South African Health Review

Small Family; good house; Enough for all.

Love; Health care.

Healthy body needs exercise.

Healthy mind: good school.

I am a Healthy Child.

I have.
This is the fifth South African Health Review published by the Health Systems Trust.

Policy makers, planners and managers in the health sector remain our primary target and over the years, readership has expanded to include researchers, academics, and students, as well as health and development organisations and health systems experts in South Africa and internationally.

This broad readership offers a challenge to planners and writers of the Review, which aims at providing a comprehensive and detailed account of developments in the South African health system over the last twelve months.

The chapters represent a combination of commissioned research, experience, and available published literature, and the focus on equity, central to the 1998 Review, has been retained in a number of chapters. Progress to achieving equity is especially highlighted in the chapters on the distribution of financial and human resources. Recognising that the greatest inequity exists in the maldistribution of resources between the public and the private sectors, this Review pays great attention to the role of the private sector, and also to the evolving partnerships between these two sectors.

The Board of Trustees of the Health Systems Trust is proud to be associated with this publication. We recognise the dedication and hard work of a large number of people who have contributed to its production, and thank all the contributing researchers, writers and reviewers as well as the staff of the Health Systems Trust. We trust that the Review will continue to support the transformation of the health sector, and in so doing, play a part in the improvement of health care in South Africa.
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Cover drawing by Mantoko Mofokeng, a grade 4 pupil from Bethlehem in the Free State. Winner of the “Healthy Child” Competition organised by NPPHCN and the Nelson Mandela Children’s Fund and funded by the Henry J Kaiser Family Foundation.

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As we draw to the end of the century, significant strides have been made in developing a unified public health sector that is district based and underpinned by the principles of the primary health care approach. An explicit commitment to equity underlies the transformation process. However, transformation, and the achievement of equity, are hampered by a variety of factors including difficulty in redistributing resources and a shrinking public sector budget. The poor relationship between the public and private sectors, and the contribution of the private sector to the inequity in health care in the country are cause for serious concern. In addition, the impact of HIV/AIDS upon the health system is beginning to be felt with some hospitals estimating that up to 35% of beds are occupied by people with HIV-related infections. The National Health Bill, expected to replace the 1977 Health Act, and to provide the broad enabling legal framework for current policies, is still awaited. This overview highlights some of the most important findings of the 1999 South African Health Review.

**Health Status**

South Africa’s first Demographic and Health Survey indicates that infant mortality and maternal mortality rates are alarmingly high, with wide provincial variation. The rate of infant mortality in the Eastern Cape is 61.2, almost twice as high as in the Western Cape, where the rate is 30.2. There is also wide variation in levels of immunisation which are very poor in some provinces. In the Eastern Cape and KwaZulu-Natal rates are around 50% and only the Northern Cape has achieved 80% immunisation coverage. These figures show that for some parts of the country the standard of health care is lower than it is in many other poorer sub-Saharan countries.
Public Sector Health Care Financing

In the public sector, changes in the Department of Finance formula for allocating money to provinces have resulted in some of the “better off” provinces experiencing a reduction in their share, while the share of some of the “historically poorer” provinces has increased. However, the changes in the formula, despite containing a “backlogs” component (3%), cannot be said to be completely equity promoting since at least two of the historically disadvantaged provinces, Eastern Cape and Mpumalanga, face a decline in their share.

Figure 1: Changes in provincial budget share targets with new formula

An update on inter-provincial spending on health indicates that the trends highlighted in 1998 continue and that the introduction of fiscal federalism in 1997 has reversed or slowed the achievement of equity. Per capita expenditure in Gauteng, the Northern Cape, Northern Province and North West is moving away from the national average.
Case studies analysing intra-provincial resource allocation in two provinces, reported in the 1998 Health Review, found that the districts with the greatest budgets had four times as much money to spend as those with the least. In contrast with inter-provincial expenditure, an update on expenditure in these provinces demonstrates a move towards equity. Inter-district allocations in both provinces are moving closer to the provincial average than they were in 1998.

**Public-Private Relationships**

The Medical Schemes Act, by outlawing “risk-rating”, should reduce the number of seriously ill patients having to leave the private sector because they cannot afford higher premiums imposed by medical schemes. At a primary level many low-income groups are paying for private sector care, reinforcing the inequity between the public and private sectors.

While much attention has been focused on the financing aspects of the private sector, more work needs to be done on how the quality of care in the private sector can be monitored. There is plenty of evidence to suggest that some care in the private sector is of poor quality and influenced by commercial considerations. For example, as many as 63% of all visits for STDs are to private doctors and yet at most 30% of doctors are giving effective treatment for STDs. If this country is to accept a large commercial health sector an important challenge will be to imbue the sector with a greater sense of ethics, integrity, patient loyalty and a culture of caring.
Table 1: Reported treatment of STD syndromes by GPs (n=120)

<table>
<thead>
<tr>
<th></th>
<th>Urethral discharge</th>
<th>Genital ulcer</th>
<th>PID*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage reporting effective treatment</td>
<td>28.3%</td>
<td>15.5%</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

*PID: pelvic inflammatory disease

Strategies to improve the quality of care in the private sector may also require state intervention of a regulatory nature. However, the introduction of these measures necessitates there being the human resource capacity available to monitor regulations. The idea that a free service is an inferior service needs to be challenged, as does the idea that the private sector is inherently superior to the public sector. One strategy for this is patient education. If the South African public were more health literate they would be in a better position to make choices about if and when to seek private care.

District Health Systems Development

A major stumbling block to the implementation of the District Health System has been the interim nature of local government structures. While progress has been made in identifying larger municipalities, the boundaries of local municipalities have yet to be finalised. It is likely that many health district boundaries will need to be adjusted to accommodate the changes in local government demarcations. The devolution and transfer of district health services to local government will now become a major preoccupation of all provinces, and will require a careful, slow and incremental approach if the quality of services is not to deteriorate as has been the experience of other countries.

A confusion of roles between the national and provincial departments of health and the district level persists. Effective implementation of the district health system needs managers at district level to have control over resources and decision-making. This implies putting decentralised decision-making into practice and for staff at national and provincial level to redefine their roles to provide strategic and policy level support.

It is clear that we need to move quickly away from an emphasis on structure to an emphasis on the delivery of services. Concentrating on providing excellent services in priority programmes will not only help improve health but help shape the structure of the health system into a more effective and efficient form.

Central to effective decision-making for districts is access to accurate and appropriate information. Much attention has been given to the development of standardised data collection tools. There has been less progress with the standardisation of the content and quality of data collected. The regular and effective use of routine data for the purpose of strengthening management and informing decision remains a challenge to the country.

The introduction of the essential drugs list appears to have facilitated rational drug use and the availability of key items has improved over time. However, appropriate and rational drug prescribing remains a challenge. Of serious concern is the shortage of pharmacists in the public sector, especially in district hospitals.
Table 2: Pharmacist vacancy rates

<table>
<thead>
<tr>
<th>Province</th>
<th>Number of state hospitals without a pharmacist</th>
<th>% vacant public sector pharmacist posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Free State</td>
<td>11</td>
<td>36</td>
</tr>
<tr>
<td>Gauteng</td>
<td>0</td>
<td>39</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>Northern Province</td>
<td>15</td>
<td>45</td>
</tr>
<tr>
<td>North West</td>
<td>7</td>
<td>43</td>
</tr>
<tr>
<td>Western Cape</td>
<td>3</td>
<td>12</td>
</tr>
</tbody>
</table>

The introduction of community service for pharmacists may go some way to addressing shortages. However so far the priority has been to provide adequate numbers of pharmacy support personnel, and progress in this area has been slow.

**Human Resources**

Transformation of the health system implies reform of the curricula for training health professionals. Although some progress has been made, there are still very many problems and challenges to be overcome to ensure that South African health workers are equipped to provide the sort of health care required to improve the health status of the country.

A key strategy to “distribute health personnel throughout the country in a more equitable manner” has been the introduction of community service for doctors. Assessment of the first year of community service indicates that this aim has been partially met. Less than 25% of community service doctors are placed in rural hospitals which qualify for the rural allowance, while 55% are working in regional, tertiary and specialised hospitals. The challenge of getting doctors to the periphery is a huge logistical one.

Table 3: Distribution of community service doctors by facility in 1999

<table>
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<tr>
<th>Site of allocation</th>
<th>Number of CS doctors</th>
<th>Percentage</th>
</tr>
</thead>
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<tr>
<td>Community health centres</td>
<td>22</td>
<td>45</td>
</tr>
<tr>
<td>District hospitals</td>
<td>479</td>
<td></td>
</tr>
<tr>
<td>Regional hospitals</td>
<td>401</td>
<td></td>
</tr>
<tr>
<td>Tertiary &amp; specialised hospitals</td>
<td>186</td>
<td>55</td>
</tr>
<tr>
<td>SA Military Health Services</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1122</td>
<td>100</td>
</tr>
</tbody>
</table>
It does appear that community service has been successful overall in contributing to improved provision of health services and many doctors doing community service valued the opportunity to feel that they were “making a difference”. Greater attention needs to be given to developing criteria for facilities where community service doctors are allocated, to developing the supporting infrastructure (such as residential accommodation) and to ensuring that doctors are involved in areas of greatest need within a district. Addressing these factors will help the community service programme to meet its stated aims.

Excellent progress has been achieved in addressing racial imbalances in the staffing of the public health sector. The implementation of affirmative action policies over the last five years means that women are now better represented in public sector management. However in some provinces women are still under-represented in middle, senior and top management positions. Staff morale and productivity are poor and are contributing to people not accessing services or resorting to care in the private sector.

There has been some progress towards the registration of traditional healers and their incorporation into the health system, however there is still a long way to go.

**Health Care Support Services**

Transformation is underway, albeit at different paces in the three health care support services of occupational health, environmental health and health promotion. From an equity perspective it is of concern that while the main function of occupational health services in the public sector is to provide services to under-served groups in the community, in practice services are primarily providing for DoH employees.

**Figure 3: Proportion of Provincial Occupational Health Sub-Directorate’s time (%) devoted to occupational health service development in the various provinces of South Africa**

<table>
<thead>
<tr>
<th>Province</th>
<th>Department of Health employees</th>
<th>Public patients using public sector health services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Free State</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Gauteng</td>
<td>5</td>
<td>95</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>5</td>
<td>95</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Northern Province</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North West</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Western Cape</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

Note: No information was provided by the Northern Province.
South Africa faces serious environmental health challenges. There is a need to build consensus that the role of the environmental health officer is to focus on basic development needs, and to build capacity for environmental health services. Inequity in the distribution of environmental health officers mirrors patterns of inequitable distribution of other health workers. Some of the lowest levels of coverage of EHOs are in provinces with some of the most pressing environmental health challenges such as the Eastern Cape and the North West.

<table>
<thead>
<tr>
<th>Province</th>
<th>Area (km²)</th>
<th>EHO: population ratio</th>
<th>Shortfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>169 600</td>
<td>1:25 951</td>
<td>185</td>
</tr>
<tr>
<td>Free State</td>
<td>129 480</td>
<td>1:25 956</td>
<td>120</td>
</tr>
<tr>
<td>Gauteng</td>
<td>18 810</td>
<td>1:16 187</td>
<td>244</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>92 180</td>
<td>1:23 249</td>
<td>437</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>78 180</td>
<td>1:19 036</td>
<td>126</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>384 987</td>
<td>1:12 433</td>
<td>15</td>
</tr>
<tr>
<td>Northern Province</td>
<td>123 280</td>
<td>1:23 455</td>
<td>237</td>
</tr>
<tr>
<td>North West</td>
<td>116 190</td>
<td>1:26 007</td>
<td>190</td>
</tr>
<tr>
<td>Western Cape</td>
<td>123 390</td>
<td>1:11 282</td>
<td>47</td>
</tr>
<tr>
<td>South Africa</td>
<td>1 242 287</td>
<td>1:18 948</td>
<td>1804</td>
</tr>
</tbody>
</table>

Although South Africa has some very vibrant health promotion activity, health promotion services in provinces are generally weak. Health promotion should play a role in re-orienting health care and ensuring that health promoting activities, essential to the primary health care approach, are not squeezed out by the demands of treatment and care. Strong promotion of health could play an important part in facilitating community participation and community education on health matters as well as empowering health care consumers, and enabling them to be more discerning, both about when to seek care as well as what type of care to choose.

**Priority Programmes**

There has been progress in the implementation of the national TB control programme and a number of demonstration and training sites have shown that district TB programmes can achieve cure rates of more than 80%. The close link between HIV and TB necessitates that HIV/AIDS and TB programmes are co-ordinated and work together.

The catastrophically high levels of HIV infection, especially in teenage women, demand an urgent need for the translation of political commitment into strong national and provincial HIV/AIDS programmes. Gauteng stands out among the provinces as an example of where strong programmes are developing.
The Choice on Termination of Pregnancy Act has resulted in a steady increase in the number of terminations of pregnancy (TOPs) since February 1997. Unfortunately a number of barriers prevent women accessing TOPs. Important barriers include negative attitudes of staff and the poor availability of abortion services. There is wide variation in the number of TOPs performed across the provinces, with 45% of all TOPs done in Gauteng, and only 1% in the North West Province.

Figure 4: Number of TOPs per province February 1997 – January 1999

Conclusion

South Africa’s commitment to a unified health system underpinned by principles of equity bodes well for the provision of health care. This Review recounts many success stories in moving towards the achievement of this vision. It also attempts to highlight some of the stumbling blocks on the path to the future.
Health for all requires socio-economic, civic and political rights to become a reality. It is argued that poverty is a violation of human rights in that it is the “inability to maintain a minimum standard of living” and deprives people of their dignity and access to the means to remain healthy.

Poverty hearings were held between March and June 1998. The commission heard of current problems of poverty and poor people and of past discrimination and disadvantage. The unemployment theme was pervasive but there were many reports of community mobilisation and action to overcome the effects of poverty.

Government’s response to the unemployment and poverty challenges is contained in the Growth, Employment and Redistribution (GEAR) policy that contains a fundamental anti-poverty strategy and in the establishment of several institutions to protect human rights (Office of the Public Protector, the South African Human Rights Commission, the Commission for the Promotion and Protection of the Rights of Cultural, Religious and Linguistic Communities, Commission for Gender Equality, Auditor General, Electoral Commission, the Truth and Reconciliation Commission). The Constitution is of course the country’s major human rights policy.

At the end of 1995 the National Progressive Primary Health Care Network (NPPHCN) began a campaign promoting “health rights” as “human rights”. This was aimed at increasing awareness and deepening understanding of health rights and responsibilities. The third phase of this campaign was conducted in 1998 and 1999 and was aimed at popularising the “health charter”.

The chapter concludes that it is important to entrench the principle of socio-economic rights at a national level, and that it is only when they are expressed at a local level that human rights are meaningful for ordinary people. Only then is the abstract notion of rights made into something real and valuable.
Introduction

“Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control”. Article 25, Universal Declaration of Human Rights.

Good health requires certain prerequisites that are both tangible and intangible: water, food, shelter, education, work, a stable sustainable ecosystem, peace, social justice and equity. Poor people have worse health with a much higher proportion of illnesses such as tuberculosis, diarrhoea, fever, physical and mental disability. “Health for All” can only be achieved when the socio-economic as well as civic and political rights are guaranteed to everyone. The diagram below illustrates the central idea that well-being is influenced by a range of factors only some of which are within the control of the individual. Many negative forces erode socio-economic rights. Some are national, others are increasingly international/global. This is having a profound local impact on poverty and health, but because of the remoteness of the forces, the threat to well-being is often not perceived.

Figure 1: Forces impacting on health

Poverty and Human Rights

What poverty means

Poverty is the most common and serious violation of human rights. Its effects on health are devastating. Experience of it is like torture. While there is much scientific literature on poverty describing its degrading effect on human dignity and well-being, few capture the dreadfulness as graphically as those who are actually experiencing it.

“My husband lost his job about five months ago. It was a big shock but we thought we could cope. I was earning a reasonably good wage. We had to cut a few corners though. We had to eat less meat. We had to save on all kinds of
things... Then two months ago I lost my job. We were desperate. There was no money coming in now... Now they've cut off the electricity and we're two months in arrears with rent. They're going to evict us, I'm sure, we just can't pay though. My husband decided to go to Jo'burg... I don't know where he is ... Sometimes (the children) lie awake at night crying. I know they are crying because they are hungry. I feel like feeding them Rattex. When your children cry hunger-crying, your heart wants to break. It will be better if they were dead. When I think things like that I feel worse ... I'm sick. I'm sick because of the cold. I can't take my children to the doctor when they are sick because there is no money ... What can one do? You must start looking. You can also pray to God that he will keep you from killing your children”.

As this woman’s experience of being poor shows, poverty erodes dignity and sometimes, even the will to live. She knows, even without understanding the statistics, that poverty is closely linked with high unemployment, hunger and malnutrition, lack of basic services, inability to pay for or access health care, disintegration of families, vulnerability, homelessness, hopelessness and a direct cause of a wide range of social ills such as crime, prostitution and addiction. She knows that women bear a greater burden than men and that children become its victims.

Poverty is defined as the inability to attain a minimum standard of living, measured in terms of a household’s inability to meet its basic consumption needs or the income required to satisfy them. Usually this is stated in relation to a “poverty line” which is an income level or monetary value of consumption which separates the “poor” from the “non-poor”.

Over the past few decades several research studies and conferences, both internationally and in South Africa, have attempted to quantify poverty as a problem pertaining to the denial of basic socio-economic rights and seek solutions. A recent important base-line study “Key Indicators of Poverty in South Africa” was undertaken for the Reconstruction and Development Programme by the Office of the State President. It painted a bleak picture of the rampant poverty and resultant ill health that challenged South Africa’s new democracy:

- South Africa still had one of the worst records in terms of social indicators and income inequality. About half (44%) of South Africans were poor.
- Nearly 95% of poor people were African.
- The vast majority (75%) of the poor lived in rural areas, the former homelands or “TBVC” states which had been the most disadvantaged.
- Two thirds of the poor lived in three provinces: the Eastern Cape (24%), KwaZulu-Natal (21%) and the Northern Province (18%).
- Female-headed households had a 50% higher poverty rate than male-headed households.
- Over 45% of the poor were children.
- Unemployment was rife. Fewer than 30% of poor working-age adults are working. Employment was, not surprisingly, the major priority (57%) for the poor, followed by water (44%), food (34%) and housing (32%).
- Most (80%) of the poor had no piped water to their homes, no modern toilets (90%) or electricity (85%).
- In terms of health impacts, more than half of the poor were unable to get treatment because of high costs of treatment or transport. Those that were able to go for care spent on average nearly two hours travelling and 45 minutes waiting to be seen. More than a third (38%) of the children under five were nutritionally stunted, compared to 6% in the richest households.
Speak Out on Poverty Hearings: The Community Voice

Between March and June 1998 the South African Human Rights Commission (SAHRC), the Commission on Gender Equality (CGE) and the South African NGO Coalition (SANGOCO) convened a series of ten hearings on poverty. Hearings were held in each of the nine provinces. Over 10,000 people participated in Speak Out on Poverty by attending the hearings, mobilising communities or making submissions. Nearly 600 people presented oral evidence over the 35 days of the hearings, presenting evidence to the fact that poverty is dismal, permeated with drudgery, hunger and struggle. Despite this, the testimonies also revealed the indomitable, ingenious and creative ways poor people cope with their lives, developing strategies for survival that rival those of sophisticated tactical planners. Although the question “What is poverty?” was not entirely answered, an important lesson emerged: Poverty is not only about a lack of money or material goods, but also about the absence of opportunities and choices which people need to build decent lives.

Despite acknowledging that there had been some improvements since 1994, many people expressed disappointment with the rate of delivery of promised services.

In the poorest provinces, the severity of poverty was evident when people spoke and wrote about the lack of food. Although gender, disability and crime were not among the official themes of the hearings, they nevertheless emerged as factors compounding people’s vulnerability to poverty and undermining their well-being.

Employment

Unemployment was the theme that recurred most often and was a particular problem in rural areas.

For those who did have work, many of the most vulnerable felt afraid to question employers or resign despite poor wages and conditions as they were desperate for even the smallest amount of money. Others would be more than willing to take their place.

Despite encouragement from Government for small and micro-enterprise, very few initiatives proved successful. Opportunities for enterprise were very limited. The market was poor people like themselves, who had little money. There was severe competition, not only from other micro-entrepreneurs but also from a highly efficient formal business sector ever driving to increase its market share. Further difficulties were the inequitable barriers to formal market entry, lack of access to credit and the premium prices levied on people forced to buy extremely small quantities of raw materials. Lack of infrastructure such as electricity made for low productivity.

Few people felt that the Growth, Employment and Redistribution (GEAR) strategy had been successful in creating the jobs. Sadly, in interpreting the cause of the failure of jobs to materialise, some respondents blamed foreign immigrants, who were seen as taking the jobs of local people.

Basic Services

Poor access to water, both for domestic and productive purposes, featured prominently in virtually all the hearings, in both rural and peri-urban areas. There were some success stories, but also accounts of problems with the new services - such as breakdown of the infrastructure and dissatisfaction with communal rather than on-site provision. Among those who had received services, there were many who complained that they were unable to afford the payments. Poor roads limited access to schooling, health facilities, shops and markets for goods. Where roads existed, transport was expensive and dangerous.
Health

Several people noted the benefits of the newly established clinics in their areas. There were complaints, however, about the long queues at health facilities, the inadequacies of the facilities, the arrogant attitudes of workers and in areas distant from a fixed facility, the infrequent visits of mobile clinics. Some clinics lacked both electricity and water. Many people experienced difficulty in getting to a clinic, or once there, found no medicines to treat their illnesses. They spoke about the diseases caused by impure, inadequate water supplies and about the health problems caused by pollution from nearby mines and industries. A few people talked about the difficulty of living with poverty-related illnesses such as tuberculosis, chronic cough and increasing debility. Others addressed the issue of disability and how it affected all aspects of their lives.

Education

Many testified that children could not attend school because they were poor. Sometimes this was because the children were excluded for non-payment of school fees. In others, it was because there was no money for transport, school uniforms, food, examination fees, and so on. There were many reports of appalling facilities and resources at schools, particularly in rural areas. In some areas there were no secondary schools nearby.

Several people spoke about the frustration of those who failed the matric exam, and were then prevented from repeating. Many parents and grandparents bemoaned the fact that although their children had passed matric, they were still unable to find jobs or to obtain funding for further studies.

Social security

People spoke about the importance of state grants to their household’s survival. Many related how difficult it was to obtain, or even get information about, grants to which they were entitled. In the Northern Province and Eastern Cape there were many reports of the devastation experienced by people whose grants had been stopped without warning. Others spoke about the unhelpfulness of staff as well as administrative and other obstacles.

The new child support grants were appreciated, but concerns were expressed with the amount and age limits set. Much testimony revealed inadequacies of the social safety net in that many poverty-stricken households did not qualify for grants either because the children were too old for child support and the adults were not sufficiently disadvantaged for a disability grant or old enough for an old age pension.

Environment

In the environmental hearings, there were stories of workplace illnesses and injuries leading to disability, unemployment and death. Usually there was little or no compensation. Many workers remained in harmful working situations because of the desperate need to provide for themselves and their families. Testimony revealed how industries harmed neighbouring communities by pollution of water, land and air. There were reports of the problems of people living in unsatisfactory areas, on wetlands vulnerable to floods, on rubbish dumps and near a waste incinerator.
**Views on responses to poverty**

Many of those who testified praised community and non-governmental organisations which had tried to educate people about their rights, and had assisted them in trying to better their situation. Although there was some gratitude to Government for delivery, the quality was below expectations. Generally there was disappointment given the promises from both national and provincial levels. Local government also came in for much criticism. Councillors were said to be unavailable, and only interested in their own well-being. Several reports suggested that traditional authorities were a stumbling block to development.

**Community mobilisation and action**

The Hearings were important in that they provided an opportunity for ordinary people to speak about their difficulties and put forward their suggestions for solutions. Many who came forward in describing their own survival strategies did provide concrete ideas and their stories showed a great resourcefulness and a wish to be independent. They were clear, however that these solutions would not be successful without considerable outside assistance. In a situation of extreme poverty, it is difficult, if not impossible, for people to pull themselves up by their bootstraps without an enabling environment. As Violet Nevhri of Elim in the Northern Province concluded her testimony: “We don’t just want fish to eat! We want fishing rods and to be taught to fish”. There was an appeal to the Government to address the problems raised and to provide assistance.

**Health and Human Rights**

**The relevance of human rights to the poor**

The year 1998 was the 50th Anniversary of the Universal Declaration of Human Rights adopted by the UN General Assembly in 1948, and the fifth anniversary of The Vienna Declaration and Programme of Action that was adopted by representatives of 171 states at the World Conference on Human Rights in Austria in June 1993. It should have been a time of rejoicing, but for the vast majority of people on the planet it was not, for they were grappling with poverty and increasing joblessness. What did the issue of human rights mean for them?

There is the prevalent view that human rights are peripheral to poverty, because human rights are perceived to relate mainly to civil and political liberties. While it is true that civil and political rights are an important component of human rights, it is equally true that economic, social and cultural (or socio-economic) rights are just as important. In theory, if not in practice, socio-economic rights are one of the two main pillars underpinning the International Bill of Human Rights. This “Bill” consists of three internationally endorsed instruments: The Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, 1966 (ICESCR) and the International Covenant on Civil and Political Rights (ICCPR) with its two optional protocols. Recently the obligations of states have been further clarified with the establishment of the Maastricht Guidelines on Violations of Economic, Social and Cultural Rights in 1997.

Interpreted narrowly, a Bill of Rights gives legal protection to the “traditional” liberal rights of equality, personal liberty, property, free speech, assembly and association – the so-called civil and political or “first-generation” rights. First generation rights (so called because historically, they were the first rights to achieve legal recognition and protection) are based on the idea that individuals should be free of government interference when it comes to what they do in their personal and private lives and in their associations with
Poverty, human rights and health

The recognition that human rights and the basic social conditions of citizens are fundamentally interconnected have encouraged attempts to include less traditional rights in modern constitutions – socio-economic or “second” generation rights. These are “positive” rights which impose obligations on government. Thus, rather than simply protecting members of society from the heavy hand of state power, the idea of socio-economic rights is that the state must be obliged to do whatever it can to secure for all members of society a basic set of social goods – education, health care, food, water, shelter and a clean environment. In so doing, the Bill of Rights attempts to ensure that all members of society have the capacity to enjoy and participate in the rights of association, equality, political participation and expression that are traditionally protected in liberal constitutions.

In recent years “third generation” people’s or collective rights have been asserted, especially by developing countries. The right to self-determination is the most widely recognised of these rights. Others are the right to a satisfactory environment and the right to development. The latter right was proclaimed by the UN General Assembly during 1986 in the Declaration on the Right to Development. Third generation rights feature prominently in the African Charter on Human and People’s Rights.

It is abundantly clear, not least in South Africa, that the pressures of globalisation sponsored by the more powerful nations, are undermining the commitment of many less developed countries to protect the socio-economic rights of their citizens. The argument has been that poorer countries cannot afford these rights if they are to be competitive and attract international investments. Alternatively it is argued that the protection of socio-economic rights will automatically flow from the achievement of higher economic growth. Unfortunately, international experience does not bear this out. Many countries achieve high growth rates while at the same time allowing increasing inequality and poverty in their societies.

Professor Phillip Alston, Chairperson, United Nations Committee on Economic, Social and Cultural Rights which monitors implementation, has argued that economic, social and cultural rights have for too long been the poor and neglected cousins of civil and political rights and must be re-emphasised. His view is that the pressures of globalisation and economic competitiveness have promoted an ideology which, if permitted to remain unchecked, will inexorably reduce the living standards of the poorest groups in our society. According to this logic, Human Rights are presented by some as the means to facilitate the triumph of market forces. This involves an emphasis upon freedom of information, the right to property, the right to effective remedies in commercial matters, and the right to individual freedom and initiative. These rights are all important, but such an approach is neither economically sustainable nor morally acceptable. He insists that the only legitimate justification for the free market, as well as the extensive government regulation that protects and sustains it, is to ensure the triumph of all human rights. That means that economic policies must ultimately be judged solely on the basis of their capacity to contribute to the dignity and well-being of every individual and not just of entrepreneurs and those allied to them.

Human Rights in South Africa

Since the democratic elections of 1994, the Government has signed and ratified a number of international and regional Human Rights treaties, which commit it to the protection and promotion of the equality and human dignity of all. Certain rights are already entrenched in the Constitution. Others are being incorporated into specific sectoral charters such as a “Patient’s Charter” which may well be contained within acts at national and provincial level.
The South African Constitution

On 11 October 1996, South Africa adopted its new Constitution, within which is a Bill of Rights. The Bill of Rights is one of the most substantive and forward-looking legal frameworks within which fundamental political and social change can be effected. Section 27 of the Bill of Rights firmly entrenches health rights:

- Clause 27(1) of the Bill of Rights states that everyone has the right to have access to:
  - health care services, including reproductive health care
  - sufficient food and water and
  - social security, including appropriate social assistance, if they are unable to support themselves and their dependents.

- Clause 27(2) specifies that the state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of these rights.

- Clause 27(3) states that no one may be refused emergency medical treatment.

Institutions and initiatives to promote human rights

The Constitution also provides for the establishment of institutions to protect democracy and promote human rights. Among these are the Office of the Public Protector, the South African Human Rights Commission, the Commission for the Promotion and Protection of the Rights of Cultural, Religious and Linguistic Communities, the Commission for Gender Equality, the Auditor-General and the Electoral Commission. The “Batho Pele - People First” (1997) initiative was an attempt to improve the quality of public service delivery and is one practical expression of commitment to socio-economic rights.

Another important commitment is the National Action Plan for the Protection and Promotion of Human Rights (NAP) which was accepted by Parliament in December 1998 as a serious effort to address the legacy of apartheid. It was devised to help the advancement of human rights in South Africa. Its goals are to audit the human rights situation (specifically including second and third generation rights) in the country, identify areas in need of protection and improvement, signal commitment to concrete measures that can be adopted to build and entrench a culture of human rights for the enjoyment of all, and provide a framework for sustained and co-ordinated ways for the country as a whole to protect and promote human rights over a three year period.

In addition to the Constitutional provisions to guarantee health rights, the Department of Health has gone even further by passing several laws and promoting healthy public policy. Legislation is now in place that gives all women the right to choose whether or not they would wish to continue with a pregnancy. Tobacco legislation curtails the rights of tobacco companies to market their dangerous products. Pharmaceutical legislation provides for the Government to circumvent “intellectual property rights” which multi-national companies use to charge premium rates for medicines in certain countries where they feel the market will bear higher prices. Yet other laws protect women against abuse in domestic relationships and create more equitable and affirming work environments.
The Truth and Reconciliation Commission

The brief of the Truth and Reconciliation Commission (TRC) was primarily to investigate infringements of civic and political liberties during the years of apartheid. The investigation of infringements of socio-economic rights was beyond its brief despite the fact that the damage inflicted on society by poverty was probably more profound than the gross infringements of civic and political liberties.

The report of the Commission was published in 1998 and consists of five volumes, each with a particular focus. The Amnesty Committee, which is part of the Commission, is still completing its work and its report will be published later.

The Health Sector Hearings
(Volume 4, Chapter 5 of the TRC Report)

The institutional hearings of the health sector highlighted the problem of health workers with dual obligations, citing the performance of the doctors in connection with the deaths in detention of Stephen Biko and Elda Bani as cases in point. It was shown that “there are numerous accounts of district surgeons who failed to fulfil their moral and ethical duties”.

The section on medical schools underlines the disparities in education between black and white medical students that existed under apartheid. The roles of the nursing profession, mental health professionals and other health professionals is similarly explored. Another finding is the misuse of medical and scientific information. It was encouraging that many institutions came forward and apologised for their complicity in working within an inequitable system that violated human rights.

Government policies, programmes and dilemmas

The findings of the Poverty Hearings together with other evidence and suggestions for solutions were fed into two important summits during 1998. During the Poverty Summit in July and the Job Summit in December, various sectors including the government, private sector, labour and non-governmental organisations acknowledged the problems raised by the people themselves and supported by academic researchers. Together they developed joint strategies to tackle the problems of unemployment and poverty.

Growth, Employment and Redistribution (GEAR) is the cornerstone of the government’s macro-economic policy. While Government is undoubtedly sincere in its belief that GEAR will assist in eradicating poverty in the long run, as a macro-economic policy it has been the subject of a great deal of controversy, not least from within the ranks of the African National Congress itself.

Liberal and business interests have applauded the government’s GEAR programme in its firm adherence to free-market principles. They feel that if South Africa is ever to tackle poverty, it must become a “winning” nation with a highly competitive export-driven economy based on unfettered capitalism and international free trade. Only once the economy is growing strongly will the country be able to afford to tackle problems such as unemployment and poverty. The government’s role is only to create stable conditions such as dealing with crime.

Socialists and non-governmental development organisations have been critical of GEAR’s over-reliance on market forces to solve issues that relate to deep persistent inequities in South African society. They feel that poverty is so deeply entrenched in the structure of the society, that nothing less than a large scale
redistributive programme to create work and meet basic needs would solve the problems within the next few decades. They doubt that the free market alone will create a more equitable society without decisive government intervention to protect the poor and the vulnerable.

The dilemmas facing the government were explored in a qualitative and quantitative study “Poverty and Inequality in South Africa” (1998) prepared for the Office of the Deputy President. It showed that redressing the centuries of systematic discrimination requires more than liberal policy change. Unqualified reliance on market forces to allow the benefits of economic growth to “trickle down” to the poor is not effective. Eradicating poverty requires profound social and economic transformation.

The Government steadfastly insists that the situation is improving. For example in President Mandela’s “Realising Our Hopes” address to the opening of Parliament on 5th February 1999, the Government was at pains to emphasise the progress being made in the “War on Poverty”. A national child support grant mechanism is in place. There is a national programme to provide needy school children with sandwiches and a meal. Statistics such as reduction of households without access to clean water from 30% to 20%; those without electricity from 60% to 37% and those without telephones from 75% to 65% seem impressive. Government has moved some distance along the path of re-prioritising its spending to meet the needs and aspirations of the majority of the people. Social service expenditure now amounts to nearly two-thirds of non-interest expenditure of Government, and much of it is targeted at the poor. However, it belies the persistent and ever deepening poverty shown even in its own statistics, for example the increase in unemployment measured by annual October Household Surveys from 3.7 million (32%) in 1994 to 4.6 million (38%) in 1997.

**Health as a Human Right**

In its White Paper on the Transformation of the Health System, the Ministry of Health has laid a broad framework for health as a human right in the country. It envisages a unitary health system where all can enjoy equitable and affordable access to basic health care services. It is also currently drafting a new Health Bill for South Africa. It is likely that it will contain extensive provisions for guaranteeing other health rights for South Africans. Similar legislation is also being prepared by several provincial legislatures to provide policy at provincial level.

**“Health Rights are Human Rights” Campaign**

At the end of 1995 the National Progressive Primary Health Care Network (NPPHCN) launched a campaign to draw attention to the idea that “Health Rights are Human Rights”. The campaign was aimed at increasing awareness and deepening understanding of health rights and responsibilities. During the course of the campaign it was discovered that many poor communities were not aware that they have health rights.

The first phase of the campaign started in 1996 and concentrated on creating awareness of health rights. Commercials, called “social action spots” were flighted on major radio stations to encourage people
to share their stories. People throughout the country phoned a toll-free number and related stories of a range of violations of their health rights at health care facilities. An example of such a violation includes waiting the whole day without being seen and then being told to come back the next day.

During 1997 the campaign focused on the content for a “Health Rights Charter”, which was presented in the form of a booklet called “Your Passport to Health Rights”. This campaign and its output helped to strengthen concurrent initiatives being taken by the National Department of Health, the South African Medical Association, the Health Professions Council, the South African Nursing Council, Lawyers for Human Rights and many other groups in developing an approach to “health rights”. It culminated in the development of a “Patients’ Charter for South Africa” (launched on 2nd November 1999) which is likely to be incorporated in the new National Health Act and separate Provincial Health Acts.

During 1998 and 1999 NPPHCN worked jointly with the national and provincial departments of health to further popularise the idea of a health charter. Training for workers and communities on health rights was organised to support implementation of the charter which was launched in 1999 by the Minister of Health.

Popularising the charter on the limited budgets available has necessarily involved use of a mix of media. Comic strips have been used to illustrate the real stories that people have told explaining how their health rights have been violated. These comics were printed regularly in national newspapers such as the Sowetan. Commercial and community radio were used to popularise the idea. A resource manual15 including a fieldworker training guide on Health Rights was developed for health workers, policy analysts and health planners. This should provide an invaluable reference for those planning to implement Health Rights charters in the field.

**The practical application of Health Rights at district level**

But perhaps of all the recent trends, the most exciting has been the practical application of these ideas at district level.

In August 1999, in the Thukela District near Ladysmith in KwaZulu-Natal, communities and health providers gathered in jubilation to celebrate their triumph. After a lengthy process they were launching a Health Rights Charter for their district. Not a charter drawn up at national level by experts, but a charter drawn up by them together in their own district. One that they had struggled over and collectively agreed represented what they could all, providers and users alike, commit to and ensure was implemented in their district.

The Thukela District Health Charter is unique in several respects. Firstly, it not only lists the rights of patients, but also emphasises their responsibilities. Secondly, although it makes demands of health providers by listing their responsibilities, it also gives recognition to the rights of health workers. Written by the stakeholders themselves, the Thukela District Health Rights Charter goes a long way to ensuring that everyone in the district is prepared to take ownership of the Charter. Success of the initiative is evidenced by the Charter’s adoption by the entire health region which has asked for it to be applied in all its clinics and facilities. Similar processes have been underway at Tonga-Shongwe in Mpumalanga, Vaal in Gauteng, Taung and Odi in the North West, Haledgratz in the Northern Province, Bothaville and Tshepo in the Free State as well as several other sites in KwaZulu-Natal.
All this work emphasises an important principle that, all too often, has been forgotten in the drive to promote human and health rights. The practical achievement of health rights on a day-to-day basis can only become a reality when everyone meets their obligations to other people. For health rights to exist, both providers and users must demonstrate respect for each other’s rights and show this by carrying out their respective responsibilities. Rights and responsibilities are like the two sides of a coin. One cannot exist without the other!

Conclusions

Increasing attention is being given to eradicating poverty by acknowledging that socio-economic rights are as fundamentally important to society as civil and political liberties. Both internationally and nationally, “Plans of Action” to implement socio-economic rights (which include the right to health) recognise that it is important for countries to take progressive steps to realise these rights.

In South Africa, the Human Rights Commission has a specific brief to monitor steps being undertaken by the Government to achieve the progressive realisation of these rights. In its reports to Parliament each year the Commission has indicated its seriousness in undertaking such a role. Although limited resources will always constrain the application of socio-economic rights, it is certain that the State will be increasingly challenged to give effect to these “second generation” rights.

Important as it is to entrench the principle of socio-economic rights at a national level, it is only when such rights find expression at local level that they become meaningful for ordinary people. For example, when local providers and users working together agree that everyone in their local clinic, irrespective of their capacity to pay, will be treated with consideration and respect, they take the critical step forward in the local entrenchment of health care as a basic socio-economic right. They take the abstract notion of rights and make it something real and valuable.

Experience in several districts throughout the country is showing that improving health rights can be very practical. Not only have local communities and their health providers proved that they can collaborate and develop their own “District Health Charter”, but they have found the achievement so exciting and worthwhile, it has been worth celebrating!
This chapter focuses on legislative initiatives of the national and provincial departments of health, in particular those laws specifically designed to promote health systems development.

New developments in health legislation during the course of 1999 are discussed, such as the Medical Schemes Act, the Medicines and Related Substances Control Amendment Act, the South African Medicines and Medical Devices Regulatory Authority Act, the Pharmacy Amendment Bill and the Tobacco Products Control Amendment Act. Anticipated areas of legislative activity, such as euthanasia and HIV/AIDS, are also discussed. Anticipated laws such as the National Health Bill, the Social Health Insurance Bill and the Mental Health Care Bill are included in the chapter.

Legislative developments from all the provinces are listed.

In addition the chapter provides updates on major developments arising from the legislation discussed in the 1998 Health Review.
Introduction

The commissioning of a ten-page chapter on health in South Africa would be a tall order under the best of circumstances. Its complexity would arise from the fact that there are so many different facets and determinants of health that it would be close to impossible to encapsulate them all in a dissertation, let alone a single chapter. A scan of the “Contents” pages of this Review will provide some indication of just how broad the area of health is.

To write a ten-page chapter on health legislation in South Africa is not much less complex, because legislation which impacts on health is almost as diverse a field as health itself. It would probably be fair to say that the laws of every Ministry in government have bearing on health or health status in some way or another. From legislation promoting equality to traffic laws, there is invariably some direct or indirect impact on health.

The writing of this chapter has therefore of necessity involved a process of choice, whether conscious or not, as to what material should be included and what should not. In the main, the discussion focuses on legislative initiatives of the national and provincial Departments of Health, and in particular those laws specifically designed to promote health system development.

It is intended that this chapter will provide some basis by which readers can keep track of the rapidly changing health regulatory environment, which can be confusing to even the most astute observer. The chapter describes new developments in health legislation during the course of 1999, as well as providing an update on major developments in legislation discussed in the South African Health Review 1998. It would therefore be a useful exercise to read this chapter in conjunction with the Health Legislation chapter of the 1998 edition.

National legislative developments in 1999

While relatively few health Bills were introduced to Parliament during 1999, there have been significant developments and setbacks in respect of the legislation discussed in the South African Health Review 1998. The legal obstacles which have impeded health legislative development over the past few years, and which continue to do so, demonstrate both the complexity of the regulatory environment in which health care reform must take place, as well as the ambitiousness of the legislative programme. Nevertheless, despite the setbacks, there have been some significant health reforms brought about by legislation, which have the potential to substantially impact on the future development of the South African health system.

Medical Schemes Act

The Medical Schemes Act was promulgated in the first week of February 1999, to the chagrin of the medical aid industry which was expecting a 12-month period of grace before it would have to comply with the Act. Nevertheless, the provisions with the most far-reaching implications for contribution and benefit structures of schemes are contained in regulations, which were finally published on 20 October 1999 and which come into effect on 1 January 2000, with the exception of certain limited provisions which came into effect on 1 November 1999.

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The most significant component of the regulations is a list of prescribed minimum benefit conditions. In respect of these conditions, medical schemes are required to reimburse in full, without co-payment or the use of deductibles, the diagnostic, treatment and care costs in at least one provider or provider network, which must include the public hospital system. While medical schemes may still employ techniques such as pre-authorisation, they are not entitled to refuse authorisation in a public hospital of standard treatment for any prescribed minimum benefit.

Due to constant change in medical practice and available medical technology, the Department of Health will review the list of prescribed minimum benefits every two years, in consultation with the Council for Medical Schemes, stakeholders, Provincial Health Departments and consumer representatives. These reviews will provide recommendations for revision of the regulations based on, amongst others, considerations of: cost-effectiveness; health policy developments, and the impact on medical scheme viability and its affordability to members.

The stated objectives of specifying a set of prescribed minimum benefits are:

1. To avoid incidents where individuals lose their medical scheme cover in the event of serious illness and the consequent risk of unfunded utilisation of public hospitals; and
2. To encourage improved efficiency in the allocation of private and public health care resources.

The regulations clearly hold potentially significant advantages for the public health sector which has virtually attained a preferred provider status in terms of the regulations. If public hospitals structure and market their services appropriately, they have the potential to attract many more private patients and thereby attract a greater share of the revenue from the private medical aid market.

Another significant provision of the regulations relates to premium penalties for persons joining medical schemes late in life. Medical schemes are entitled to impose such premium penalties in terms of a scale prescribed in the regulations, which escalates the longer a person has not been a member of a medical scheme after the age of 35. There is, however, provision for an “amnesty period” from 1 January 2000 to 30 June 2000, during which medical schemes must accept late joiners applying for membership without imposing penalties. The reasoning behind such premium penalties is to discourage opportunistic behaviour by people who only join a medical scheme when they get frail or sick, which has financially adverse effects on medical schemes.

Other provisions of the regulations relate to: managed health care; personal medical savings accounts; waiting periods; financial stability of schemes; and administrative requirements.

*Medicines and Related Substances Control Amendment Act*

Implementation of the Medicines and Related Substances Control Amendment Act, 1997, is still on hold following the institution of a legal challenge by, amongst others, the Pharmaceutical Manufacturers’ Association (PMA). The major issue of contention is still section 15(c) of the Act, which purports to allow parallel importation of drugs. Pleadings are still being exchanged in the Pretoria High Court between the

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b It is interesting to note that, in respect of HIV-associated disease, minimum benefits include medical and surgical management for opportunistic infections and localised malignancies, but do not include anti-retroviral treatment.

applicants and the national government, and in the meantime efforts to reach a negotiated settlement are continuing.\textsuperscript{d}

At the same time, the United States (US) government has exerted mounting pressure on the South African government to relent on provisions of the Act which the US consider a violation of their trade interests. At the end of April 1999, the US Trade Department announced that it would keep South Africa on its “watch list” of countries that may violate trade interests.\textsuperscript{7} South Africa was given until the end of 1999 to amend or repeal section 15(c) or face punitive measures, including the possibility of economic sanctions. It is also possible that the US government may lay a complaint with the World Trade Organisation.\textsuperscript{8}

Nevertheless, toward the end of 1999, there were two developments which suggested that the impasse around the Medicines and Related Substances Control Amendment Act may soon be broken. On World Aids Day (1 December), United States President Bill Clinton announced that the US will develop a co-operative approach on health-related intellectual property issues to allow “poor” countries access to affordable medicines. In his announcement, Clinton said that the US trade law related to intellectual property should remain sufficiently flexible to respond to legitimate health crises.\textsuperscript{9} On the same day, Health Portfolio Committee chairperson Dr Nkomo announced that Parliament would introduce measures to reduce the costs of medication during its next sitting. It appears that the intended legislation will introduce mechanisms to obtain generic versions of drugs that are still under patent in South Africa.\textsuperscript{10}

\textbf{Pharmacy Amendment Bill}\textsuperscript{11}

The South African Health Review 1998 reported on the system of community service introduced for medical practitioners in terms of the Medical, Dental and Supplementary Health Service Professions Amendment Act.\textsuperscript{12} The Pharmacy Amendment Bill seeks to introduce a similar system in respect of pharmacists. It was anticipated that the Bill would be passed by Parliament in the last session of 1999.\textsuperscript{e}

In terms of the Bill, any person registering for the first time as a pharmacist is only entitled to registration as a pharmacist on completion of one year of remunerated pharmaceutical community service. Persons performing pharmaceutical community service will be employed and remunerated by Provincial Health Departments while performing that service. Provincial Health Departments have commenced arrangements for their employment in the year 2001.\textsuperscript{13}

\textbf{South African Medicines and Medical Devices Regulatory Authority Act, 1998}\textsuperscript{f}

On 30 April 1999, the President issued Proclamation R49 of 1999\textsuperscript{20} to the effect that the South African Medicines and Medical Devices Regulatory Authority Act (‘SAMMDRA’)\textsuperscript{21} would come into operation on that day. On the eve of South Africa’s 1999 national elections, Proclamation R49 became a \textit{cause célèbre} for opposition parties and a matter of acute political embarrassment for the national government.\textsuperscript{22,23}

\textsuperscript{d} S Ramasale, Legal Unit of the Department of Health, Pretoria, personal communication.

\textsuperscript{e} See discussion of the content and passage of this Bill on pages 21 and 22 of South African Health Review 1998.
This followed an urgent *ex parte* application for Proclamation R49 to be set aside, brought in the Pretoria High Court by, amongst others, the State President, the Minister of Health, the Medicines Control Council and the PMA. The legal crisis emerged as a result of an administrative error, whereby Proclamation R49 was published prematurely. While SAMMDRA purported to substantially repeal the Medicines and Related Substances Control Act, 1965 (the “1965 Act”) and the schedules made under that Act, Proclamation R49 was made at a time when no regulations had been made to replace those schedules. While the Minister of Health attempted to rectify this omission on 7 May 1999 by the publication of schedules of medicine in a Government Notice, this notice itself was considered to be legally defective.

The repeal of the relevant schedules of the 1965 Act, at a time when no others had effectively been substituted in their place, would have meant that there was no control over the import, packaging, use and sale of medicines until such time as new schedules were effectively prescribed by regulation.

The potential consequences of such a state of affairs, as set out in the affidavit of the then acting Director-General of Health, Dr JHO Pretorius, would have been that the “regulation of medicinal products would (have) become chaotic. … The absence of an effective regulatory system may (have created) the opportunity for medicines to be traded freely whatever their strength, content and effect. There (was) also the danger that drug peddlers, pushers and users would exploit the opportunity and interpret the situation as one which allows them to freely trade, deliver, sell and use medicines and other substances. … There (was) also a possibility that the pharmaceutical industry (would have been) left in an unregulated environment which may rapidly descend into chaos. The danger to South Africa as a whole (could) hardly be overemphasised.”

Although in the court of first instance, the application was dismissed, in the appeal the Court found that Proclamation R49 was invalid, and had never taken effect. It followed that the 1965 Act had never been lawfully repealed, thereby avoiding the dire consequences described by Dr Pretorius.

As embarrassing as this sequence of events must have been to the national government, it may have saved the Minister and Department of Health from even greater embarrassment. The implementation of SAMMDRA would almost certainly have been frustrated by glaring drafting errors and a lack of clarity of policy in some areas. For example SAMMDRA, which was drafted by an external consultant, provides a new definition of “medicine” while saving the old definition of “medicine” in the 1965 Act. This anomaly would have raised the basic problem of what constitutes a medicine, for the purposes of the Act. Similarly, the regulatory system in respect of complementary medicines is poorly conceptualised in the Act.

Since the decision of the Court to set aside Proclamation R49, the Minister of Health has initiated a process of consultation with affected stakeholders, including the Department of Trade and Industry, the PMA, and the United States government to inform the process of amending SAMMDRA. It is anticipated that an amended version of the Act will be tabled in Parliament in the course of 2000.

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S Ramasale, Legal Unit of the Department of Health, Pretoria, personal communication.
Tobacco Products Control Amendment Act

The South African Health Review 1998 reported that Parliament had passed the Tobacco Products Control Amendment Bill toward the end of 1998. Constitutionally, however, a Bill only becomes law once it has assented to by the President. Section 79 of the Constitution provides that, if the President has reservations regarding the constitutionality of a Bill submitted to him for his assent, he is required to refer it back to Parliament for reconsideration.

In January 1999, the President exercised his Constitutional prerogative by referring three Bills back to the National Assembly for their reconsideration, including the Tobacco Products Control Amendment Bill. Although the President was satisfied that the purposes and objectives of the Bill fell within the parameters of constitutionality, the President was concerned that the terms of the Bill were so broad in certain respects that they limited rights in areas unconnected to the purposes of the Bill.

Parliament subsequently approved three important amendments to the Bill. First, it excluded private homes from the definition of “workplace”, except where these homes are used for childcare. Secondly, whereas the Bill initially prohibited tobacco companies from sponsoring, and displaying tobacco logos or brand names at, any “organised activity”, Parliament approved an amendment whereby private events attended by shareholders or employees and their spouses were excluded from the definition of “organised activity”. Thirdly, provision was made for designated smoking areas to be permitted in the workplace, provided that these areas comply with the conditions set out in regulations which will be made by the Minister of Health. The remaining provisions of the Bill were left intact.

Draft regulations under the Act were published for comment at the beginning of December 1999. The main areas covered by the draft regulations include: smoking in public places; the maximum amount of tar permitted in cigarettes; advertising in places where cigarettes are sold; and exemptions from the ban on tobacco sponsorship and advertising. The regulations provide for a period of three months for public comment. The Act will only come into operation once these regulations have been finalised. It is intended that this period will allow businesses ample opportunity to make the necessary adjustments to align themselves to the requirements of the Act. Further delay in implementation of the Act could ensue if a court challenge is brought against it. Following passage of the Bill, the Tobacco Institute issued a statement to the effect that it considered the Bill and the new amendments to be unconstitutional, and warned that they reserved their rights in that regard.

The far-reaching new tobacco control measures, pioneered by then Minister of Health, Dr Nkosazana Zuma, received plenty of international attention as well. On 17 May 1999, Dr Zuma was awarded the Tobacco-Free World Award by the World Health Organisation in recognition of her crusade against smoking.
Anticipated national laws

Euthanasia Legislation

In mid-1999, the South African Law Commission submitted its completed report on aspects of the law regarding euthanasia and the artificial preservation of life to the Minister of Justice. The report contains recommendations regarding end-of-life decisions and the treatment of terminally ill patients. The report recommends that legislation should be enacted in view of uncertainty among the public and the medical profession about the legal position in this regard. It is not clear whether the Act will be administered by the Department of Health or the Department of Justice.

The report includes a recommendation that a medical practitioner or, under certain circumstances, a nurse, should be permitted to relieve the suffering of a terminally ill patient by prescribing sufficient drugs to relieve pain even though this may have the secondary effect of shortening the patient’s life.

The Law Commission did not make any final recommendation in respect of active voluntary euthanasia, but provided three options for further debate and discussion. The first option was that there should be no change to the current legal position in South Africa prohibiting active voluntary euthanasia and physically assisted suicide. In terms of the second option, legislation would permit a medical practitioner to perform euthanasia at the request of a terminally ill, but mentally competent patient. The medical practitioner would have to adhere to strict safeguards to prevent abuse. The third option provides for the practice of active euthanasia to be subject to consideration by a multi-disciplinary panel, in terms of set criteria.

Given the complexity of the moral and ethical issues involved, the passage of the proposed legislation will undoubtedly be accompanied by emotive and acrimonious public and parliamentary debate. This should, however, not deter Government from proceeding with this legislation which is crucial to ensure that South African law remains responsive to advances in medical science and the broader social moves toward greater patient autonomy.

Mental Health Care Bill

The Department of Health is in the process of finalising a new Mental Health Care Bill, which will replace the existing Mental Health Act, 1973, in its entirety. The Bill will provide for a more human rights-based approach to mental health and will focus on promoting rehabilitation of mentally ill persons in a manner which is responsive to their needs as well as the needs of communities in which they reside. It is also intended to locate the determination of the mental status of patients more firmly in the domain of the medical profession than the legal profession. It is anticipated that this Bill will be tabled in Parliament in 2000.

National Health Bill

In the South African Health Review 1996, it was reported that the National Health Bill was expected to be tabled in Parliament during the first session of 1997. In the 1998 edition, the concern was raised that passage of the National Health Bill had become a matter of extreme urgency due to the need for legal
certainty around some major policy issues such as the structure and functioning of the district health system.

Yet, the new millennium is approaching and the long-awaited National Health Bill remains elusive. This is the Bill that is expected to replace the 1977 Health Act and to provide the broad enabling legal framework for the policies outlined in the White Paper on the Transformation of the Health System in South Africa. As such, the continued delay of its passage remains something of an enigma.

Of course, the point has been made that passage of this Bill will be complicated by the complex Constitutional environment in respect of the division of powers between different spheres of government. It is also possible that the national Department of Health is somewhat litigation-wary following legal challenges to several legislative initiatives in the past couple of years. Nevertheless, the country cannot wait indefinitely for the legislative instrument that is to set the overall framework for a transformed health system.

In order to secure progress in this important matter, it may well be advisable for the Department of Health to adopt a less ambitious approach, whereby comprehensiveness is sacrificed in favour of a simpler National Health Bill. It is suggested that an abbreviated version of the National Health Bill could endeavour, with the consensus of all spheres of Government, to define only an appropriate division of functions and powers between those spheres of Government. The remaining content of the existing National Health Bill could rather be legislated in a piecemeal manner, so that legal complexities around specific issues would be less likely to jeopardise the successful passage and Constitutional validity of the entire National Health Bill. This may well provide a method by which passage of the National Health Bill can be expedited.

**National Health Laboratory Service Bill**

Public health laboratory services in South Africa evolved in a fragmented manner. The single largest service is provided by the South African Institute for Medical Research (SAIMR), but over the years separate laboratory services were also developed by the national Department of Health, several departments responsible for health in the provinces and homelands, and some Universities’ medical schools.

In December 1998, the then Minister of Health, Dr Nkosazana Zuma, appointed a Transformation Task Team to advise her on restructuring the pathology laboratory services in the public sector. Arising from the work of this task team, the National Health Service Laboratory Bill was drafted. The Bill was approved in principle by Cabinet in August 1999, and is expected to be tabled in the first session of Parliament in 2000.

The Bill seeks to restructure and transform all public health pathology services in the country, and make them part of a single National Health Laboratory Service. The objective of this service is to provide a system whereby the pathology and laboratory needs of public health service providers, researchers, health science educators and other government institutions may be met in the most cost-effective manner possible.

**Social Health Insurance Bill**

Policy in respect of social health insurance is still in the process of development, and no draft Bill is yet available for comment. The Bill will complement the changes brought about by the Medical Schemes

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1 S Ramasale, Legal Unit of the Department of Health, Pretoria, personal communication.

m S Ramasale, Legal Unit of the Department of Health, Pretoria, personal communication.
Health legislation

Act, discussed above, by the establishment of social health insurance as part of a comprehensive social security system. The national Department of Health is working closely with other sectors, including Welfare, Labour and Finance in developing a policy around social health insurance, and has established an interdepartmental team to develop recommendations in this regard. It is anticipated that a draft proposal will be available for wider consultation in March 2000. 33

Developments in the law relating to HIV/AIDS

During 1999, there were at least two significant developments in the law relating to HIV/AIDS. The first was the publication for comment of draft regulations making AIDS a notifiable medical condition. The second was the release by the South African Law Commission of a discussion paper relating to the merits of creating a statutory offence aimed at harmful HIV-related behaviour.

In April 1999, then Health Minister Nkosazana Zuma published for comment draft regulations making AIDS a notifiable condition. Significantly, the draft regulations did not purport to make HIV-positive status notifiable.36

The draft regulations require health care providers, who diagnose AIDS or certify deaths as AIDS-related, to notify health authorities. Information which would need to be provided includes the patient’s age, sex and race, his or her area of residence, and the probable source of infection. Names and other personal identifiers would not be provided to health authorities. The draft regulations went further and required the person performing the diagnosis to also inform immediate family members and caregivers of the person diagnosed with AIDS.36

The Department of Health explained that the rationale for the regulations was to collect information which is important for programme planning purposes, resource allocation, and for determining the number of persons who may require hospitalisation or other care.36

The Department of Health further pointed out that there are currently 33 other diseases in South Africa which are notifiable, including typhoid, plague, polio and maternal deaths.36 While that is indeed so, there unfortunately remains a social stigma around HIV/AIDS which makes the risk of discrimination against sufferers a real one, which must be taken into account in the development of appropriate and effective interventions.

Detractors of the regulations argued that the information obtained by notification of AIDS will not be useful for planning purposes, because it will provide information about the epidemic as it was five or more years previously, when those now with AIDS first became HIV-positive. They argued that cheaper and more accurate measures, such as antenatal testing, would be more accurate. They further argued that notification of family members and caregivers may give rise to discrimination and may discourage people from getting tested or treated for HIV.37

At the time of writing this chapter, legal drafters in the Department of Health were still awaiting instructions from the new incumbent of the Ministry of Health, Dr Tshabalala-Msimang, as to whether or not to proceed with the finalisation of the regulations.6

n S Ramasale, Legal Unit of the Department of Health, Pretoria, personal communication.
A second significant development in the law relating to HIV/AIDS was the South African Law Commission’s release in January 1999 of a discussion paper on the need for a statutory offence aimed at harmful HIV-related behaviour. The Law Commission supported the notion that the criminal law is not pre-eminently the means by which to combat the spread of HIV. However, it contended that the criminal law has a role to play in protecting the community and punishing people who, through irresponsible and unacceptable behaviour, deliberately place others at risk of HIV infection. The discussion paper provided the option of either applying the existing common law in realising this objective, or creating an HIV-specific statutory offence.

The use of the criminal law to achieve public health objectives is by no means uncomplicated. However, there are instances when criminal sanctions are a useful addition to the panoply of strategies available to counter behaviour which undermines the public health. The consequences of deliberate or reckless transmission of HIV are so grave for the victims of such behaviour that the creation of a statutory offence to address this issue may well be justified. Indeed, it may be worth considering extending that offence to the deliberate or reckless transmission of other serious and highly infectious diseases, such as tuberculosis.

**Regulations**

In order to ensure that the body of health law contained in regulations does not become obsolete, the Department of Health reviews these regulations on an ongoing basis. During 1998 and 1999, more than 70 sets of regulations were reviewed by the Department’s legal advisors. The constant updating of regulations is critical because much of the detail of legislation, and therefore much of the law that tangibly affects people’s rights, is relegated to regulation.

An important set of regulations promulgated in 1999 relates to food hygiene. The regulations apply to all food premises, except those where only fresh, raw and unprocessed fruit and vegetables and other agricultural products are handled. An important prescription of the regulations is that a certificate of acceptability, issued by a local authority, is required before food may be handled in any place that sells processed foods. To accommodate the diversity of circumstances that exist in various communities, local authorities are empowered to grant exemptions, and to establish additional requirements in respect of health hazards not covered by the regulations.

The Department of Health intended, by these regulations, to enhance consumer protection by preventing the transmission of food-borne diseases and by applying a uniform set of regulations throughout the country.

**National Assembly Portfolio Committee on Health**

During 1999, the Portfolio Committee on Health had a relative respite from the frenetic legislative activity which characterised the Parliamentary sessions in 1998, and concentrated more on its function of oversight and monitoring. Responding to public disquiet over levels of efficiency in health services, the Portfolio Committee is in the process of preparing a report on the status of health services nationally. Once

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Dr A Nkomo, Chairperson: Health Portfolio Committee, personal communication.
complete, this report will be submitted to the Department of Health, the Minister of Health and will be
tabled in Parliament. In the coming year, the emphasis on oversight and monitoring will continue, together
with an ongoing focus on specific issues such as health financing and equity, HIV/AIDS and sexuality and
reproductive health.\(^p\)

Of course, the Portfolio Committee will also be involved in the scrutiny, public debate and passage of
the various health Bills which are expected to be introduced in Parliament shortly (see above). The Portfolio
Committee is particularly concerned about the need to increase levels of public participation in its work,
and will be concentrating on eliciting participation by individuals and communities who are not organised
in formal advocacy structures.\(^p\) This is critically important because public participation in law-making is
the essence of democratic governance.

### Update on provincial legislation

This section provides an update on provincial legislative developments which were described in the
South African Health Review 1998.\(^q\) It appears that the pace of legislative development at provincial level
has leveled off to some extent. This may well have the advantage of introducing a measure of stability to an
otherwise rapidly changing regulatory environment.

#### Eastern Cape\(^r\)

The Eastern Cape Provincial Health Bill was expected to be tabled in the provincial legislature in
November 1999.

#### Free State\(^s\)

The Free State Provincial Health Bill was tabled in the provincial legislature, but it was decided not to
proceed with passage of the Bill until the National Health Bill is promulgated. During 1999, the Free State
School Health Services Act, 1998, and the Free State Nursing Education Act, 1998, were promulgated.

#### KwaZulu-Natal\(^t\)

The KwaZulu-Natal Provincial Health Bill was approved in principle by the KwaZulu-Natal Cabinet,
and was submitted to the provincial legislature for consideration.

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\(^{p}\) At the time of writing this chapter, information was unfortunately not available on legislative developments in the
North West province.

\(^{q}\) At the time of writing this chapter, information was unfortunately not available on legislative developments in the
North West province.

\(^{r}\) B Mzileni, Deputy Director: Eastern Cape Department of Health, personal communication.

\(^{s}\) V Litlhakanyane, Chief Director: Free State Department of Health, personal communication.

\(^{t}\) C Baekey, Consultant to KwaZulu-Natal Department of Health, personal communication.
**Gauteng**

The Hospital Ordinance Amendment Act, 1999, amended the Hospital Ordinance, 1958, to allow for the appointment of non-medical Chief Executive Officers to be in charge of hospitals. A Hospital Bill was developed and consulted with hospital managers. A District Bill was in its early draft, together with a Green Paper. Provision was made in the Hospital Bill and the District Bill for structures to facilitate community participation.

**Mpumalanga**

The Mpumalanga Health Bill is still in the process of development. In the meantime, it is anticipated that a Health Facilities Bill will be submitted to Cabinet for consideration early in 2000.

**Northern Cape**

Both the Northern Cape Provincial Health Bill and the Northern Cape Nursing Colleges Management Bill were passed by the provincial legislature, although neither was immediately promulgated. The provincial Department was in the process of drafting regulations to support the Provincial Health Bill.

**Northern Province**

The Northern Province Health Bill was passed by the provincial legislature.

**Western Cape**

The Western Cape Health Facility Boards Bill and the amendment to the Hospitals Ordinance allowing non-medical managers of hospitals are expected to be tabled in the provincial legislature in 2000.
Conclusions

Although provincially there appears to have been some levelling off of legislative activity, the pace and scale of change at national level is still quite frenetic. This is inevitable in the current context of transformation, where far-reaching changes to the health system are critical to redress the imbalances of the past. However, there comes a point where the regulatory environment becomes so unstable that ordinary persons, who are intended to be subject to the laws, have difficulty in keeping track with the changes. Alternatively, they may then begin to resist the changes because they resent the climate of uncertainty in which they are forced to function and which they may perceive as a threat to rational planning of their personal or business activities. When that point is reached, the intended effect of the legislation in modifying behaviour begins to be compromised. This must be avoided.

The other risk of an aggressive legislative agenda is that procedural or technical mistakes may be made which may tie up legislation in legal dispute for a very long time. The fate of SAMMDRA is a case in point.

One of the most important mechanisms which the Department of Health can use to introduce a measure of regulatory stability in the health care environment would be the enactment of the National Health Bill. This would provide a broad enabling framework for the health system, through which an appropriate legislative agenda can be structured, planned and timed. Without such a framework, it is difficult for the layperson to understand how individual legislative reforms at national and provincial level fit into the broader objectives of health system reform in South Africa. The year 2000 provides an important opportunity for the enactment of the National Health Bill, as Parliament and the public will have the benefit of being able to assess the Bill, and in particular its provisions related to the creation of a District Health System, in the light of the culmination of the related processes of demarcating local government boundaries and the creation of fully accountable municipal governance structures.z

Equity in public sector health care financing and expenditure

This chapter deals with the complex environment of public sector financing. A conceptual framework is provided to steer the reader through the steps involved in budget allocations. The mechanisms provided by the Medium Term Expenditure Framework (MTEF) for allocating resources between national and provincial functions, between provinces and within provinces are described.

Vertical division separates national allocations from the allocations to provinces while the horizontal division of revenue refers to the division of the budget between functions within a province. Fiscal federalism was introduced in 1997 and this has strongly affected the priorities in intra-provincial allocation of the budget and impacted on plans to move to equity in health care. Since 1997 provinces are allocated a single “global equitable share” which each province has the autonomy to disburse between functions. The importance of population figures in the formula for division of the revenue is reinforced. Changes in provincial budget share are heavily influenced by the recognised official census figures. The impact of the changes from the preliminary to final 1996 census figures is illustrated.

Trends in intra-provincial allocations are influenced by the provincial treasuries. A rule requiring provinces to allocate 85% of their budgets to the social sector (health, welfare and education) has provided some protection to the health sector from arbitrary allocations. However, there is a mechanism by which the national department influences the departmental allocations and spends so-called “conditional grants”. Their impact on budgets has been negative because they are a circumscribed subset of the departmental allocation of predetermined value. Together with the growing wage bill that has resulted from centralised bargaining these grants have crowded out the remaining portion of the budget used to provide services. The chapter suggests that norms and standards have great potential to prevent arbitrary reductions in allocations to the health sector.

Examples are given of intra-provincial resource allocations in the Western Cape and Gauteng. The influence of other funding from outside of the provincial health department (such as the private sector, local government and even the SANDF) on equity is explained. It is suggested that district equity requires a needs-based formula and that the district health expenditure reviews (DHERs) may assist in preparing for this. Facilitating factors and constraints to equitable district allocations are discussed.

The chapter concludes that little progress has been made towards equity between provinces since the introduction of fiscal federalism in 1997 and that there is a fundamental conflict between provincial level decision-making and equity within a particular sector. A solution may be to focus on standards and norms. The intra-provincial equity analysis is incomplete and hampered by slow evolution of the district system. The final conclusion is that despite severe fiscal constraints it is possible to gradually redistribute resources.
**Introduction**

A detailed review of the budget process and trends in the allocation of total provincial budgets and provincial health budgets was provided in the 1998 South African Health Review\(^1\) and accompanying Technical Report.\(^2\) There was also some consideration of the allocation of health care resources within provinces. This chapter attempts to update inter-provincial health expenditure and budget trends and review recent policy developments that impact on equity in public sector health care expenditure and financing. In addition, evaluation of health care resource allocation within provinces receives particular consideration in this year’s Review.

**Conceptual framework**

When considering equity in public sector health care financing and expenditure, it is important not only to evaluate the distribution of resources *between* provinces, but also how those resources are allocated *within* provinces. Figure 1 highlights the important issues to focus on in such an evaluation (see McIntyre *et al*\(^2\) for detailed information on different aspects of this framework).

**Figure 1:** Key public health sector expenditure and financing equity issues

- (1) Medium-term fiscal framework and the vertical and horizontal division of general revenue
- (2) Medium-term expenditure framework process
- (3) Global provincial budgets
- (4) Provincial health budgets (Inter-provincial equity)
- (5) Conditional grants
- (6) Norms and standards
- (7) Intro-provincial resource allocation:
  - Distribution between health districts
  - Distribution between levels of care
- (8) Provincial level resource allocation decision-making
- (9) District level planning and budgeting
- (10) Facilitating and constraining factors
Overall, government spending limits are determined in the medium-term fiscal framework (Box 1), which uses the budget deficit and tax to GDP ratio targets set in GEAR (the government’s macro-economic policy). This establishes the overall constraint on resources available for public spending. Given that personnel costs are a major component of government spending, civil service salaries negotiated through the central bargaining structure significantly constrain the extent to which available government resources can be translated into service provision.

At present, each province’s health budget (Box 4) is influenced by:
- the size of the global budget which that province receives (Box 3), which in turn is influenced by the medium-term fiscal framework and the vertical and horizontal division of general revenue (Box 1);
- the conditional health sector grants awarded to it (Box 5); and
- the Medium-Term Expenditure Framework (MTEF) budgets submitted to the provincial treasury by the respective health departments and the final MTEF allocations determined by the provincial treasury and Executive Council (EXCO) (Box 2).

These largely provincially determined health budgets in turn influence progress towards equity in the distribution of health resources between provinces. If the national Department of Health were to establish norms and standards for the health sector (Box 6), as has occurred in the education sector, this could also impact on provincial health budgets and hence on inter-provincial equity.

The provincial health department then determines how the resources it has will be utilised (Box 7). There are two important aspects to this intra-provincial resource allocation, namely the distribution of resources between health districts or health regions and the distribution between levels of care. Obtaining an adequate balance of resource allocation between levels of care is of importance from an equity perspective.

On the one hand, the major burden of ill health, particularly for the poor, is attributable to potentially preventable causes that could be addressed through improved access to primary care facilities. On the other hand, equitable access to hospital services for “catastrophic” illness should also be ensured.

While the MTEF process currently influences level of care distribution (Box 2), it does not directly impact on the equitable geographic allocation of resources within provinces. The health sector conditional grants (Box 5) for central hospital services, also impact on the level of care distribution. Ideally, intra-provincial resource allocation should also be influenced by the interaction of provincial level resource allocation decisions (Box 8) and district level planning and budgeting (Box 9). In order to promote equity and efficiency of resource use within provinces, the head office of the provincial health department has to play an important resource allocation decision-making role. In particular, they should establish guideline budget allocations to districts based on the relative needs of districts for health services (e.g. through an equity-promoting, needs-based resource allocation formula). However, plans and budgets prepared at the district level need to be taken into account when determining the final allocations to districts. These plans and budgets will provide an indication of whether the district is able to deliver adequate services within the guideline budget allocation (e.g. has the capacity to downscale services if budgets are to decline or the capacity to absorb budget increases). A range of factors (e.g. financial management capacity at decentralised levels) will either facilitate or constrain these initiatives to allocate resources in an equitable and efficient way (Box 10).

While the above conceptual framework focuses primarily on provincial structures, local governments are also of importance within this framework. For example, as it is intended that local government and provincial services are to be unified within the district health system, district level plans and budgets need to take local government health services into account. Provincial level needs-based resource allocation decisions should also take local government “own revenue contributions” to health services into account.

The rest of the chapter briefly reviews individual components of this framework.
Recent developments affecting the allocation of total government resources

There have been a number of developments over the past year that have impacted on resources available for government spending. Firstly, economic growth has been slower than originally anticipated. While the economy was growing at about 3% in real terms (i.e. after adjusting for inflation) in 1994, 1995 and 1996, the growth rate declined to under 2% in 1997 and to an estimated 0.1% in 1998. Thus, government revenue, and hence government expenditure, is likely to be lower than projected in the 1998 medium-term fiscal framework. This means that total government spending will remain severely constrained for the foreseeable future.

The constraints on the total government budget will in turn impact on the budgets for national, provincial and local governments. At present, the majority of government budget resources are attributable to nationally collected tax revenue and loans. These resources are allocated to the national, provincial and local spheres of government through what is termed the vertical division. Excluding debt service costs and money set aside in a contingency reserve, over 44% of government resources are given to the national sphere, about 54% to the provincial sphere (including conditional grants) and 1.3% to the local government sphere. This proportional distribution between the national and other spheres will remain relatively constant over time. However, a greater proportion of resources may be allocated over time to the local government level as service responsibilities at this level increase (e.g. responsibility for district health services), with a comparable decrease in the percentage allocation to the provincial sphere.

The provincial share of resources from the vertical division is then allocated between the nine provinces in what is termed the horizontal division. The horizontal division attempts to share these resources in an equitable manner using a formula which takes particular account of individual province’s needs for education, health and welfare service needs (see McIntyre et al. for a detailed review of the horizontal division formula). The horizontal division of resources between provinces changed quite dramatically between 1998/99 and 1999/00. There were two major reasons for these changes: firstly, the formula itself was revised (Box 1); and secondly, the final 1996 census data were used in calculating the 1999/00 allocations while the preliminary census data were used for the 1998/99 allocation.

Box 1: Changes in the horizontal division formula for the 1999/00 financial year

The key changes in the formula were as follows:

- A “backlogs” component was introduced to accommodate criticisms that the previous formula did not take adequate account of historical backlogs in some provinces. It attempts to estimate provincial needs for rural infrastructure and additional health and education facilities. While this change is to be welcomed from an equity-promoting perspective, the backlogs component has only been given a weighting of 3% (i.e. it makes very little impact on the overall allocation of resources between provinces).

- The way in which the health component of the formula was calculated was changed. Previously, the health component was based on the proportion of the population without private health insurance and weighted in favour of women, children and the elderly. The new formula does not remove those with private health insurance from the base population, it merely gives them a lower weighting. In addition, the weighting for women, children and the elderly has been removed.

- The calculation of the basic component has also changed. Previously, this was based on the provincial population with a weighting in favour of the rural population. As the new backlogs component includes a rural population weighting, the basic component is now purely based on the size of each province’s population.
The weightings of the individual components was changed as follows:

<table>
<thead>
<tr>
<th></th>
<th>1998/99</th>
<th>1999/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education component</td>
<td>39%</td>
<td>40%</td>
</tr>
<tr>
<td>Health component</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Social welfare component</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>Basic component</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td>Economic activity component</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Institutional component</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Backlogs component</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

As many of the components of the formula are based on provincial population estimates, changes in population data have considerable impact on provincial budget allocations. Table 1 indicates that there are relatively substantial differences between the preliminary and final census data in some provinces. In particular, the Northern Province has a considerably larger population and the Western Cape has a considerably smaller population than previously estimated. There are also important differences in the estimated population for Gauteng and to a lesser extent KwaZulu-Natal and the North West.

Table 1: Comparison of different population datasets (% of total population per province)

<table>
<thead>
<tr>
<th>Province</th>
<th>Census 1996 (Preliminary)</th>
<th>Census 1996 (Final)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>15.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Free State</td>
<td>6.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Gauteng</td>
<td>18.9</td>
<td>18.1</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>20.3</td>
<td>20.7</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>7.0</td>
<td>6.9</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>2.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Northern Province</td>
<td>10.9</td>
<td>12.1</td>
</tr>
<tr>
<td>North West</td>
<td>8.0</td>
<td>8.3</td>
</tr>
<tr>
<td>Western Cape</td>
<td>10.9</td>
<td>9.7</td>
</tr>
</tbody>
</table>

Note: The % population figures for 1996 do not add up to 100% due to an error in calculation at the source.

The changes in the composition of the formula and in some of the data used in calculating the formula, most notably population data, have resulted in considerable changes in the target budget shares for certain provinces (see Figure 2). The Western Cape, Gauteng and Mpumalanga have seen the greatest decreases in their target shares (from 9.6% to 8.9%, 16.2% to 15.7% and 7.6% to 7.1% respectively) while Northern Province and KwaZulu-Natal have seen the greatest increases (from 12.5% to 13.5% and 20.3%
to 20.7% respectively). Eastern Cape’s target share has dropped slightly (from 16.9% to 16.8%), Northern Cape’s has increased slightly (from 2.3% to 2.4%) while Free State and North West remain unchanged (at 6.6% and 8.2% respectively).

Figure 2: Changes in provincial budget share targets with new formula

Figure 3 compares each province’s equitable target share of the government budget, determined through the horizontal division, with their baseline expenditure level and population share. It indicates that the Department of Finance’s (DoF) formula results in a relatively higher percentage of resources being allocated to provinces with the highest poverty levels and human development backlogs than if the allocation were purely based on provincial population size. Thus, the percentage share in the horizontal division in provinces such as the Eastern Cape and Northern Province (and to a lesser extent Mpumalanga) is considerably higher than their population share, and is considerably lower than the population share in “richer” provinces such as Gauteng and the Western Cape. However, given the vast disparities in income, social services and human development within South Africa, it could be argued that inter-provincial budget allocations should favour historically disadvantaged provinces even more than the DoF formula proposes.6

This is particularly important when the DoF target shares are compared with historical spending levels (compare the “base” spending levels with DoF formula columns in Figure 3). It is evident from this comparison that some of the “poorer” provinces are faced with a declining share of government resources (e.g. Eastern Cape and North West) whereas others (like Northern Province) will only experience marginal increases. The provinces that are set to receive the greatest increases in the share of government resources, in terms of the Department of Finance formula, are Gauteng and KwaZulu-Natal, with Mpumalanga receiving a somewhat smaller increase. Given the fiscal policy of reducing the budget deficit coupled with low economic growth, overall government budgets are declining in real per capita terms. This translates into declining real per capita budgets for all provinces, with the greatest declines being faced by provinces such as the Western Cape, Eastern Cape, North West and Free State.
The Department of Finance is currently developing a horizontal division formula for the local government sphere. This formula will be based on estimated expenditure requirements to deliver basic services to poor residents within each local government area (i.e. those residents who would not be able to pay for these services themselves) and will adjust for “own revenue” generated by local governments. Whereas provinces have extremely limited revenue-raising powers, some local governments (particularly in metropolitan areas) are able to generate considerable revenue through employee levies, property taxes, utilities’ sales and other local revenue sources. To ensure equitable allocation of resources for local government services, it will be important to allocate a greater proportion of national revenue to those local governments with a limited local tax base.

Inter-provincial health budget allocations

Data sources and calculation methods

This section focuses on public sector health care expenditure attributable to provincial health departments. It does not take into account health services provided by other government departments, such as Defence, or by local governments. Data on recent expenditure trends and budget projections were obtained from individual provincial health departments and compared with the national Department of Health’s database. Expenditure estimates were obtained for the 1995/96 to 1997/98 financial years, while only budget data were available for the 1998/99 and 1999/00 financial years. MTEF projections for the 2000/01 and 2001/02 financial years are also presented. The official consumer price index was used to calculate real expenditure and budget trends. To emphasise that a combination of expenditure and budget data is used, the term “expenditure/budget” is used in the data presentations below. While actual expenditure will differ from budget allocations and MTEF projections, budget data do provide the best available insight into likely future health spending patterns.
The 1996 census population estimates, adjusted to remove those covered by medical schemes, are used to calculate per capita spending in each province. The most recent estimates of provincial population growth rates, based on the 1996 census, were used to calculate population figures for each year under review.

It should be noted that the inter-provincial health expenditure and budget trend data presented here differ slightly from data presented in the 1998 South African Health Review (SAHR) as well as from other sources. The main reasons for this are that:

- The latest population growth rate and inflation estimates have been incorporated in this analysis
- Final estimates of expenditure for Northern Province for 1995/96 and 1996/97 were slightly different to the preliminary expenditure estimates in the dataset used in the previous SAHR
- Expenditure data are incorporated for 1997/98, compared with budget estimates in the previous SAHR
- The final adjusted budget data are used for 1998/99 compared with preliminary MTEF estimates in the previous SAHR
- The 1998 MTEF projections for 1999/00 and 2000/01 were slightly revised in 1999.

Information on the process of preparing MTEF estimates at the provincial level were derived from interviews with senior health department officials in a sample of provinces (Eastern Cape, Mpumalanga and Gauteng). Information on progress with conditional grants and norms and standards were obtained from interviews with relevant officials in the national Department of Health.

Recent trends in inter-provincial health expenditure and budgets

Figure 4 presents the results of the inter-provincial health expenditure/budget trend analysis. Given the adaptations to some of the underlying data (see above), there are slight differences to the analysis presented in the 1998 SAHR, but the overall trend pattern remains the same.

![Figure 4: Percentage difference between real per capita total provincial health expenditure/budgets and the national average](image-url)
Some provinces are gradually moving closer to their equitable share of public health sector resources (most notably Mpumalanga, Western Cape and KwaZulu-Natal). However, in most cases, progress towards equity in inter-provincial health budget allocations has slowed or been reversed with the introduction of fiscal federalism in 1997. Gauteng stands out as the province that appears to be continually able to secure a relatively large share of global provincial resources for the health sector. Other provinces, particularly the Northern Province and Northern Cape but to some extent the Eastern Cape and North West, appear to be experiencing considerable difficulties in securing a “fair share” of provincial resources for the health sector.

It should be noted that a comprehensive analysis of the inter-provincial allocation of public sector health care resources should include estimates of spending on services provided by the South African National Defence Force (SANDF), other national government departments and services funded from local government “own revenue”. It is likely that the inclusion of such expenditure will accentuate the inter-provincial inequities depicted in Figure 4. For example, services funded from local government “own revenue” are likely to be greatest in the Gauteng and Western Cape metropolitan areas and SANDF health services are also heavily concentrated in these provinces.

The following sections explore the various factors that influence provincial health budgets (including the MTEF process and conditional grants). This is followed by some discussion of possible mechanisms for promoting inter-provincial equity in health resource allocation (including existing government structures that could monitor resource allocation trends and the potential role of norms and standards).

The MTEF process in relation to provincial health budgets

As highlighted in Figure 1, trends in provincial health budgets are integrally linked to overall government budget constraints (determined in the medium-term fiscal framework) and global provincial budgets (determined by the vertical and horizontal division of revenue as well as by conditional grants – see following section). Thus, health departments in provinces that have relatively less constrained global provincial budgets, such as Gauteng, KwaZulu-Natal and Mpumalanga, are better able to secure resources for the health sector. In contrast, health departments in provinces which face significant declines in real per capita provincial budgets, such as the Eastern Cape, are less able to secure a “fair share” of provincial resources for the health sector. It is of particular concern that the health department of the Northern Province, which is not faced with the degree of real per capita global provincial budget cuts of the Western and Eastern Cape, is also unable to secure adequate funding for the health sector. This points to the fact that, while global provincial budgets do have a direct effect on provincial health budgets, provincial level budget negotiations are also of considerable importance.

Since the introduction of fiscal federalism in 1997, different sectors have had to compete with each other at the provincial level for a share of resources allocated from the national level or generated within the province. The respective provincial treasuries are the main arbitrators in this resource competition, through evaluating the MTEF submissions of each department and awarding the final MTEF departmental allocations. The provincial Executive Councils (EXCOs) also play a role in this arbitration process. Many of the provincial health department officials interviewed complained of “unsympathetic treasuries”. In some cases, it is perceived that the treasury (and EXCO) does not regard health as a high priority. This not only influences decisions about the health department’s MTEF allocation, but also adjustments made during the financial year. A number of interviewees complained of “shifting goalposts” whereby provincial treasuries unilaterally cut the initial health department MTEF allocation to accommodate overspending in other departments. Another issue raised by interviewees is that provincial treasuries are sometimes reluctant to
allocate additional resources to the health sector until adequate expenditure controls have been put in place and efforts to achieve efficiency gains have been implemented (Interview data). As the allocation of resources between sectors in each province is fundamentally a political process, the relative influence of the MEC for health in budget debates is also seen as important in securing adequate funding for health services.5

One national initiative that could assist the health and other social sectors in their provincial level resource competition is the recently introduced requirement that at least 85% of each provincial budget should be devoted to social services (health, education and social welfare). In provinces that are currently below their health budget equity target, this requirement could be of assistance. As provinces are required to restructure their administrations and activities to meet the 85% target, more resources will be directed gradually towards social services. While this may result in increased budgets for health, it should be recognised that there is considerable pressure for additional allocations to education while centrally determined pension increases require additional allocations to social welfare.

Some provincial interviewees indicated that they sought additional support from the national level in attempting to ameliorate health budget cuts. The national health department is involved in determining the provincial allocation of conditional grants, participates in various fora that review health budget allocations and can potentially exercise some influence on provincial health budgets through the introduction of norms and standards. These issues are considered in the following sections.

**Conditional grants and their impact on provincial health budgets**

As indicated in Figure 1, provincial health budgets are also influenced by a range of conditional grants. Conditional grants are intended to be additional to the global provincial budget allocated through the horizontal division of revenue. However, in reality, they are not regarded as additional funds for the respective provincial health departments. Conditional grants are essentially a mechanism of “protecting” or “ring-fencing” funding for specific activities that are regarded as priorities, i.e. the funds can only be used for the purpose specified in the conditions attached to the grant. Conditional grants for the health sector currently account for about half of all the conditional grant allocations. Box 2 summarises the health sector conditional grants.
Box 2: Health sector conditional grants

The health sector conditional grants include the following:

- **Central hospitals:** This grant is only given to Gauteng, Western Cape, KwaZulu-Natal and Free State to cover the costs of use of tertiary and referral services by residents of other provinces.
- **Health professionals’ training and research:** All provinces receive a grant, but the largest shares go to Gauteng, Western Cape, KwaZulu-Natal and the Free State.
- **Redistribution of specialised health services:** These grants serve to support the development of specialised services in provinces that currently do not provide such services.
- **The Primary School Nutrition Programme (PSNP):** All provinces receive this grant, with the largest shares going to the Eastern Cape, KwaZulu-Natal and Northern Province.
- **Hospital rehabilitation and construction:** This grant serves to assist provinces to restructure and rehabilitate their hospital systems to improve service delivery.
- **Durban and Umtata hospitals:** This grant is specifically devoted to the construction of the new Durban Academic Hospital and to upgrading and developing the Umtata Regional Hospital.

Conditional grants are included in the national Department of Health’s budget. The national health department releases these funds to provincial health departments as and when they meet the conditions of each grant. The exact conditions for each grant are still being finalised (Interview data), but in most cases, provincial departments are required to submit business plans detailing how the resources will be used. Thus, the provincial departments are accountable for the expenditure of the funds and the national department is responsible for monitoring compliance with the conditions of the grants (which presently means submission of a business plan which is regarded as acceptable, and then adhering to this business plan).

The largest conditional grant category for the health sector is that for central hospital services, followed by the grants for training and research. These two conditional grant categories account for nearly 80% of total health sector conditional grants. Thus, specialist services and training activities have been awarded a high priority in the health sector for conditional grant allocations. This is an important mechanism for securing funding for activities that are regarded as “national resources” and for ensuring that provinces which provide the majority of specialised and training services, that also benefit residents of other provinces, are adequately compensated for these activities. However, these grants can constrain health sector resource allocation decisions within provinces.

As indicated previously, conditional grants are in reality not regarded as additional funds for the respective provincial health departments. Thus, provincial treasuries determine what they regard as an appropriate overall allocation for the health department during the MTEF development process, irrespective of the conditional grants. The conditional grant allocations are then subtracted from the overall provincial health budget to determine the non-conditional grant allocation. Thus, conditional grants do not really affect the overall size of the provincial health budget, but rather the allocation of this budget, particularly between levels of care.

Thus, if conditional grant allocations are increasing at a faster rate than the overall provincial health budget (or declining at a slower rate than the overall provincial health budget), the amount of resources available for district and regional health services becomes increasingly constrained. This impact is particularly...
severe in provinces where the conditional grants account for a major share of the health budget. For example, approximately 41% of the 1999/00 Western Cape health budget was attributable to conditional grants, compared with about 34% of the Gauteng, 19% of the Free State and 11% of the KwaZulu-Natal health budgets. It would appear that there is a need to review these conditional grants (particularly those for central hospitals and health professionals’ training) to achieve a balance between securing stability in resource allocation for “national assets” and the ability to address other priority health service requirements.

**Monitoring equity in inter-provincial health budget allocations**

If equity in the allocation of public sector health care resources between provinces is regarded as a priority, it will be important for resource allocation monitoring mechanisms to be set in place and for equity to be placed firmly on the agenda of various structures that currently play a role in the MTEF process. In relation to monitoring, the national Department of Health has recently awarded a tender to collate a set of National Health Accounts (NHA), i.e. to compile comprehensive health financing and expenditure data. It is envisaged that mechanisms will be set in place to compile such data on a routine basis. The availability of accurate routine health expenditure data will greatly enhance efforts to monitor equity in the health sector.

However, such data must be reviewed by official government structures in order that steps can be taken to address persistent inequities. A recent study concluded that the implementation of health policy is greatly enhanced when that policy is linked to routine government processes. Thus it is likely that equity in inter-provincial health resource allocation can best be promoted if existing structures, that have a defined role in the MTEF budget process, have an explicit and mandated equity monitoring role.

One such mechanism is the MTEF health sector task team that evaluates the provincial health department MTEF submissions. To date, the focus in this evaluation has almost entirely been on efficiency, such as comparing the relative distribution of provincial health budgets between programmes (allocative efficiency) and comparing unit costs (technical efficiency). McIntyre *et al.* noted that:

> “Just about the only reference in the Sectoral Team’s report to equitable resource allocation is to the formula for allocating global provincial budgets. There is also a brief reference to the need to increase equity in the allocation of tertiary level services”.

McIntyre *et al.* go on to argue that the sectoral team should focus on equity, in addition to efficiency, issues in their deliberations.

Another forum that could also play an important role in monitoring inter-provincial health resource allocation, and particularly in making recommendations to introduce mechanisms that could promote equity, is the health sector “4 x 4”. The “4 x 4” is a forum comprising one health department representative from the national level and three from the provincial level with an equal representation from the national and provincial finance departments. It is charged with reviewing a range of financing and budgeting issues affecting the health sector and its deliberations and recommendations are fed through to the Provincial Health Restructuring Committee (PHRC) and the health MINMEC. The “4 x 4” is thus potentially a very powerful advocate for equity in health sector resource allocation.

However, it should be recognised that fiscal federalism is in many ways incompatible with equity promotion within particular sectors. While many government policy documents cite equity as a key policy objective, the constitutional requirement to grant provinces the right to allocate resources according to locally determined priorities jeopardises the extent to which inter-provincial equity within sectors can be achieved.
Thus, while the MTEF task team and the “4 x 4” can play an important role in monitoring progress towards equity and in keeping equity on the health sector policy agenda, additional mechanisms to actively promote inter-provincial health resource equity within the context of fiscal federalism may be necessary.

The potential role of norms and standards

The Constitution allows for national government to legislate minimum norms and standards to ensure “uniformity across the nation” (Act No 108 of 1996; Section 146(2b)), while allowing provincial discretion about the exact mode of service delivery. Education is the only sector to have made progress in the development of norms and standards to date. After intense negotiation with relevant trade unions, norms and standards on education post-provisioning and a mechanism for the redistribution of surplus teachers (i.e. posts above the norms) were introduced.5

Interviews with national Department of Health officials indicate that the development of norms and standards for the health sector is to receive attention. However, it is unclear what form these norms and standards should take. Van den Heever and Brijlal13 recommended that, in the case of the health sector:

“norms and standards relate to the package of services to be made available by the state … they establish the official distinction between what can be regarded as essential and discretionary health services”.

Thus, designing a “basic package” would be one possible approach to establishing norms and standards for the health sector. Alternatively, norms and standards could take the form of staff to population ratios, which is similar to the approach adopted in the education sector.5

Whatever specific approach is adopted, norms and standards could potentially contribute to promoting health resource distribution equity both between and within provinces.5 In theory, provincial treasuries would need to allocate sufficient resources to their respective health departments to ensure that the health sector norms and standards are met. However, provinces may argue that these norms and standards are “unfunded mandates”. Thus, a key constraint in developing appropriate norms and standards is that of ensuring that they are compatible with national affordability criteria, so that provinces could reasonably be expected to fund the required services from their global budget allocations.

Possibly an even more important consideration is which services such norms and standards should cover. On the one hand, norms and standards could focus on certain priority services such as district level services or a “primary care package”. One potential problem with this focus is that if the norms and standards require additional budget allocations to these priority services, but the overall provincial health budget is not increased, spending on “discretionary” services (i.e. those not covered by a conditional grant or norms and standards) may be reduced. This would adversely affect referral hospital services in particular. An alternative approach is to specify norms and standards for all health services, outside of those covered by existing conditional grants. However, this would significantly reduce provincial powers in determining health budgets and could have almost the same effect as making total provincial health budgets a conditional grant.

While the alternative options require more detailed consideration, norms and standards appear potentially to be the most viable mechanism for promoting inter-provincial (as well as intra-provincial) equity in health sector resource allocation in the context of global provincial budgeting.5 Thus, the implications of alternative forms of health sector norms and standards should receive priority consideration by the national Department of Health.
Intra-provincial health care resource allocation

Previous studies have highlighted that inequities in resource allocation within provinces are in many cases greater than inequities between provinces.2,9-11 Case studies were undertaken in 3 provinces (the Eastern Cape, Mpumalanga and Gauteng) to explore the extent of intra-provincial inequities in the allocation of district level health care resources and the extent to which provinces have been able to address these inequities. These were supplemented by data on the Western Cape, which were derived from a recent study.12 Thus, data is presented on two relatively well-resourced, heavily urbanised provinces and two relatively under-resourced, largely rural provinces. In addition, two of the provinces (the Western and Eastern Cape) have faced substantial real per capita health budget cuts while the other two provinces (Gauteng and Mpumalanga) have faced less dramatic real per capita health budget declines.

Data sources, calculation methods and limitations

Data on district level expenditure were obtained from each of the case study province’s financial management systems for the most recent year for which all expenditure data had been captured. Data on more recent budget allocations were also collected. In some cases, these data were already captured in terms of expenditure or budgets per health district (or health region in the case of the Western Cape and Gauteng where districts are yet to be established) while in other provinces, facility level data were obtained and expenditure and budgets in each health district/region were calculated by the research team.

Population data from the 1996 census were used in each of the provincial case studies to calculate per capita expenditure and budgets. Information on the relationship between magisterial districts and health districts/regions were obtained for each province and the population in each health district/region calculated from the census magisterial district data. In the case of Mpumalanga, magisterial district boundaries did not always coincide with that of health districts and appropriate adjustments were made. These data were extrapolated to the year for which expenditure and budget data were available using province-specific population growth rates estimated from the 1996 census results.

This is one of the limitations of these case studies; magisterial level population growth rates were not available so it was assumed that the population in each health district/region would grow at the average population growth rate for each province. Another limitation is that medical scheme members were not excluded from the base population due to the lack of district level data on medical scheme membership. This analysis is also limited by the lack of availability of information on health expenditure funded from local governments’ own revenue, which may differ considerably between health districts/regions in each province. Spending on services provided by the Defence Force were also not incorporated, although these services are only accessible to defined population groups. The major limitation of these case studies is that they only include expenditure and budgets that are explicitly designated for district level services (i.e. community health centres, district hospitals, district offices and other district level non-facility based expenditures). Thus, spending on services which could be regarded as primary care activities that are delivered at other levels of care (e.g. regional or central hospitals) are not included in this analysis. Other studies have indicated that inclusion of expenditure on such services can dramatically influence intra-provincial resource allocation patterns.11

However, these limitations are unlikely to dramatically influence the overall trends presented in the following analysis. Areas that are shown to be relatively over-resourced in this analysis are likely to be found to be over-resourced in a more comprehensive analysis. For example, large urban areas which are shown to have a large share of district-level health care resources from provincial budgets, relative to their resident population, are also likely to have the largest share of local government own revenue and the
greatest medical scheme membership coverage. Thus, a more comprehensive intra-provincial analysis is likely to show similar trends, but even greater disparities, to those presented here. Nevertheless, these limitations require that the following data be interpreted with some caution.

Information on provincial level resource allocation decision-making processes and district/regional level budgeting and planning was obtained from interviews with a range of health department officials in the case study provinces.

**Recent trends in intra-provincial resource allocation**

The findings for the two more urbanised provinces that only have regional level data are presented first. Figure 5 compares the distribution of district level health expenditure in 1997/98 with the 1999/00 budget distribution between the 5 Gauteng health regions. It appears that relatively little progress towards a more equitable distribution of resources between health regions has been accomplished in Gauteng. The distribution of the most recent health budget has, with the exception of the Vaal region, not shown a dramatic relative shift of resources in favour of previously under-resourced regions (particularly Pretoria), while the degree to which the Central Wits region is relatively over-resourced has increased. Overall, the real per capita budget in 1999/00 is slightly higher for Gauteng district level health services than real per capita expenditure in 1997/98. The Central Wits and Vaal regions experienced the greatest increase in real per capita budgets, with the East Rand and West Rand regions experiencing marginal increases. In contrast, the Pretoria region experienced a considerable cut in its real per capita budget. One of the factors contributing to the increase in budget for the Vaal region is that part of Hillbrow Hospital was converted into a primary care ambulatory service and incorporated into district level services in the Vaal region. The extent to which differences in local governments’ own revenue contributions to district level services may diminish (or exacerbate) inter-regional inequities is unknown.

**Figure 5:** Percentage difference between real per capita regional health expenditure/budget and the provincial average (district service expenditure - Gauteng)
The one issue that must be borne in mind when interpreting the Gauteng inter-regional distribution is that of migration patterns. As Gauteng covers a very small geographic area, there is considerable inter-regional migration on a daily basis for work purposes. Thus, the Central Wits region may be providing services to a much greater population than its “resident” population, given that a high proportion of Gauteng residents work in the Central Wits region.

Figure 6 compares the distribution of Western Cape expenditure on Primary Health Care (PHC) services between the four health regions for the 1996/97 and 1998/99 financial years. It should be stressed that the London12 study, from which the data presented in Figure 6 is derived, only documented what was defined as PHC service expenditure, i.e. it does not calculate total district level spending. The London12 study included expenditure on district management, community health services and only 20% of district hospital expenditure. It did not make any assumptions about spending on primary care services at other hospitals. As it does not include all district level expenditure, the results for the Western Cape are not directly comparable with the other case studies.

In relation to PHC expenditure, there has been a substantial change in the relative distribution of resources between health regions between 1996/97 and 1998/99. The two regions which are relatively over-resourced (Southern Cape and Metro regions) have seen a marked decline in expenditure while the West Coast in particular has received increased resourcing to bring it closer to its equity target allocation. Overall, there has been a decline in real per capita PHC spending in the Western Cape, due largely to the significant decline in the real per capita health budget in this province (see Figure 4). The Southern Cape and Metro regions have seen the greatest decline in real per capita PHC spending, while there has been a less marked decrease in real per capita spending in the Boland/Overberg region. The West Coast region is the only region to have experienced an increase in real per capita PHC spending. It is a remarkable achievement that a relative redistribution in PHC spending between regions could be achieved during a time when the Western Cape health department was experiencing substantial health budget cuts.

Figure 6: Percentage difference between real per capita regional health expenditure and the provincial average (PHC expenditure - Western Cape)
The major drawback with the Gauteng and Western Cape data is that it only refers to the regional level. Thus, these aggregate figures are likely to mask substantial differences in resource distribution within each region. In particular, although the Western Cape’s Metro region and Gauteng’s Central Wits region appear to be relatively over-resourced, it is likely that certain peri-urban areas within these regions are in fact under-resourced. For this reason, an analysis of intra-provincial expenditure disaggregated to health district level was undertaken for the Eastern Cape and Mpumalanga. As a detailed analysis of inter-district expenditure for these two provinces was included in the 1998 Health Review, data are not presented here but general trends are highlighted.

Various studies on inter-district health care expenditure have highlighted the trend for rural areas to be relatively under-resourced and the larger urban areas to be relatively over-resourced. The most under-resourced health districts are those which were based in the former homelands. These studies have also highlighted that inter-district health care expenditure disparities are greater than inter-regional disparities. For example, in 1998/99 health regions in Gauteng ranged from being 39% below the equity target level to 45% above the target level (see Figure 5), and from 14% below to 20% above in the case of the Western Cape (see Figure 6). In contrast, health districts in the Eastern Cape ranged from 77% below to 166% above the equity target allocations.

The case studies undertaken in the Eastern Cape and Mpumalanga for this report show that there has been some progress towards addressing inter-district inequities within these provinces. In the Eastern Cape, district level expenditure in 1997/98 was compared with comparable budget allocations in 1999/00. Overall, the real per capita district level budget in 1999/00 was considerably lower than 1997/98 expenditure levels. The majority of districts that were relatively over-resourced in 1997/98 faced the greatest real per capita budget cuts in 1999/00, while the majority of health districts that were relatively under-resourced faced the lowest real per capita budget decreases. In Mpumalanga, district level expenditure in 1997/98 was compared with estimated expenditure in 1998/99. In contrast to the Eastern Cape situation, real per capita district level expenditure increased in 1998/99 compared with 1997/98 expenditure levels. There was a similar pattern of inter-district resource reallocation in Mpumalanga to that found for the Eastern Cape, with the majority of health districts moving closer to their equity targets.

The Mpumalanga case study undertaken for this report also highlighted the importance of obtaining accurate population estimates when analysing geographic inequities. The Mpumalanga Department of Health uses Demographic Information Bureau (DIB) population data for resource allocation decision making while the case study analysis used Census population data. There are some striking differences in health district population estimates based on the two different population datasets. While all districts (with one exception) remain either relatively over- or under-resourced irrespective of which population dataset is used, the extent of intra-district disparities is greater when Census data are used.

The above analysis of intra-provincial resource allocation patterns raises a number of important issues. Firstly, a more comprehensive analysis of the geographic distribution of resources is required in order to take appropriate steps to redress historical inequities. In particular, it is important to ensure that all expenditure on district level services is captured including expenditure funded from local government own revenue sources and well as primary care expenditure occurring in non-district level facilities. Expenditure on health services provided by the SANDF and other public sector providers should also be captured. Secondly, given that population size is a key element of equity driven resource allocation decision-making, the issue of contradictory population datasets should be resolved as a matter of some urgency. In addition, more disaggregated data on the geographic distribution of medical scheme members is necessary to accurately estimate the population within health districts and regions who are dependent on public sector health services. Ideally, one should also obtain information on migration patterns between health districts and regions for the use of health services. However, this should focus on cross-boundary health service use that
is related to ease of access (e.g. populations living near a district boundary with a nearby clinic located in the neighbouring district or use of services near the workplace) rather than migration resulting from a lack of access (i.e. use of services in other districts due to a complete lack of services in their district).

Despite the limitations of the present analysis, some interesting patterns emerge. Although the aggregated regional level analysis in Gauteng and the Western Cape may mask inequities within regions, it does appear that the extent of geographic resource distribution disparities is smaller in historically well resourced provinces (such as Gauteng and the Western Cape) than in provinces which are historically under-resourced (such as the Eastern Cape and Mpumalanga). It also appears that, in general, provinces are gradually attempting to address intra-provincial geographic resource allocation inequities despite the fact that real per capita health budgets have declined in all the case study provinces with the exception of Mpumalanga. This suggests that if a realistic pace of change is adopted, geographic resource redistribution can occur even if overall resources are extremely constrained.

**Provincial level resource allocation decision-making and the link with district level planning and budgeting**

Figure 1 indicates that provincial level resource allocation decision-making processes have a major impact on intra-provincial resource allocation patterns. This figure also indicates that district level planning and budgeting should ideally also be taken into consideration when resource allocation decisions are made by the provincial health departments. It is thus useful to present information from interviews with provincial health department officials on how resource allocation decisions are made and whether or not district budgets and plans influence these decisions.

Some of the case study provinces, most notably Mpumalanga and the Eastern Cape, reported using some form of needs-based formula to guide the allocation of health care resources between geographic areas. Population size was the primary component of the formula in all instances, with a range of other indicators of relative need for health services being incorporated in different provinces (e.g. relative poverty levels, demographic variables etc.). Interviewees in all provinces attempting to redistribute resources between districts/regions noted the need to adopt a realistic pace of change and to avoid drastic budget cuts and increases.

While there are clearly attempts to take equity considerations into account when making resource allocation decisions, most provinces indicated that there is still a heavy reliance on historical budgeting. For example, in one province an interviewee noted that “what we've done is actually to look at historical data to determine the budgets of the various institutions”. Some interviewees noted that the main reason for not pursuing equity-promoting needs-based formulae resource allocation mechanisms more actively is the dearth of reliable data. If one is to apply a needs-based formula, it is necessary to routinely update data for the indicators used in the formula, which can be a time-consuming exercise. It was also noted that there are ongoing and heated debates about the accuracy of population data with different health regions and districts claiming that their population is greater than that reflected in various datasets (e.g. Census and DIB population estimates). This continued controversy makes it difficult to gain support from regions and districts for a relative redistribution of health care resources within provinces.

There was considerable variation between provinces in relation to whether or not district or regional level budgets and plans were taken into account when resource allocation decisions were made. In all provinces, there are efforts to promote planning and budgeting at the district and/or regional level but in many cases, these budgets are not taken into account when determining budget allocations to districts and/
or regions. The main reasons cited by interviewees for not considering district/regional budgets were that the budget estimates were not appropriately compiled and/or that there were insufficient provincial head office staff to collate the budgets submitted by decentralised units. Interviewees identified a number of problems or constraints underlying the issue of inappropriate budgeting by decentralised units. Firstly, capacity constraints at the district (and sometimes regional) level were seen as pervasive, which translated into inadequate budgeting practices (see later section). Secondly, numerous interviewees stated that budgets developed by decentralised units were “completely unrealistic”. One of the reasons for this is that in many cases that districts are merely asked to develop a zero-based budget and are not fully informed of overall budget constraints. One interviewee expressed this problem as follows: “The district manager has compiled a budget of about 100 million, you know that you are supposed to allocate 20 million ... because they haven’t got this understanding that the cake is x billion” (Interview data). This problem could be addressed by providing guideline allocations within which districts should budget. Such guideline allocations could be related to equity target allocations so that districts which are currently under-resourced are given a guideline allocation which exceeds the previous year’s allocation, while over-resourced districts’ guideline allocations would be gradually reduced over time.

While all provinces reported experiencing “unrealistic” budgeting by decentralised units, individual provinces addressed this problem in different ways. One province noted that they did not have sufficient capacity within the provincial head office to go to each district and work with district management to develop a more realistic budget. They also noted that it was “demoralising” for district managers whose response to provincial officials is “you’ve told me to do a budget but you don’t even give me the budget that I’ve asked for”. Within this context, provincial officials indicated that “at the end of the day, you cut it on your own”, i.e. instead of requiring districts to prepare another, more realistic budget, provincial head office officials merely determined an alternative budget amount. Another province was able to adopt a different approach and developed a “spreadsheet with all the districts, and for every district all the facilities with all the line items and what they have been allocated the previous year, the expected expenditure and what they’ve asked for”. District managers then met with provincial head office staff to review their budgets using information contained in the spreadsheets. One interviewee described the budget negotiation process as follows: “[we said] you’ve got A, B, C people working for you, they are earning this amount of money and this is what you have asked for. Why did you ask for that much money if you’ve got to pay people only this”. While this process was extremely time consuming and in some cases very “emotional”, it was seen as an opportunity to develop capacity and demonstrate realistic budgeting practices to district managers. The key factor influencing the different approaches in these two provinces is the availability of head office staff to work with districts in revising the initial, unrealistic budget estimates. The latter province has a dedicated head office staff member for developing district level financial management capacity.

The interviews indicated that some progress has been made in promoting decentralised budgeting and planning, but that considerable additional effort is required in this regard. Some of the key factors that should be addressed are:

- Financial management capacity should be developed at decentralised levels (including skills development and improved information systems);
- Guideline allocations should be provided to districts/regions within which districts/regions can develop more realistic budgets than at present; and
- Adequate capacity at the provincial head office level is essential to support districts/regions in developing decentralised budgets.

The next section considers a recent project, co-ordinated by the Initiative for Sub-District Support (ISDS), aimed at contributing to improved district level planning and budgeting.
District Health Expenditure Reviews

District Health Expenditure Reviews (DHERs) are a recent initiative to develop the capacity of district managers to improve resource allocation in their districts.

The aim of the DHERs is to raise questions about the effectiveness of health spending in districts in relation to key objectives, and to empower district and provincial managers to improve the allocation of health resources in the district. An initial DHER was conducted in the Mount Frere district in the Eastern Cape for the 1996/97 financial year. The detailed methodology and results of the Mount Frere study are provided in McCoy et al. The Mount Frere DHER highlighted a number of key issues about the allocation of resources within the district, including:

- A very high level of recurrent expenditure (85%) was devoted to salaries and other personnel allowances with only 7% being devoted to drugs.
- Hospitals within the district accounted for 62% of total (recurrent and capital) expenditure, with in-patient services alone accounting for 44% of total expenditure. About 22% was devoted to fixed and mobile clinics and 11% to community services (such as environmental health, school health and nutrition services).
- Hospital and clinic resources were fairly evenly distributed within the health district with very similar levels of per capita expenditure in the Kwabacha and Tabankulu magisterial districts which comprise the Mount Frere health district.

These and other findings highlighted relative underfunding of drugs, particularly at the clinic level. However, given that the Mount Frere district is the second most under-resourced district in the Eastern Cape, low spending on drugs is likely to relate to general underfunding rather than to excessive spending on personnel. The picture with regard to the level of care (or hospital vs. clinic and community services) allocation is not as clear. It is conventional wisdom that expenditure on primary level services, particularly through clinics and other community-based services, will have a bigger impact on the health of the poor than at other levels. This is primarily because the poor often suffer from diseases which could be easily prevented. Health status is thus maximised through providing basic health care services, in line with current government policy. However, hospital services are an integral part of district health services and are needed to support clinic-based services. Hospital services will always be more expensive than clinic services. There is no international norm on the distribution of resources between hospitals and clinics within a district. Insights into an appropriate distribution of resources between types of facilities within South Africa may be possible once a comparative study of level of care findings from DHERs in a wide range of districts has been undertaken.

The development of guidelines for DHERs and co-ordination of DHERs in pilot districts is being undertaken by the Health Expenditure Review Task Team (HERTT). HERTT was given this mandate by the District Finance Committee, a sub-committee of the District Health Systems Committee (DHSC), responsible for co-ordinating district health development in South Africa. HERTT has concentrated on developing a “basic” methodology that will be implementable in all districts. Thus, the proposed analyses and dataset have been restricted to a minimum, to ensure feasibility while preserving utility for planning. More sophisticated analyses and approaches will be developed at a later stage.
While district level resource data are often not routinely available, district health service activity data are often even more limited. DHERs will promote the compilation of such health care resource and activity data that are required to calculate key indicators. These indicators focus on: equity, technical efficiency, allocative efficiency and financial sustainability.

Table 6 summarises the recommended DHER indicators. Of particular relevance to this chapter is the equity column. This requires district teams to provide information on the expenditure per capita in different geographic and facility catchment areas. Such data will indicate whether funds are being allocated on an equitable per capita basis. (More sophisticated indicators, such as per capita expenditure when the number of people insured with medical schemes are excluded from the catchment population, would be desirable at a later stage). In addition, it is suggested that per capita utilisation rates for catchment populations are also collected. This may provide some indication of geographical access as well as the general acceptability of the service being offered. Low per capita utilisation rates, in comparison to similar populations elsewhere will prompt questions about equity of access. Equity issues could also be explored through mapping the location of services relative to the distribution of the catchment population.

Other criteria also have some relevance for equity. As noted, allocative efficiency is a measure of where the highest returns to expenditure can be found. As investment in primary services may have a strong equity effect, it is useful to evaluate the different proportions of total district funding which flow to different levels of care and/or facilities. While technical efficiency does not have a direct bearing on equity of allocation, it concerns itself with how the resources are used at the facility or programme level. If they are used differentially well across facilities then equal resource allocation will not be the same as equal health care.

Combining these analyses together will provide the district manager with a picture of the equity of resource distribution and use in the district. Such data will also encourage debate about the suitability of current resource allocation patterns and promote identification of ways in which these patterns can be changed to promote intra-district equity and efficiency. In this way, DHERs are intended to contribute to improved district level budgets and plans, which can be used by district managers for advocacy with higher budgetary authorities.

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Technical efficiency is concerned with the optimal combination of inputs into a particular programme or facility to achieve more output at least cost. In contrast, allocative efficiency relates to the optimal use of resources across programmes or levels of care. It examines whether resources are used in activities which will give the highest returns.
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<tr>
<td></td>
<td><strong>Criteria</strong></td>
<td><strong>Equity</strong></td>
<td><strong>Allocative Efficiency</strong></td>
<td><strong>Technical Efficiency</strong></td>
<td><strong>Sustainability</strong></td>
<td><strong>Source:</strong> Template drafted by the Health Expenditure Review Task Team (HERTT)</td>
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<tr>
<td>1. District</td>
<td>- Per capita expenditure</td>
<td>- Per capita expenditure per magisterial district, sub-district area, urban/rural</td>
<td>- % standard line items (human resources, drugs, others)</td>
<td>- % expenditure on different levels of care/cost centres (% on PHC)</td>
<td>- % of funds from different sources (LA own, district budget, donor)</td>
<td>- % expenditure on maintenance of capital equipment</td>
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<td></td>
<td>- Per capita expenditure per magisterial district, sub-district area, urban/rural</td>
<td>- % on PHC</td>
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<td>2. Hospitals</td>
<td>- Expenditure per catchment population (total, IP, OPD)</td>
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<td>- % expenditure on hospitals (total, IP and OPD)</td>
<td>- Cost per visit</td>
<td>- Revenue collection as a % of total facility expenditure</td>
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<td></td>
<td>- Per capita utilisation of services per catchment population</td>
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<td>- Cost per IPD/OPD</td>
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<td>3. Clinics</td>
<td>- Expenditure per catchment population</td>
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<td>- % expenditure on clinics (total, fixed, mobile)</td>
<td>- % standard line items (human resources, drugs, others)</td>
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<td></td>
<td>- Fixed</td>
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<td>- Drug expenditure per visit</td>
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<td></td>
<td>- Mobile</td>
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<td>- Nurse: visit ratio</td>
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<td>(Bed occupancy rate, where appropriate)</td>
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<td>4. Community</td>
<td>- Programmes</td>
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<td>Services</td>
<td>- District Surgeons</td>
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<td>5. Emergency</td>
<td>- Expenditure on EMS (from province, LA)</td>
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<td>Medical</td>
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<tr>
<td>Services</td>
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Factors facilitating and constraining district level planning and budgeting

As highlighted in the discussion on intra-provincial resource allocation issues, progress on district level planning and budgeting has been slow. Information on constraining and facilitating factors is derived from published research findings and interviews conducted specifically for this study in case study provinces. It is noteworthy that interviewees very seldom cited factors that they regarded as facilitating planning, budgeting or implementation.

Possibly the key constraint to district level planning and budgeting in South Africa is the lack of progress in implementing a district health system (reviewed in chapter 11).

A number of recent studies have highlighted capacity constraints within health districts. Interviewees in this study highlighted the same capacity constraints. Urgent efforts to address capacity constraints (both at provincial health department and district health management levels) would appear to be a key condition for more effective resource allocation in pursuit of equity in South Africa.

As indicated previously, very few interviewees were able to identify facilitating factors. However, the example of one province that has made considerable progress in decentralised planning and budgeting is worth noting. In this province, districts have been operational for some time and district management teams are in place. An important step was to ensure that all district offices had computers with on-line access to various provincial information systems. Possibly the most important initiative in this province was assigning one provincial health department head office staff member to providing full-time support for district level financial management capacity development. This person travels to districts to provide initial training and ongoing support (districts can contact this person at any time with queries and requests) and is involved in reviewing initial budget estimates with district managers.

Factors facilitating and constraining resource redistribution implementation

Many of the results presented in earlier sections have relied heavily on budget estimates due to delays in producing audited expenditure statements within the public sector. Previous studies have cautioned that the redistribution of budgetary resources, either between geographic areas or between levels of care, should not necessarily be regarded as reflecting real resource shifts. McIntyre et al noted that “Expenditure shifts will only be achieved once staff are shifted … as staff account for over two-thirds of total public sector expenditure”. One of the objectives of undertaking provincial case studies in this project was to obtain information on whether human and other non-financial health resources were being redistributed, to translate budgetary shifts into changes in service delivery patterns.

Interviewees tended to focus primarily on constraining factors to resource redistribution implementation. However, a number of respondents identified the MTEF as a potential facilitating factor. While it was stated that the preparation of adequate MTEF estimates is not yet fully operational, particularly at decentralised levels, it was seen as a tool which promoted longer-term planning. In this way, it promotes building programs incrementally, “which allows you to develop capacity along the way” (Interview data). It was also seen as a mechanism to “allow you to look at what is affordable” (Interview data).

The constraints to effective planning and budgeting referred to in the previous section clearly also influence implementation of plans. Interviewees highlighted the pervasive issue of lack of capacity of historically under-resourced areas to absorb budget increases and lack of capacity of relatively over-resourced areas to absorb budget cuts. While much of this relates to the inability to shift non-financial resources (discussed below), it also raised the issue of lack of expenditure monitoring and control mechanisms. It was noted that shifting resources from relatively over-resourced areas and facilities would be limited until expenditure controls had been put in place.
In relation to the ability to redistribute non-financial resources, the need to first address infrastructural development was highlighted. Before staff and other recurrent expenditure inputs can be redistributed, clinics and other facilities have to be built in currently under-resourced areas. A major constraint to facility development is the MTEF’s restriction on “rolling over” capital budgets. The tendering process is frequently a lengthy one and capital funds may be “lost” if tenders are only awarded late in the financial year. While the Clinic Upgrading and Building Program (CUBP) has assisted in developing additional clinic infrastructure, some interviewees stated that lack of intersectoral collaboration to develop complementary infrastructure (e.g. roads, electricity etc.) has slowed progress in operationalising these facilities. Some provinces are taking steps to redistribute movable capital items, such as vehicles, computers and medical equipment in an effort to promote a more equitable distribution of these resources.

All interviewees identified human resource issues as the primary constraint to implementing resource redistribution. Some provincial officials indicated that they had insufficient skilled health personnel overall to contemplate human resource redistribution. “The problem is finding ourselves with a shortage of personnel … they are saying we’ve got too many supernumeraries, but … we’ve got a shortage of skilled personnel, we’ve got an excess of unskilled labour, that’s the thing that’s causing the problem” (Interview data). While routine human resource planning, comparing numbers and categories of staff that are required with the existing staff establishment, is beneficial, current civil service regulations prevent health services from taking action to redress human resource mismatches. In particular, the lack of an appropriate retrenchment tool is a major impediment to rational human resource planning.17

However, in most cases, interviewees highlighted lack of adequate staff relocation mechanisms to be the key problem. Various respondents referred to the lack of willingness to move to rural areas due to poor infrastructure. “There are quite a number of constraints, one of them being accommodation. Most of our clinics do not have good accommodation for nurses … there is no water supply, the roads are poor …”. “I would not want to stay in a place where there’s not even TV reception” (Interview data).

The need to provide incentives to attract staff to rural areas was seen as a priority. “We have tried in some areas where we have newly built clinics to come up with good accommodation. We build a nurses’ home, we put in the furniture; where we can, we supply them with TV sets and a phone”. (Interview data). Thus, free or subsidised accommodation is seen as one possible incentive. Some respondents noted that the Receiver of Revenue has recently removed much of the benefit of subsidised accommodation. “The system is very bureaucratic in creating incentives … there is no equity between rural and urban areas … the Receiver of Revenue uses a formula, he says R2 000 for the house, he [the doctor] is paying R200, he is taxed on R1 800 because that is an incentive [taxable benefit]. Now you can’t compare a doctor or a nurse in [X - a large town] with a doctor in [Y - a remote rural area], … in [Y] that house is probably only worth R300 whereas here [X] the house is worth R200 000 so in fact what you are doing is using one formula for everybody and that’s the nonsense of government” (Interview data).

In very remote areas, financial incentives may also be required. One interviewee noted that there are already “… rural incentives for doctors but we think a doctor … is not a health system; you need a nurse, you need administrators. To have a doctor there without those support people, that person cannot work. Now we are saying, let this thing cascade down to … all those health workers there to form that team”. (Interview data). On the one hand, the constraint is that of civil service regulations where provincial health departments do not have the authority to offer incentives. On the other hand, even if offering such incentives were permitted, it may be unaffordable in the context of current financial constraints in the health sector. The issue of changing public sector regulations and developing appropriate, affordable incentive mechanisms to attract staff to rural areas and relatively under-resourced facilities requires urgent attention if an equitable distribution of health care resources is to be achieved.
Conclusions

This chapter has highlighted that there has been relatively little progress towards achieving a more equitable distribution of public sector health care resources between provinces, particularly since the introduction of fiscal federalism in 1997. A key factor influencing inter-provincial health sector equity is the extremely constrained public sector resource environment. The ambitious budget deficit reduction targets, combined with worse than expected economic growth rates, have resulted in annual declines in the real per capita government budget. Resource redistribution is considerably more difficult to achieve in the face of a declining real budget. The size of global provincial budgets, as determined by the horizontal division formula, also impacts on inter-provincial health budget distribution. While the current formula is somewhat weighted in favour of poorer provinces, it could be argued that relative resource allocation to such provinces should be given even greater priority given the vast human development and social service backlogs in these provinces. In some relatively disadvantaged provinces, such as the Eastern Cape and North West, the horizontal division formula is resulting in allocations which are below their current spending levels. In this context, it is extremely difficult for the provincial health department to secure a fair share of the provincial budget.

In addition to overall government resource constraints, there is a fundamental conflict between provincial level decision making about the allocation of resources between sectors (i.e. fiscal federalism) and the goal of achieving equity in the distribution of resources within a particular sector. If inter-provincial health sector equity is regarded as a priority, mechanisms that can indirectly influence provincial health budgets should be explored. It would appear that norms and standards could potentially be the most viable mechanism to achieve health sector equity goals within a fiscal federal environment. However, considerable effort is required to develop appropriate norms and standards that are nationally affordable and that do not adversely affect level of care resource distribution. Thus, the development of health sector norms and standards would appear to be a priority focus for health department officials and researchers involved in public sector health expenditure related research.

This study has also highlighted that data on the intra-provincial distribution of health care resources are currently incomplete and that a more comprehensive analysis of these issues is a priority area for future research. Despite these data deficiencies, there is evidence that there has been some progress towards addressing intra-provincial inequities. Even in the absence of a fully functioning district health system across the country, a relative redistribution of resources between geographic areas within a province can be initiated. A recent initiative to undertake District Health Expenditure Reviews is directed at promoting equity and efficiency in the distribution and use of resources within districts.

However, in order to ensure that budgetary changes are translated into real resource shifts within provinces and within districts (where they exist), in support of health sector equity, certain issues need to be addressed urgently. In particular:

- Efforts to redistribute financial resources should be accompanied by initiatives to develop all facets of capacity at decentralised levels.
- Infrastructural development (health facilities as well as complementary infrastructure such as roads and electricity) in currently under-resourced areas is urgently required. This could be facilitated by developing mechanisms to allow for the spending of capital budgets across financial years.
- The development of appropriate incentive and other staff relocation mechanisms for all key categories of health providers requires urgent attention.
Despite the extremely constrained resource and capacity environment within which public sector health services are provided in South Africa, it is feasible to gradually redistribute resources if a realistic pace of change is adopted. A number of steps that could be taken to promote such redistribution are summarised above. Arguably the most important factor that will influence relative resource redistribution progress is the extent to which equity is awarded top priority status on the health sector policy agenda.
During 1995 managed care was introduced to the country. It was soon discovered that implementation of managed care involves many highly charged and emotive issues. The chapter gives a very brief overview of the developments of managed care in the United States where it is believed that managed care has successfully contained costs. The aim of introducing managed care to South Africa was to control costs and there are some examples of successes. Patient admissions to hospitals in the managed care environment have decreased but the costs per admission have risen. The chapter indicates that funders and providers have co-operated in addressing managed care issues and this has resulted in decreased costs of medication and primary health care. There have been limited improvements in the costs of hospital care.

The conclusion is that health funding is not under control and that there is a great deal of work still to be done if managed care is to impact on bringing health care costs down.
Introduction

During the latter part of 1995, South Africa’s healthcare providers were informed by the likes of the Medical Association of South Africa (MASA), the Representative Association of Medical Schemes (RAMS) and major business entities (Anglo-American, Southern Life and Sanlam) that Managed Healthcare was about to transform the private sector. American-based management systems backed by advanced coding initiatives and American expertise were introduced into the traditional fee-for-service environment together with a plethora of concepts which were as confusing as they were creative. Processes which had taken place over almost two decades in the USA were rapidly, and in many cases superficially “South Africanised”, and health funding solutions were simultaneously offered to major clients and virtually imposed on healthcare providers.

Given this set of circumstances it is hardly surprising that concepts such as pre-authorisation, capitation, risk-sharing, risk pools, co-payments, deductibles, provider networks, provider contracts, withholds, and formularies probably served more to politicise and organise providers than to reassure medical schemes and employees that the solution to rising health costs was at hand. Those involved in trying to implement Managed Care quickly found that formularies, treatment protocols, algorithms and guidelines, administrative procedures, collection of members’ co-payments, “steering” of patients into provider networks, and preferred provider arrangements were all highly-charged issues. To quote two South African “pioneers” in this area, “Managed care is a contact sport” which is “definitely not for sissies”.

Coinciding with the advent of the global electronic network, web sites, web pages and Internet opinions, South African Managed Care was further compromised by the negative views and publicity posted on the Internet by disgruntled American providers and consumers. Indeed, during the first half of 1996 it was virtually impossible to clearly establish what Managed Care was about as various stakeholders dogmatically and vociferously took up their positions. Table 1 gives an indication of the range of opinions.

Table 1: Stakeholder positions – 1996

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>What managed care is about…</th>
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<tbody>
<tr>
<td>Medical Association</td>
<td>Interference with business</td>
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<tr>
<td>Medical Practitioners</td>
<td>Interference with autonomy</td>
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<tr>
<td>Employers</td>
<td>Cost containment</td>
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<td>Consumers</td>
<td>Limitation of choice</td>
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<td>Government</td>
<td>Dangers of vertical integration</td>
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<td>Competitions Board</td>
<td>Interference with free market</td>
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<tr>
<td>Managed Care Companies</td>
<td>Provision of health care</td>
</tr>
<tr>
<td>Medical Schemes</td>
<td>Salvation</td>
</tr>
</tbody>
</table>

The reality is that all the stakeholders were right, and all were wrong. Each was correct in presenting one dimension of Managed Care, and each was wrong in failing to recognise that Managed Care is the multidimensional mix of all of the parts listed in Table 1. Not surprisingly, the narrow focus of the various stakeholders inhibited dialogue and progress, and the rough-and-tumble of a “contact sport not for sissies” regressed to mimic an earlier phase of South African history, namely the era of the defensive laager. This effect was so powerful that it evoked the statement that “nothing in South Africa’s medical history has done more to unite the profession than the arrival of US-based Managed Care”.

54
Against that background it would be appropriate to briefly trace the development of Managed Care in the United States.

Managed care is firmly established in the USA, and despite the different environments of the two countries it is of interest and importance to review some of the American experiences. The following data appear in the Managed Care Digest Series.¹

- By the end of 1996 some 77.3 million Americans were enrolled in Managed Care plans, which were delivered by 36 chains (e.g. Kaiser, United Health Care) via some 500 different models (e.g. IPA, PHO, staff model).
- Almost 70% of membership resided in plans which were more than 10 years old, with the older more traditional plans continuing to grow, while plans which were five to nine years old lost membership (41% in 1996 alone).
- Medicine expenditure increased by 10% between 1995 and 1996, and represented 10.4% of benefits paid out.
- 68% of plans utilised drug formularies, yet the average drug expense per member increased from $108 in 1994 to $121 in 1996.

More traditional Managed Care (which is still about 10 years ahead of South African Managed Care) is more attractive to Americans than newer variants; members over 65 utilise hospital days at least 7 times more than their younger counterparts; and Managed Care is not inexpensive and premiums may soon approach double-digit rates of increase.² Finally, even in a mature environment, health costs (e.g. medicines) increase at above the general inflation rate.

**Aspects of Managed Care in South Africa, 1996 - 1998**

This time frame has been selected because it represents the period during which the various parties represented in Table 1 focused their attention on Managed Care. There was certainly experience of several Managed Care models prior to 1996, but none which captured the imagination to the same extent. Successful examples include the Vaalmed staff model plan, and the Eastern Cape UDIPA full capitation option run by the Uitenhage IPA. Less successful examples include the Mines Benefit Society’s pre-paid health plan (which included a staff model hospital, formulary and closed panel of providers), and Medimo’s capitation plan. The latter two suffered particularly from the burden of controlling costs in environments loaded with pensioners and continuation members, and the requirement to assume risk for areas which were becoming increasingly unmanageable.

The 1995/96 interest in and enthusiasm for controlling costs of health care created opportunities in the marketplace for a spectrum of “products”. These are broadly defined in Table 2.
Table 2: Components of managed care

<table>
<thead>
<tr>
<th>Component affected</th>
<th>Product</th>
<th>Component affected</th>
<th>Component affected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Doctors</td>
<td>Hospitals</td>
<td>Medicines</td>
</tr>
<tr>
<td>Utilisation review</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Utilisation management</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Networks</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Fee for service</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Alternative reimbursement mechanism</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

A variety of vendors offered these products which ranged from stand-alone services such as the review of hospital accounts, through partially-integrated activities such as comprehensive management of hospital benefits, to fully-integrated benefit management. The latter involved integration of all components, from collection of members’ contributions to management of all healthcare benefits and reimbursement of providers. None of these products are inexpensive for medical schemes or their members, and as a result vendors have been placed under increasing pressure to take risk on their fees. Where the vendor has a contractual relationship with providers (as in a network), there may be devolution of risk-sharing to that level. In simple terms, a vendor such as a medical aid administrator might contractually bind a provider group to deliver services to a defined population for a specified amount. Failure to deliver could result in a penalty for the providers, which in turn could contribute to payment of the penalty incurred by the administrator for failing to keep within a medical scheme’s budget. It is probably fair to say that this aspect of health care delivery, i.e. risk-sharing, is likely to dominate the Managed Care debate as we move into the new millennium.

**Impact of Managed Care**

There are certainly examples of successful Managed Care, whether on a component or comprehensive basis. The Eastern Cape UDIPA model has demonstrated that engagement of the IPA in a relationship with the State can effectively deliver comprehensive health care for less than R600 per member per month, with annual contribution increases matching inflation. However, this model is difficult to emulate in environments in which private hospitals predominate and the profiles and demands of members are very different. In the latter situation, while certain parameters show a response, others have reacted “adversely”. For example, data from two major administrators show an impact of hospital benefit management on the number of admissions, but the cost per admission has increased simultaneously as a result of increases in ward and drug costs. Examples of the impact on admissions/1 000 lives and cost per admission are shown in Figure 1.
While the two administrators regard the next step as having to control ward and drug costs via an alternative system of reimbursement (e.g. per diem or per case fees), it should be acknowledged that these results are unadjusted for factors which might have changed over the period of review. Consequently adjustment for age, chronic disease level, seasonality and gender might produce a very different picture.

A study carried out by Abt Associates Inc measured the impact of several cost-saving interventions.2 The interventions included removal of most out-of-hospital consultation benefits, the introduction of chronic medication management, and hospital pre-authorisation. The findings clearly demonstrated savings in medication and primary care. In contrast, there was an average increase in hospital costs. However, the range was very broad, and although managed care resulted in an overall increase in costs, in some situations it resulted in savings.
Focusing on disease management, an area in which all stakeholders are in agreement that managed chronic disease is more cost effective than unmanaged disease, the data in Figure 3 are relevant.
Figure 3 relates to a diabetes management programme in which a network of providers was paid a monthly capitation fee of approximately R600 per registered patient. Claims through the administrator’s system were immediately reduced by roughly the same amount (i.e. there was a shift in costs for consultations, medicines and hospitalisation into the network), but within a matter of three months there were obvious and significant improvements in the quality of diabetes management as indicated by haemoglobin $A_{1c}$ measurements. Notably, where quality is defined as improved access to care, process of care, and outcome of care, this management programme has certainly addressed the first two, and as a result one can anticipate lower costs and fewer long term complications of the disease.

![Figure 3: Diabetes Control (Hb A$_{1c}$)](image)

Note: Good diabetes management is reflected by a lower Hb A$_{1c}$ percentage.

Of major importance in the achievement of Managed Care results is the co-operation between funders and providers. Here the results of two local studies into asthma and hypertension respectively, are relevant. While the pharmaceutical benefit management company has shown clients’ consistent savings as a result of systematic review of prescriptions, its efforts are nevertheless frustrated by the medical profession’s reluctance to adhere to its own, locally developed guidelines. Hopefully with time there will be greater involvement of all parties in the development of and adherence to clinical guidelines.

**Conclusions**

The past five years have witnessed the complicated delivery and early development of integrated Managed Care in South Africa. Attendants at the birth were ambivalent about its viability, and several would have felt comfortable with withdrawal of all life-support. However, Managed Care has become ambulant and is taking steps with increasing confidence. Government has acknowledged its existence, and the new Medical Schemes Act and attendant Regulations entrench it, but with provisos and demands which are directed towards quality and equity. As demonstrated by statistics produced by one of our
major administrators, the health funding situation is not yet under control (Figure 4), but the management process is under way and every effort should be made between stakeholders and role-players to build on what has worked, examine what has not, and jointly nurture and develop whatever holds promise.

Figure 4: Medical aid index

Medical aid source: Medscheme
Health insurance dynamics

Between 1969 and the mid-1980s medical schemes were forbidden from charging different premiums based on risk of ill health. They were required by law to cover a certain percentage of the fee schedule for all health care provided. During the mid-1980s there was a series of deregulations of the medical schemes industry. In 1989 rules disallowing risk-rating of premiums and requiring open enrolment were reversed. This made the sick and elderly much more vulnerable to losing medical scheme cover.

The national Department of Health has opposed allowing risk-selection since the change of government in 1994. This led to a revised Medical Schemes Act being passed in late 1998.

Since 1985 there has been steady growth in the number of persons covered by medical schemes (with the exception of the years 1991 and 1992). Although data on race have not been collected by the Registrar since 1992, anecdotal evidence suggests that most of this growth has been amongst black South Africans.

South Africa has both employment-based (closed) funds and open funds. Pensioner membership has changed from commercial to open group or closed schemes but the ratio of pensioners is thus primarily dependent on the degree to which younger members are leaving or joining the scheme rather than the pensioners moving. Now with mandatory community rating of premiums the elderly are also able to “jump ship” to lower cost schemes should their existing cover become prohibitively expensive, without fear of being denied cover. Scheme profiles are likely to change and some schemes will price themselves out of the market.

There is a positive link between risk-rating of premiums and cost escalation. Much of the perceived “hyperinflation” in health care in the 1980s and early 1990s was due to improved quality of insurance coverage, and worsening risk pools, rather than true factor price inflation.

The chapter looks at whether reforms contained within the Medical Schemes Act are sufficient to ensure risk pooling. Three additional solutions are suggested to limit adverse selection without jeopardising access for the seriously ill. The first is a basic insurance cover for all of those earning above a certain level (the Social Health Insurance); the second is the revision of the tax incentives to obtain medical cover, and the third is the introduction of measures designed specifically to limit adverse selection without prejudicing bad health risks.

The chapter concludes by suggesting that whereas the previous regulatory changes of 1989 threatened the employment basis of medical scheme cover, future legislation should seek to strengthen employment-based medical cover.
Introduction

South African mutual health insurers, or “Medical Schemes” have been regulated under the Medical Schemes Act since 1967. The Act makes provision for two bodies – the Council for Medical Schemes, and the Registrar of Medical Schemes – to perform regulatory functions. The period from 1969 to the mid-1980s was characterised by strong government involvement, via the Act, and various revisions thereof, in the medical schemes industry. Regulation was especially concerned with the relationship between medical schemes and the provider community, and both modes and rates of reimbursement were fixed by statute. Schemes were forbidden from charging differential premiums based on risk of ill health and were required by law to cover a certain percentage of the nationally mandated fee schedule for all health care provided. Medical scheme premium escalation, the rise of economic liberalisation ideologies internationally, the emergence of non-employment-linked, or open medical schemes, and the movement of for-profit commercial insurers into the health sector in the mid-1980s, prompted a series of deregulations of the medical schemes industry. In the 1989 amendment to the Act, rules disallowing risk-rating of premiums and requiring open enrolment were removed from the statute books, thus making the sick and elderly much more vulnerable to losing medical scheme cover. Schemes have since been able to charge higher premiums to the elderly or sick, or to exclude them from cover altogether.

A few basic definitions are required at the outset. “Adverse selection” refers to the phenomenon whereby consumers choose to take out insurance only when they have a high risk of claiming. Where there is extensive adverse selection, only high risk persons (the elderly, sick, etc.) would end up taking out insurance cover.1 Adverse selection occurs when there is “information advantage” of one player in a potential transaction (often called information asymmetry). In this case, the potential enrollee knows more about his or her risk of ill health than the insurer, and will only buy cover if the premium charged is lower than the expected value of cover given the individual’s own information. “Risk selection” on the other hand, is usually applied by insurance companies to counter adverse selection, and involves assessing the risk of claiming of prospective enrollees, and either charging risk-rated premiums, or excluding from cover those that appear to have significantly higher than average risk of claiming. Risk selection leads to greater efficiency in the sale of health insurance cover, but typically violates a major objective in health policy, that of equity of access. Both risk selection and adverse selection can result in a lack of “risk-pooling”, with reduced cross subsidy from low to high risk enrollees at any point in time.

The distinction between employment-based (closed), and open funds, is an important one. Since membership of employment-based funds is generally compulsory for all employees within a company, and pensioners typically elect to remain a member of the scheme after retiring, a broad spectrum of risk types are accommodated within a fund, typically at “community rated” premiums. Open funds, on the other hand, recruit multiple individuals or small employment groups, generally through brokers, and have little natural cohesion between members. They were thus the first to apply risk-rated premiums to members in order to minimise adverse selection, and compete with other open funds. Although these are by law still non-profit organisations, their administrators typically have a much stronger say in the scheme policy. Most open funds operate as effectively as for-profit funds, with the distinction between the medical scheme and the administrator being a largely artificial one. Increasingly, open funds have sought to selectively recruit younger members from employment based, closed funds.

The national Department of Health has opposed allowing risk-selection in the Medical Schemes Industry since the change of government in 1994, and this led to a revised Medical Schemes Act being passed in late 1998. This will become fully effective from the beginning of 2000. Very little empirical study of risk-pooling within and between medical schemes has been undertaken, however. If the current reforms are to be successfully evaluated, it is important that baseline assessments are undertaken. This chapter reports an investigation into the pattern of private health insurance coverage in South Africa over the
period of deregulation (mid-1980s to mid-1990s). In particular, it attempts to assess the effect of allowing risk-selection by medical schemes on coverage, equity and efficiency of private health care cover. A more detailed description of relevant insurance theory, statistical methods, data and numerical results can be found elsewhere.²

**Data Sources**

Three sources of data were used to study risk-pooling in the South African health insurance environment:

- Data supplied annually by private medical insurance companies to the regulator (the Registrar of Medical Schemes) for the period 1985-1995. This covered between 170 and 200 schemes for 11 years.
- Data extracted from the 1995 October Household Survey on the determinants of medical scheme coverage nationally. The survey covered 138 000 individuals, 70 000 of whom were extracted for study.
- Data on premiums paid for insurance cover by 280 000 families belonging to 42 health insurance funds for the period 1995-1998.

None of these data sources was ideal. While data provided by the Registrar of Medical Schemes covered the period of most interest, they contain little information on the risk profile of funds. The best marker of fund risk profile available was the proportion of pensioner members. Household survey data give a good picture of the determinants of coverage for South Africans, but at the time of study, only one year of data was available, and no information was collected on the price paid for medical scheme cover. Family level data supplied by a medical schemes administrator had good information on price and health risk, but were not necessarily representative of the market as a whole.

**Medical scheme coverage**

*Figure 1: Growth in the number of persons covered by medical schemes over the period 1985 to 1995*

![Graph showing growth in the number of persons covered by medical schemes from 1985 to 1995](image-url)

Source: Registrar of Medical Schemes database
With the exception of the years 1991 and 1992, there appears to have been steady growth in the number of covered persons over time. Although data on race have not been collected by the Registrar since 1992, anecdotal evidence suggests that most of this growth has been amongst black South Africans, with levels of cover remaining relatively static, or even declining for whites during the 1990s. Advocates of deregulation had argued in the late 1980s that such a move would significantly increase the numbers of insured persons by encouraging low risk individuals to join. This does not appear to be the case however, as there is, on average, a slightly slower rate of membership growth in the 1990s than in the 1980s.

**Equity of access and risk-pooling**

The 1989 deregulation of medical schemes made membership relatively more attractive to young and healthy persons, but also made it possible for schemes to penalise high risk, elderly or sickly enrollees.

Data from the Registrar for Medical Schemes indicate a definite separation of risk types between funds over the period since 1985. This has not been an abrupt change, but rather a slow shift in practices led predominantly by a small group of schemes administered by commercial life insurance companies. Separation of risk-types is evidenced primarily by the growing divide between open and closed schemes, with increasing numbers of elderly members in the latter setting. Figure 2 shows the changing proportion of pensioner members in four different types of scheme over the period 1985 to 1995. Open schemes have been divided into 3 sub-types - schemes run by commercial life insurance companies, other open schemes catering for individual members, and other open schemes providing only small group cover.

**Figure 2:** The changing proportion of pensioner members in medical schemes 1985-1995
Prior to 1986, open schemes catering for individuals (commercial and other open) had higher than average risk profiles, indicating that there was probably significant adverse selection in the market. This had reversed by the early 1990s, with open schemes having significantly lower risk profiles by 1995. The most dramatic decrease in the number of elderly members was evident for commercial open schemes, which averaged just over 1% pensioner members in early 1995. Analysis confirmed a significant association between open schemes and decreasing average risk over the study period, while the average risk profile of closed schemes was increasing. Worsening risk profile was also associated with decreasing total number of enrollees, worsening loss-ratios (claims costs: premium income) and larger contribution increases in the preceding year. All of these factors suggest that elderly medical scheme members are “trapped” in that other medical schemes will not readily accept high-risk members. The ratio of pensioners is thus primarily dependent on the degree to which younger members are leaving or joining the scheme. As premiums increase, so more young members leave, the scheme shrinks, the risk profile and loss-ratio worsens, and average premiums have to increase still further. Eventually, pensioner members are left with unaffordably high premiums, and they lose their cover. Mandatory community rating of premiums avoids this type of phenomenon as the elderly are also able to “jump ship” to lower cost schemes should their existing cover become prohibitively expensive, without fear of being denied cover.

Household survey data from 1995 showed that people were more likely to have health insurance cover if they were formally (as opposed to self) employed, a member of a family, white and young. Relatively low levels of cover for the permanently disabled and the elderly, after adjustment for income and other factors, suggest the effect of risk selection with regard to “easily identifiable” risk factors. At the same time, there were suggestions of adverse selection predominating with regard to less easily identifiable medical risks, with recent illness and hospital admission being associated with greater probability of insurance cover. Higher income was significantly associated with greater probability of medical scheme cover up until around R30 000 per family member per annum, above which there was no significant income effect.

Efficiency

Few industry players would deny that extensive risk-rating of premiums might be perceived as unfair. It is argued, however, that the ability to risk-rate premiums allows more efficient operation of the insurance market, and that this compensates for inequities generated. While the market for health insurance might operate efficiently under such conditions, there is no necessary link to efficient spending of health care resources. In fact, there are a number of reasons why we might expect risk-rating of premiums to be associated with cost-escalation in health care:

- Significant transaction costs are associated with risk-rating, and these are inherent in the informational advantage that a potential enrollee has over their insurer. These costs are not incurred if all enrollees are charged the same premium.
- Schemes that are able to discard their marginal bad risks have less incentive to control health care costs actively. Careful construction of cost-effective benefit options and managed care interventions are difficult to implement, and might only yield cost reductions in a few years’ time. It is thus likely that schemes that do not practice risk selection will have much stronger incentives to follow this approach to cost control.
- Insurance theory suggests that as different risk types are forced into the same risk pool, lower levels of cover are chosen with a greater degree of out-of-pocket payment. Conversely, if high risks are excluded from a scheme, the remaining low-risk enrollees would choose more comprehensive forms of cover. Moral hazard, or the propensity to consume more health care in
line with greater levels of insurance cover, would thus increase under a risk-rated, as opposed to a community-rated scenario, thus spurring cost-escalation.

In order to test the link between cost-escalation and risk-rating, data from the Registrar of Medical Schemes were used to assess the determinants of premium escalation for registered medical schemes over the period 1985-1995. In assessing the relationship between risk-rating and price changes, it was important to simultaneously adjust for the risk profile of schemes, the quality of cover offered, scheme size, and potential for adverse selection. These proved to be important adjustments and were all significant predictors of premium variation. The most important “quality adjuster” appeared to be use of public versus private hospitals, with shifts from the former to the latter in the early 1990s accounting for a large proportion of premium increases. After adjustment, there remained a statistically significant, positive link between risk-rating of premiums and cost-escalation. If the quality adjustments were removed from the model, the effect of risk-rating on premium increases became much stronger. This suggests that savings to low-risk members from risk-rated premiums tend to be passed on through more lavish benefits, rather than lower premiums. This analysis also allowed estimation of overall premium inflation for the medical schemes industry after removal of the effect of risk pool changes and coverage improvements. Figure 3 shows adjusted premium increases year-on-year compared to unadjusted figures, and the Consumer Price Index (CPI).

Figure 3: Adjusted premium increases year-on-year compared to unadjusted figures and the Consumer Price Index (CPI)

These adjustments suggest that much of the perceived “hyperinflation” in health care in the 1980s and early 1990s was due to improved quality of insurance coverage, and worsening risk pools, rather than true factor price inflation. In fact, underlying private sector health care costs probably increased slower than the CPI over this period. With the sudden change in risk profiles associated with the deregulation of premiums in 1989, the 1990s showed a substantial convergence of adjusted and unadjusted inflation estimates.
Overall, however, medical scheme premium inflation does not appear to have differed significantly from the CPI.

Finally, data at the level of individual families obtained from 42 medical schemes for 3+ years were used to assess willingness to pay for risk-rated versus community-rated cover, after adjustment for quality and risk profile. This analysis allowed estimation of the “pure-value” of risk-rated, as opposed to community-rated cover for individuals. Higher income, white, single persons in the age range 45–59 were willing to pay the highest price over and above their actuarially fair premium for cover. Furthermore, families enrolling in the risk-rated plans were willing to pay significantly more than those covered by community-rated schemes, for equivalent cover. This phenomenon confirms the separating equilibrium suggested by the Rothschild-Stiglitz model. If enrollees are confident that they do not have to cross-subsidise other enrollees, they will be willing to pay more for insurance cover.

Conclusions

There can be little doubt that the period since 1985 has been characterised by quite fundamental shifts in the risk-pools covered by the South African medical schemes.

The inequities that have resulted, and are likely to result from extensive risk-rating of medical scheme premiums are almost certainly the reason behind current regulatory reform. Risk-rating also appears to be associated with cost escalation, however, and efficiency improvements might be a second result of re-regulation. Are reforms contained within the Medical Schemes Act sufficient to ensure risk-pooling though? Community-rating and open enrolment provisions will definitely enhance the cover available to currently excluded high-risk individuals who are well informed of their rights. They offer little protection to medical schemes with abnormally high risk profiles, however, and it is likely that some open medical schemes with relatively poor risk profiles will be forced to exit the market. Previously proposed risk-equalisation mechanisms would protect both individuals and schemes.

Some critics have suggested the new legislation will cause catastrophic adverse selection, and a collapse of the medical schemes industry altogether. Given the fact that deregulation brought about only modest decreases in adverse selection, this seems somewhat alarmist. It would seem that risk-rating by insurers poses an incomplete solution to adverse selection anyway, with substantial information asymmetry being the root cause, rather than regulation. Three additional solutions have been suggested to limit adverse selection without jeopardising access for the seriously ill. The first, and most comprehensive would require a mandate on basic insurance cover for all of those earning above a certain level. The Social Health Insurance (SHI) plan mooted by the Department of Health is essentially a such an intervention.

A second, and less comprehensive approach would involve a revision of the tax incentives to take out cover. This should extend tax deductibility to the self-employed, for whom adverse selection/risk selection appears to be a significant problem. Changing the nature of tax deductibility to a ceiling on the total amount that could be deducted, rather than a proportion of the premium costs to be exempted would provide a stronger incentive to low-income workers to take out cover.

Finally, measures designed specifically to limit adverse selection, without prejudicing bad health risks, do exist, and should be permitted by the revised Medical Schemes Act. These include late age joining penalties and waiting periods after joining a fund before benefits become available. Since these reduce the informational advantage of potential enrollees, they are likely to reduce adverse selection without penalising current medical scheme members who develop serious illness. Finally, the results provided suggest that employer-based medical scheme cover is a powerful cohesive force in an otherwise fairly anarchic insurance
environment. Whereas the previous regulatory changes threatened the employment basis of medical scheme cover, future legislation should seek to strengthen employment-based medical cover. Furthermore, employers should seek to wield the considerable market power which they hold to extract better value for money for their beneficiaries.
The purpose of this chapter is to examine the relationship between the public and private sectors in health care. It explores the ways in which the two sectors interact; asks whether the behaviour of the private sector is detrimental to the goals of the public health sector, and if so, in what way; examines how the government should respond; and questions whether it is possible for the public sector to benefit from working with the private sector.

Having described the interaction between the two sectors, and the negative impacts of private sector behaviour, it is argued that the public sector can benefit from interaction with the private sector, as long as the government is successful in its attempts to regulate the private sector. If the public sector spreads its resources too widely trying to meet the needs of too many, it may damage capacity already existing, failing to care for those who need it most. Engaging with the private sector may enable the public sector to concentrate on the poor, while at the same time working towards a less segmented system under social health insurance that could yield benefits in terms of better access, improved equity and social cohesion.
Introduction

This chapter aims to:

- outline the current role of the private health sector within South Africa
- describe current forms of public-private partnerships in health
- describe possible changes in the relative sizes and resources available to the two sectors
- discuss alternative forms of regulation of private sector
- briefly outline the Social Health Insurance proposals, their potential benefits, and problems.

The role of the private sector within South Africa

South Africa had one of the most expensive and ineffective health systems in the past regime. In 1992/93 the country was spending 8.4% of its GDP on health care (public and private expenditure), amongst the highest in the world, yet South Africa ranked below 60th in terms of the “health status indicators”. This was attributed to the fact that the private sector spent over 60% of the total spending on a beneficiary population of less than 20% of the country’s total. Given this maldistribution of resources, monitoring health expenditure by the source of finance and by beneficiary type is important.

The National Health Accounts Project, commissioned by the national Department of Health, is in the process of gathering data for years 1996-1999. Table 1 shows the source of finance and the extent of insurance coverage for the years 1992/93 and 1995. There are substantial problems with both the 1992/93 and 1995 data.
### Table 1: Expenditure on health care by source of finance 1992/93 and 1995

<table>
<thead>
<tr>
<th>Source of finance</th>
<th>1992/3 Million rand (1) HER estimates</th>
<th>Percentage of total</th>
<th>1995 Million rand IES estimates (3)</th>
<th>1995 Million rand Registrar data &amp; re-estimates of IES</th>
<th>Percentage of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Tax Revenue</td>
<td>11 447</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Authorities</td>
<td>225</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Public sector Total</strong></td>
<td><strong>11 672</strong></td>
<td><strong>38.9</strong></td>
<td><strong>16 500 (4)</strong></td>
<td><strong>42.0</strong></td>
<td></td>
</tr>
<tr>
<td>Medical Schemes</td>
<td>12 064</td>
<td>40.2</td>
<td>10 842</td>
<td>16 123 (5)</td>
<td>41.0</td>
</tr>
<tr>
<td>Medical Insurance</td>
<td>923</td>
<td>3.1</td>
<td>688</td>
<td>1 023 (6)</td>
<td>2.6</td>
</tr>
<tr>
<td>Industry</td>
<td>1 162</td>
<td>3.9</td>
<td>1 426 (7)</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>Out-of-pocket expenses</td>
<td>4 184 (2)</td>
<td>13.9</td>
<td>1 292</td>
<td>4 213 (6)</td>
<td>10.7</td>
</tr>
<tr>
<td>Private sector total</td>
<td>18 333</td>
<td><strong>61.1</strong></td>
<td>18 642</td>
<td></td>
<td>58.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30 005</strong></td>
<td><strong>100.0</strong></td>
<td><strong>39 285</strong></td>
<td></td>
<td><strong>100.0</strong></td>
</tr>
<tr>
<td><strong>MA Coverage</strong></td>
<td>22.8</td>
<td>18.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes/Sources:
1. Adapted from table 3.5 McIntyre et al
2. Calculated using the methodology described in the text
3. Estimates from the Income and expenditure survey
4. From McIntyre et al
5. From Valentine N using data from the Medical Schemes Registrar.
6. Calculated from Income and Expenditure survey (1995), and increased by a factor of approximately 50% to allow for under-estimation.
7. No data for 1995 were available for industry expenditure, and it has been assumed for the purposes of this table that the proportions have remained relatively stable.

The public share of expenditure would appear to have risen slightly between 1992/93 and 1995, and the private sector has fallen. This fall is matched by a fall in the proportion of the population with medical scheme coverage. It is hoped that the National Health Accounts Project will be able to provide a more accurate picture, particularly of the change since 1995.

There is considerable doubt as to the accuracy of the estimates of out-of-pocket expenditure. The 1992/93 estimate of out-of-pocket expenditure, published in the Health Expenditure Review (HER), was calculated using:

a) the number of GPs in private practice (which was found to be somewhere between 6 000 to 10 000)

b) the average consultation fee charged to those who pay cash

c) the number of visits per person per annum by non-medical scheme members

d) the income derived from dispensing medicine.
The 1995 Income and Expenditure Survey (IES) carried out by Statistics SA, has been used to calculate the 1995 estimates of out-of-pocket expenditure in Table 1. However, IES data are viewed as considerable under-estimations. If data on contributions to medical schemes by members gathered from households by the IES is compared with the Medical Schemes Registrar data to which all medical schemes have to report their income, the difference between the two figures is in the order of approximately 50%.

The Medical Schemes Registrar data is assumed to be more accurate and is reported in Table 1. If the IES figure for out-of-pocket expenditure is increased by a similar factor (as done in the table), the figure rises to R4.2 billion. This figure is comparable to the 1992/93 estimate of R4.1 billion.

Table 2 shows the distribution of health personnel between the two sectors for the years 1989/90 and 1998. In 1998, 62% of GPs, 77% of specialists, 88% of pharmacists, and 89% of dentists worked in the private sector, meeting the needs of approximately one fifth of the population. In 1989/90 nurses were the only category of staff where a greater number were working in the public sector. (Only 21% were working in the private sector.) The 1998 data suggests that this is changing - nearly half of all nurses now work in the private sector, with greater numbers of higher skilled staff working in the private sector.

<table>
<thead>
<tr>
<th>Table 2: Proportion of the health personnel in the private sector in 1989/90 and 1998</th>
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<tr>
<td></td>
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<tr>
<td>General practitioners</td>
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<td>Specialists</td>
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<td>Professional nurses</td>
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<td>Auxiliaries</td>
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<td>All categories of nurses</td>
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<tr>
<td>Pharmacists</td>
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<tr>
<td>Dentists</td>
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</tbody>
</table>

Sources: McIntyre, Söderlund

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a For further discussion see Valentine.

b This is assuming that the extent of the under-reporting is the same for the two types of expenditure, which is not necessarily the case.
**Why is the private sector important?**

The public and private sectors within health care are often perceived as two distinct entities - a public sector, providing care for the majority of the public, and a private sector, providing care for the wealthy who are able to afford medical scheme coverage. If the concern of the Department of Health is meeting the health needs of the poorer majority of the population, why should it be concerned with the private sector? Private providers are primarily motivated by the aim of making a profit, and as a result their objectives do not coincide with the public goal of providing universally acceptable health care for the whole population. This mismatch of objectives results in particular problems for health provision:

- the profit motive may override good clinical practice
- a failure to address public health issues, such as prevention
- a lack of integration with government health services
- attraction of health professionals out of the public sector
- the provision of poor quality care, or inappropriate services and distribution of facilities.

Yet the Government is unlikely to either ban the private sector (politically unfeasible and practically impossible given government capacity), or ignore it, given the impact of private sector provision on the public sector. It is argued here that the government’s response to the private sector has to have three aims:

- To plan for the impact of changes that are likely to influence the absolute and relative distribution of resources between the two sectors
- To build constructive public-private partnerships from which the public sector can benefit.
- To influence private sector behaviour through regulation - both in the form of legislation, and through a framework of incentives (financial and non-financial). The aim of regulation should be not only to limit the problems listed above, but to ensure that the public health sector benefits from its interaction with the private sector and vice versa.

In the following sections of this chapter, the public-private mix will be described in greater detail, (examining the formal interaction between the two sectors), and then two of these issues will be discussed further: the possible changes in the relative distribution of resources between the two sectors, and regulation.

**What is the public-private mix?**

The phrase the “public-private mix” refers to the formal and contractual relationships between the two sectors. The “mix” can take various forms, dependent on whether the private sector is involved in financing and/or providing health care. The typology below sets out the broad categories of relationship.

- **Public financing for private provision of care for public sector patients.** For example contracting out – where a public hospital may purchase clinical (such as laboratory, dialysis or radiological) or non-clinical services (such as management advisory services, laundry, security, catering, paramedic and air ambulance services) from a private provider. The total value of such contracts at hospital level has been estimated as 9.4% of the total hospital budget. District Surgeons or District Medical Officers provide care to public patients on a sessional basis. Departments of health sometimes subsidise either specific programmes, services or the institutions themselves such as the South African National Tuberculosis Association (SANTA) and non-governmental organisation (NGO) AIDS initiatives.
Private financing of private sector care for private patients using public facilities. For example, leasing out of public beds/wards for private patients, where private providers pay to use public facilities. Or some forms of limited private practice, where public sector doctors are allowed to spend a specified number of hours in private practice.

Private financing of public provision of care for public sector patients. This refers to “out-of-pocket and medical aid payments” by private individuals for care at public facilities, such as user fees at state hospitals. This type of interaction is not of primary concern in this chapter.

The nature of these types of relationship often varies according to level of care, and the history of the interaction between the two sectors. As an example, the different types of public-private mix within the hospital sector are described in greater detail.

**Historical and current public private partnerships in the hospital sector**

**Private not-for-profit hospitals (churches, mines, SANTA, etc.)**

These institutions and services have been a feature of the South African health system for many years. The State often entered into agreements with such organisations in order to ensure that the operators would keep the facilities open to public patients. The relevant department paid for the public patient care or met operating deficits of the provider depending on the negotiated contract. The operator’s service was a part of the health system.

**Treatment of public patients in private hospitals**

There are several chronic case hospitals that are owned by Lifecare, a private company, that provide services exclusively to the State for the care of public patients. There are also examples of private wards and special units, special equipment, etc. being made available to the public service as extensions to public facilities. This is discussed in the chapter on State-aided Hospitals (chapter 9).

**Hybrid hospital partnerships**

There are a few examples of hospitals that the homeland governments commissioned as “turn-key projects”. They were built with private capital and managed by private providers for the State, who paid patient-day and bed-day tariffs for the recurrent services. The circumstances of each hospital are different and there are lessons to be learnt from each model. They include:

- Evuxakeni Hospital, a psychiatric and chronic care institution in Giyani, Northern Province (1986)
- Shiluvana Hospital, a general community hospital that replaced Douglas Smit Mission Hospital in the Northern Province (1987)
- Matikwana Hospital, a new general community hospital in Bushbuckridge on the border between Northern Province and Mpumalanga (1989)
- Hewu Hospital, a new general community hospital near Queenstown in the Eastern Cape.

There are also examples of hospitals being shared between the public and private sectors, such as at Uitenhague and Thabazimbi.
**Treatment of private patients in public hospitals**

If the patient requests the services of his or her own private practitioner in the State facility, then such practitioner treats the patient in the public hospital. In the past there was an Ordinance in some provinces preventing public sector doctors from rendering care to private patients. This was designed to protect the income of the private doctor. This is no longer the case and care is rendered to the patient by the first competent practitioner available irrespective of whether he/she is a State employee, private practitioner, has sessions or not.

In several areas the departments of health have started upgrading facilities and are creating “private wards” with greater sophistication for full-paying patients. The departments bill the private patients for use of the facilities and for the professional services of any full-time staff, and the private practitioner bills the patient for his or her own services only. However, there are reports of private practitioners billing for services that they have not rendered, and the departments of health frequently fail to bill private patients at all, and therefore lose revenue.

**Case Study: A feasibility study of leasing out public facilities and services in two academic hospitals in the Western Cape**

**Methodology**

Hospital beds can be leased with or without support services. It is important to assess the availability of beds, and particular support services (such as clinical services, non-clinical services, human resources, hospital management and parking) by:

- **geographic area**
- **level of hospital care (academic, district hospital)**

It is necessary to evaluate the feasibility of each option taking into account:

- **The local supply and demand of public hospital facilities**
- **The capacity of the public hospital to administer a leasing contract**
- **The cost to public hospitals of providing facilities/services to be leased, to establish a suitable price for the leasing contract**
- **To assess the other implications of leasing that may be detrimental to public sector goals, such as the loss of staff to the private sector, and preferential treatment of private patients.**

**Results**

- The study showed that there was spare capacity in public hospitals available in terms of beds, equipment for pathology, radiology, catering and cleaning, theatre time, and parking space.
- There was barely sufficient human resource capacity for existing level of public service, and therefore no spare capacity to provide extra services to accompany leased beds.

**Potential Benefits**

- Extra revenue, if charges to private leases are maintained above rising costs
- Hospitals’ assets (building, and equipment) are maintained and not allowed to fall into disrepair.
Potential problems for individual public hospital

- Insufficient capacity within the public hospital to administer, monitor and enforce leasing contracts
- Loss of public hospital staff to the private sector may be increased by close proximity of the two employers.

Broader implications for the public sector

- Equity and tiering in autonomous hospitals.

Given the potential and incentive for generating considerable amounts of revenue, it is important that private sector patients are not given preferential treatment, to the detriment of public patients. The incentive among public hospital managers to favour private patients may increase if the hospital concerned is financially autonomous and therefore has greater control over the generated revenue. Monitoring to ensure that a sufficient proportion of resources continue to be available for public patients is therefore crucial.

Source: Sinanovic E and McIntyre D (1998)

The changing public-private division of resources

The private sector has grown considerably in the last 10 years. The majority of the population had access to, and used the services of the public sector in the past. However the resources in the public sector have decreased and the negative impact on services has encouraged those who can afford it to switch to the private sector. This section will look at the likelihood of continued growth, and how, if the growth does continue, it will affect the ability of the public sector to provide care to those who need it.

Factors that may affect future growth of the private sector

- Economic growth, and with it growing personal income, enables individuals to pay for private care. There is slight evidence of this in South Africa. African membership of medical schemes that has grown from 24% of total members in 1990 to 36% in 1995.
- However, there is evidence that the private sector has become saturated with some types of providers, for example general practitioners, given the limited number of individuals who can afford private care. As a result, both funders and providers are looking at new arrangements (such as modified fee-for-service or capitation) that would enable lower costs and premiums. This in turn would make medical scheme membership affordable to a greater proportion of the population.
- Social health insurance (SHI), if introduced in the form of the 1997 proposals, may support the expansion of the private sector, by making it mandatory for all those above a certain income level to purchase insurance, either through SHI or privately.
- The new Medical Schemes Amendment Act, with the prevention of risk selection, prohibits medical schemes from reducing costs by shifting expensive patients on to the public sector. Medical schemes can therefore either pass on increased medical cost to patients through premiums, potentially leading to a reduction in the demand for private health care, or modify the reimbursement system to encourage providers to limit the provision of health care and the resulting expenditure. (The role of reimbursement systems is discussed in greater detail below.) Private hospitals may accept a change in the reimbursement mechanism, rather than face a fall in demand for private care.
6: The public-private mix

**Impact of private sector growth on the public sector**

An integral part of the growth of any sector of the economy is the flow of resources to or from that sector – in this case, health personnel, funds and patients. The public sector will be affected by the relative proportions of the flows.\(^c\)

- If the movement of health personnel out of the public sector exceeds that of patients, then staff shortages will occur. This is obviously a very real issue in South Africa at the moment. Higher private sector wages has led to outflow of personnel, often increasing the work burden on those who are left. The AIDS epidemic, along with free primary health care, is likely to have compounded the problem by increasing the demand for public care.

- If the growth in the private sector is accompanied by, and partially driven by economic growth, tax revenue will also rise, (even if tax rates remain constant). If the health budget remains a constant proportion of total government expenditure, public sector resources available to the health sector should increase. Therefore an outflow of patients to the private sector may be accompanied by an increase of resources available to the public sector.

- If, and when, economic growth does occur, it can not be assumed that the health budget will remain a constant proportion of total government spending. It could be argued that as a larger proportion of the population, particularly the political elites, turn to the private sector, firstly, political support for the aims of the public sector may dwindle; and secondly, the voicelessness of the poor may lead to the neglect of suitable services even if political will to improve equity is maintained. As a result, the proportion of government expenditure allocated to health may be allowed to fall.\(^8\)

In the short term, the outflow of staff from the public sector, particularly nurses, has probably left considerable shortages which may only worsen. This, combined with the increase in the demand for care due to the impact of AIDS, may stretch resources in the public sector such that those who can turn to the private health sector, albeit for minimal levels of care, will do so. Evidence of those without medical aid using the private sector can be seen in Palmer’s discussion in this Review (as well as the growing number of private clinic chains, such as Primecure, and Carewell).

If, in the long term, the public sector attempts to stretch its resources too far to meet the needs of too large a proportion of the population, the result will be to weaken the capacity of the public health sector, thereby reducing the quality of care it can provide. It may be necessary to focus the health sector’s energies towards those that need it most. Either way the private sector will expand its activity further in order to meet demands that the public sector cannot.

The public sector could pro-actively use public-private partnerships as a means of increasing the resources available to the public sector, enabling it to improve the quality of care. Regulation would be crucial to ensure both that those using the private sector receive a reasonable quality of care, and that the public sector benefits from public-private partnerships.

\(^c\) It is likely that the recent purchase of military hardware (approximately 25 billion rand) has significantly reduced the possibility of increasing social spending for several years, wiping out any benefits that may have resulted from the recent years of fiscal restraint due to GEAR.
Government response to the private sector

The need for partnerships in health has been recognised for many years. Since the 1994 elections, even if the desired nature of the partnerships is not clearly specified, this need has been documented as a policy objective in the White Paper for the Transformation of the Health System in South Africa.d

Section 2.4 of the White Paper elaborates on “Integrating the Public and Private Health sectors”.

“The activities of the public and private health sectors should be integrated in a manner that makes optimal use of all available health care resources. The public-private mix of health care should promote equity in service provision.”

Section 3.10.5 deals with “Regulation of the Private Sector”. The introductory paragraph states that:

“The regulatory responsibility and capacity of the public sector is probably the single most important determinant of the public/private mix in many countries. Many of the policies mentioned above seek to co-ordinate public and private sector activities, and to use regulation as a means of influencing private sector behaviour rather than of control.”

More recently in a draft policy framework on “Public/private partnerships in the health sector” (August 1999), it is stated that one of the main issues for consideration is:

“The development of legislation, regulations and policies that control, support, or have an impact on (public-private) partnerships.” (p3) (Author’s emphasis).

These statements vary in their apparent policy aims from a “unified national health system” and “pooling of resources” which seem to imply some form of merging of the two sectors, or at least a closer relationship (with perhaps a greater level of social cohesion as an additional policy goal), to the practicalities of regulation and how to support and ensure beneficial partnerships. The following section discusses how regulation can be used to influence private sector behaviour, and is then followed by a brief look at the potential role of SHI.

Regulating the private sector

There are various organisations that are involved in regulating the private sector:

- The national and provincial Departments of Health
- Parastatals (such as the new Medical Schemes Registrar)
- Professional organisations (such as South African Medical Association and the Health Professions Council of South Africa).

Often the State hands over the authority to monitor and enforce standards of care in the private and public sector to a parastatal, or to a professional organisation. Professional organisations are generally run by members of the profession and are concerned with accreditation, professional training, examinations and disciplining members for poor professional conduct. Professional organisations may have relatively easy access to information about provider behaviour and have the professional knowledge enabling them to regulate. However, their objectives may be too closely aligned with the providers, whom they are supposed to be regulating, for them to pay a sufficiently independent monitoring role.5 Such a situation is called “regulatory capture.”

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There are a variety of other mechanisms that can be used to regulate the private sector. Legislation is important, for example, to ensure practitioner registration, adequate training and minimum standards for premises. Legislative attempts to directly control either price or quantity are clumsy, and can lead to the development of “illegal” markets or private players simply leaving the profession or sector. For example the banning of limited private practice (as of September 1999) attempts to control the neglect of public duties by public doctors. The ban may lead doctors who have developed private practices – not all of whom are abusing their public sector positions – to leave the public sector altogether. As an alternative it may be possible, through a public equivalent of Independent Practitioner Associations or faculty practices within academic hospitals, to monitor, and therefore prevent, the neglect of public patients in favour of private ones. The alternative is to make use of a provision in the public service for “Remunerative Work Outside the Public Sector” (RWOPS). However, any solution that allows private work in public facilities would have to be designed carefully to prevent the monitoring function from being subject to “regulatory capture”.

Another example of government policy controlling the supply of care, is the requirement to obtain a certificate of need before additional hospital capacity can be built or leased to the private sector in a particular area. This could apply to a “service”, a facility, items of equipment or to human resources. For example practice licences could be limited by a quota system.

Government has implemented a measure of control over human resource deployment with the introduction of community service for doctors. This is discussed in chapter 17.

Attempting to control supply/quantity in this way has so far failed to prevent the creation of extra facilities. Instead, a loophole has been exploited resulting in buildings being built, but under a different name – as “step-down” facilities. Patients are admitted to hospital for a day for an operation, and then are moved to the “step-down” facilities that have no theatre but are effectively additional private sector wards. These facilities do not require a licence. An alternative regulatory policy may be to enable reimbursement mechanisms to limit the excess supplier induced demand for health care that is creating the unnecessary demand for extra health facilities in the first place, rather than banning an increase in supply:

Purchasing agents, be they consumers, private insurance schemes, medical schemes or the state itself, can play an important role in determining private provider behaviour, because the provider is dependant on the purchasing agent’s decision to purchase the service. For example, the state can use the fact that it is the largest purchaser of drugs (its monopoly power) to negotiate more favourable prices from private suppliers.

Different payment mechanisms imposed by purchasing agents can affect provider behaviour.

- Payment per patient within catchment population (capitation) limits costs but encourages a provider to see as many patients as possible.
- Payment for each service (fee-for-service) encourages provision of as many services as possible for each patient, and can result in unnecessary ones, thus increasing expenditure.
- Payment per length of stay (where the payment per day decreases with increase in total number of days) encourages providers to shorten the length of stay, and thus reduce costs, and potentially quality of care.
- A fixed prospective payment (based on per head of population, length of stay, diagnosis-related groups etc.) where any additional cost is shared between the payer and provider. This encourages cost containment without forcing providers to carry the full burden of any extra costs, but requires a fairly sophisticated information system.

\[e\] Soderlund provides evidence of excessive supplier induced demand by comparing the rates of tonsillectomies, myomectomy (insertion of grommets into the eardrum) and hysterectomy in the private sector, with data from the UK National Health System and South African mine hospitals.
Chapter 5 in this Review provides an example of legislation being used to regulate private health care financing through the private medical schemes industry. The aim of the 1998 Medical Schemes Amendment Act is to ensure that the benefits of sharing the cost of health care between individuals, within an insurance scheme, are not lost as a result of the private scheme attempting to maximise profits by charging individual premiums according to individual health risk. As a result medical schemes can no longer control costs by raising the premiums of “expensive patients”, forcing such patients to leave the private sector because they cannot afford the premiums. This leaves the only option open to medical schemes to control rising medical expenditure to be to use their power as purchasing agents. For example:

- schemes can require that authorisation is obtained from the scheme before hospitalisation. This helps to ensure that the provider is not “selling” an inappropriate service.

- Chronic medicine schemes enable bulk purchase, and therefore supply of cheaper regularly purchased drugs.

Both of these methods are being used by the South African medical schemes industry. However there are other methods that could be used by medical schemes in their role as purchasing agents. For example:

- peer profiling, that identifies practitioners who frequently prescribe unnecessary drugs or procedures; or

- payment mechanisms described above. These may control costs, but may also reduce quality of care, and therefore need to be accompanied by monitoring of quality of care.

The long-term effect of the new medical schemes legislation will depend on whether the medical scheme administrators are able to ensure that providers have incentives to contain, rather than maximise, health expenditure. Partnership with the private sector requires that the quality of service can be monitored (and even regulated).

Both Schneider and Palmer in the subsequent chapters raise the issue of ensuring quality of care at primary level. The two main regulatory issues are:

- Quality of care in terms of respect shown to the patient. The standard regulatory approach to quality is to provide consumers with a choice of provider, enabling them to “vote with their feet”. Yet this is not always possible or cost-effective. Instead a more inclusive approach is needed to improve the human quality of care, through providing greater support of frontline providers, particularly nurses, by rewarding good practice, monitoring patient outcomes and providing feedback, as well as communicating the goals and content of health-sector restructuring.10

- Technical quality of care, on which the patient rarely has sufficient information to assess the provider’s ability/decisions. Hopefully, technical quality will be improved through the continuing professional development programme that is necessary for re-accreditation. Managed care could also play a role, if it is designed to monitor quality as well as cost.

Schneider et al. (chapter 7), argue that in the private sector quality of care is being hampered by the flat rate charge system, where the GP will only prescribe drugs to the value of the flat charge once his consultation fee has been deducted. Palmer’s chapter (chapter 8) indicates that there is a substantial proportion of patients (at least 12%) who are using private care, and who cannot afford the high premiums of currently available private insurance. As a result, their access to the correct drugs is being restricted because of the flat charge system and the financial hardship imposed by the alternative – paying for the full cost of the drugs out of pocket. Including primary health care within social health insurance, or creating a pre-payment scheme that meets the needs of these individuals, would considerably increase access to better quality care.

However, regulation of the private sector does not just require an understanding of the range of possible mechanisms and their effects. Crucially it requires the human resource capacity to design and monitor the regulation of both stand alone private sector activity and public-private contracts.
Social Health Insurance: a way of improving the public-private mix?

The creation of either a national health service or a national insurance scheme will be extremely difficult, both financially and politically. There is a limited amount that the government can do to change the current distribution of resources between the public and private sectors, in the short to medium term. So SHI must be considered as an option. Social health insurance has been mentioned, firstly, as a way of providing the benefits of insurance to a greater proportion of the population, secondly, as a policy that the private sector expects to assist its expansion, and thirdly, as potentially the first step towards a more cohesive health sector, expanding coverage with time. The outcome will obviously depend on the final form of the policy.

The proposed SHI, as it currently stands, would involve mandatory cover for hospital care for all formal sector employees earning above a certain income level (approximately R20 000 per annum), either through SHI, or opting out to purchase private cover. Various issues have to be examined in further detail to assess what particular form the policy would take and its implications. For example, who will the scheme include and who is able to afford the necessary contributions? Are potential members willing to pay insurance premiums for public hospital care? What are the implications for equity, in terms of the distribution of the tax burden and proposed benefits? What will be the impact on employment if wage costs rise as a result? How acceptable is the policy to different stakeholders such as the unions and the Department of Finance? Do public sector hospitals have sufficient financial management capacity to bill the SHI fund for individual patients? What are the implications for excluding primary health care from the package? All these questions need to be answered if the SHI policy is to be implemented successfully.

Conclusions

The private sector spends at least 60% of the resources in the health sector on 20% of the population, and has attracted large numbers of trained personnel away from the public sector. It is driven by profit, unconcerned with public health issues, and its activities can result in inappropriate services – in terms of type of service, quality of care and in distribution of facilities, equipment and human resources. Yet the Government can neither abolish the private sector nor ignore it. The Government has to use regulation as a means of influencing private sector behaviour, and to enable the construction of public-private partnerships from which the public sector can benefit. It is the extent of government capacity to design, implement and monitor the regulatory system that will determine the success of the interaction between the two sectors.
STD care in the private sector

Control of sexually transmitted diseases (STDs) is a health priority in South Africa. STD management is important because of the association of STDs with HIV and AIDS. The Department of Health has for some years instituted national treatment guidelines and, more recently, syndromic case management. It has also focused on providing the necessary drugs. However, a major obstacle to reducing the burden of STDs is the inadequate quality of management of STDs in the private sector.

Many patients prefer to use the private sector for STD treatment but an independent study shows that there is a very poor technical quality of care being provided by general practitioners. The State has several options to intervene in this matter. It is argued in this chapter that the only real option is to introduce simple interventions that encourage partnership with the State. The chapter outlines and discusses factors influencing patient behaviour, factors influencing general practitioner behaviour and then proposes possible interventions. All interventions require greater State intervention and stronger partnerships between all relevant stakeholders.

It is concluded that the lessons from STD management offer broader lessons for collaboration between public and private sectors.
Introduction

The control of sexually transmitted diseases (STDs) is a public health priority in South Africa. Although STDs are a significant cause of ill health in themselves, it is the association between STDs and the increased transmission of HIV that has placed STD control high on the global public health agenda. An important component of STD control is the early detection and effective management of STD cases by ensuring universally accessible, good quality STD services.

For some years, the Department of Health (DoH) has implemented a policy to improve public sector STD care through the development of national treatment guidelines, the training of primary health care (PHC) staff in syndromic case management and the provision of effective drugs. Recent evaluations suggest that the policy has been reasonably effective. In a 1998 national survey of 294 public sector clinics, 82% and 72% of nurses interviewed knew the correct drug management of urethral discharge and genital ulcer, respectively. Eighty-six percent of clinics had ciprofloxacin, a key STD drug, in stock.

However, one of the major obstacles to reducing the burden of STDs in South Africa is the inadequate quality of STD care in the private health sector. STDs are one set of conditions for which treatment is regularly sought from private providers. The stigma and embarrassment of STDs act to push people with STDs towards the privacy and anonymity of general practitioner (GP) consulting rooms. Other reasons include easier access, longer hours of service, shorter waiting times, being seen by a doctor (as opposed to a nurse) and more personalised attention in private facilities. It has been estimated that private general practitioners in South Africa treat approximately 5 million cases of STDs each year, possibly out-numbering cases seen in the public sector. In the rural Hlabisa district (KwaZulu-Natal), where public facilities have received extensive support and development in STD management, nearly half of all STD cases in the district are seen by private GPs. A study of utilisation patterns in Alexandra, a poor urban township in Gauteng, found that 63% of all visits for STDs occurred in the private sector.

Despite the preferences of the public, however, the technical quality of STD care delivered in the private sector is poor. In an independent national survey commissioned by the DoH, only 28.3% of GPs reported adequate treatment for urethral discharge, 15.5% treated genital ulcers effectively and only 4.4% prescribed acceptable treatment for pelvic inflammatory disease (see Table 1).

<table>
<thead>
<tr>
<th>Table 1: Reported treatment of STD syndromes by GPs (n=120)</th>
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<td><strong>Percentage reporting effective treatment</strong></td>
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<tr>
<td>Urethral discharge</td>
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<td>28.3%</td>
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*PID: pelvic inflammatory disease

Class, race and lack of health insurance also pose significant obstacles to receiving appropriate STD care in the private sector. As one GP put it: “I’ve got to give patients the treatment they can afford to pay. If Mrs Jones comes in for treatment and she has medical aid, and her maid comes in and she doesn’t, obviously treatment is going to differ from patient to patient”.
The reasons for poor quality private STD care appear to lie in two areas:

1. A general lack of awareness and/or acceptance of newer approaches to STD management
2. The relatively high cost of antibiotics for the treatment of STDs, and the reluctance to dispense these to uninsured, cash paying patients.

Inadequate STD management in the private sector significantly undermines STD control efforts (and HIV prevention) undertaken by the public sector. STD care is one example of a group of personal, curative services that impacts on the broader public health. Others are tuberculosis, acute respiratory illness, diarrhoeal disease and malaria care. Research has demonstrated that the quality of these services in the private sectors of developing countries is often poor and has led to international interest in managing the public health role of private providers.6, 7

The Centre for Health Policy is currently investigating mechanisms to improve the management of STD care in the South African private health sector. The analysis in this chapter is based on research aimed at establishing an overall picture of the factors influencing private provider behaviour in South Africa.a The methods included key informant interviews, extensive document review and in-depth interviews with 10 purposefully selected GPs.

While this chapter focuses on STDs, the issues raised have broader relevance to other public health problems managed in the private sector, to private-public partnerships and to private sector regulation.

The role of the State in improving private STD care

Three possible attitudes have been outlined that the government could adopt towards privately provided services which have public health relevance:a

1. To actively discourage private provider involvement in these services
2. A laissez-faire approach, leaving private providers to continue as they are at present
3. To improve the quality of services provided.

The first attitude would imply an attempt to divert utilisation for certain services away from the private towards the public sector. However, it is very unlikely that sufficiently large scale changes in the perceived quality of public sector STD care, especially in the attitudes of staff, can be achieved to significantly shift demand away from the private sector, at least in the short-term. Moreover, current government policy is concerned with ensuring that those who are willing and able to pay for services continue to do so, whilst directing limited public sector funds to the poor and vulnerable. The Medical Schemes Act (1998), for example, has as one of its core objectives to limit the ability of the private sector to dump cases onto the public sector.

A laissez-faire attitude would also not be appropriate given the public health importance of STDs. In economic terms, STD care is a personal curative service with positive externality i.e. treatment of an STD case benefits both the individual and prevents further spread of STDs. However, the positive externality associated with STD care will only be realised if a certain level of quality is achieved. STD care as private good, on the other hand, does not necessarily rely on quality. Consumers lack information to judge technical quality, while providers may have strong economic incentives to provide inferior care. State intervention is therefore required to ensure adequate provision of public health related services in the private sector, especially to the poor.

a The research was funded by the Health Systems Trust
The remaining, third strategy would be to improve the quality of private STD care. Discussions on public–private partnerships in South Africa since 1994 have focused on the contracting of private practitioners to provide care to people who would normally rely on the public sector. Examples include district surgeons, sessional doctors in public sector clinics and proposals on “accredited private providers”. Apart from limited direct subsidies in the form of free contraceptives and vaccines, up to now the state has seen little role for itself in influencing the provision of care that is fully private, that is, both privately provided and financed.

The international evidence suggests that changing the behaviour of private providers is far from simple. Strategies which rely only on the dissemination of evidence-based management protocols are rarely successful. A proposal has been made for a combination of “carrot and stick” measures that make use of state leverage over legislation, resource allocation, and processes of professional accountability. However, interventions should not be so complex and resource intensive as to divert government attention away from the ongoing task of improving public services. A multifaceted approach to intervention, based on a contextualised understanding of factors that influence the behaviour of private providers, is required.

**Factors influencing private provider behaviour**

The behaviour of private providers is clearly determined by a complex and changing web of personal and environmental factors. In Figure 1 we provide a framework for viewing these factors at three levels: the individual, the immediate (daily) environment and the broader sectoral environment. Understanding these influences will give some indication of the opportunities and constraints for improving the quality of STD care.
Individual factors

Social background, gender, nature of undergraduate medical education and professional experience all play fundamental roles in shaping the individual GPs view of his/her work and patients. GPs will vary, for example, in the extent to which they see themselves primarily as business entities or as care-givers. This will influence whether GPs approach the patient encounter, consciously or unconsciously, as a commercial or as a professional exercise. In our experience, few GPs are purely profit-oriented and most will seek to strike a balance between the various incentives operating in their practice. In doing so they are significantly influenced by factors in their environment.

Factors in the immediate environment

We have identified four key types of actors in the “daily” GP environment:

- the patients or clientele
- suppliers or their representatives (in particular the drug company salesperson)
- funders (third party payers)
- other private and public health care providers.
A GP practice that relies essentially on a poor, cash-paying clientele has two options for generating profits – increasing the number of patients seen or lowering the costs of consultations. The demand is for a low cost, all-inclusive package of care, including drugs and investigations, such that profit margins are typically narrow. The evidence is that there are limits to the volumes of patients which can be seen by GPs (see later). The only real option, therefore, is to minimise costs and offer a lower quality of care for conditions such as STDs. At the same time, the lack of consumer information and mobilisation means that patients are generally not able to judge the technical quality of treatment. Patients covered by medical schemes may not be denied appropriate therapies although the fee-for-service system of payment encourages over-servicing (e.g. unnecessary investigations, excessive amounts of drugs), which itself could result in a sub-optimal quality of care.

In interviews we conducted with GPs, drug companies and other suppliers consistently emerged as powerful sources of influence. One study recorded an average of 7.4 visits by drug company representatives each week to a GP practice. In addition to large amounts of product information and advertising materials, the practice received an average of 12 drug samples per week.

For many GPs, the drug company sponsored seminars and individualised product “detailing” by the company salesperson appear to be the main or sole sources of continuing medical education (CME). “I find them very useful, I always gain something, because I know I become in touch with new products that are coming. There is no other way we can do that ourselves. We get subscribed to all sorts of journals, but where do we get time, to actually sit down and go through that?” (In-depth GP interview).

For obvious reasons, both the individualised detailing and CME seminars provided by drug companies aim primarily to market products, rather than promote cost-effective medicine or sensitivity to public health needs.

Third party funders (medical schemes, health insurers, managed care organisations) influence the behaviour of GPs in a number of ways. Firstly, many medical aids exclude STD care from their benefits packages, although in practice both GPs and medical scheme administrators admit that these restrictions are easy to bypass. Secondly, GPs are increasingly becoming subject to managed care processes such as pre-authorisation of hospital admissions, pharmaceutical benefit management and utilisation review. The stated goal of managed care is to contain costs whilst maintaining quality and a key part of this is to control patterns of utilisation and servicing by the providers themselves. Although managed care could provide positive incentives to improve quality of care, in practice the focus in South Africa has been more on reducing costs than on ensuring quality. Current information systems and instruments of managed care are thus unable to deal with issues such as the poor quality of STD care.

Recent years have seen the rapid emergence of independent practitioner associations (IPAs) in response to threats such as proposed limits to dispensing and the introduction of managed care. IPAs are doctor-led associations, most often, but not exclusively, geographically based. The anecdotal evidence is that most GPs belong to an IPA, although in the last few years many appear to have “formed and unformed” (key informant, South African Medical Association). Initially set up to resist changes, IPAs are increasingly developing into commercial entities, able to negotiate bulk buying and volume discounts with suppliers, and contractual arrangements with funders.

Although in their early stages, some IPAs are attempting to establish standards of practice, peer review and information systems. This form of self-regulation is seen as more desirable than having systems managed and imposed by funders.

“I think that another reason why we are trying to set up the IPA is because we’re trying to set standards and norms. Because like I say, for too long you were doing your own thing … without anybody coming in to question why you were doing that. We’ve realised that it is very easy for the medical aid to sweep us all with one brush and say “all GPs in [X] cheat”, or whatever” (In-depth GP interview).
Local public sector players appear to have little direct influence over GPs. In certain areas it is common for GPs to do sessional work in public sector clinics and hospitals. In the process, GPs will access available protocols such as for STD syndromic case management, although there is the danger that these protocols are “perceived to be for nurses, not doctors” (key informant, Academy of Family Practice).

**Factors in the broader environment**

The broader GP environment in South Africa is characterised by increasing competition on the one hand and growing control on the other hand. The reality of GP practice has shifted from that of a high degree of individual autonomy and flexibility within an unregulated environment, to greater regulation, and the development of organised provider networks. A number of significant new players have emerged, all of which are seeking to influence the knowledge base and quality of GP care. These include the state through the Health Professions Council, managed care organisations, independent practitioner associations and the South African Medical Association.

Specialists, hospital casualty/outpatient departments and low cost, nurse-based private primary care facilities are all challenging the monopoly of GPs over private primary care services. The proportion of total medical scheme benefit payments made to general practitioners has declined in favour of specialists and other providers. Proposals by the state to limit dispensing by doctors may intensify competitive pressures and reduce the viability of private general practice.

Following on legislation passed in 1998, the newly formed Health Professions Council (HPC) of South Africa passed regulations introducing mandatory re-certification of medical practitioners. As from 1999, doctors are required to accumulate 250 points over five years through participating in accredited continuing professional development (CPD) activities. At present the only specified core subject for CPD is ethics (minimum 10 points).

GPs and other private providers have not remained passive in the face of these changes. IPAs and umbrella IPA bodies have emerged to protect the interests of private practitioners and to assist them in being more proactive players in the private sector. Although the standard fee-for-service model still predominates, organisations of providers are beginning to position themselves to deal with new arrangements, such as capitation or modified fee-for-service payment systems. This will allow them to take advantage of anticipated new opportunities, such as an expansion in the low cost insurance market or contracts for public primary care.

The Medical Association of South Africa, which underwent its post-apartheid transformation in 1998 into the South African Medical Association (SAMA), is also a significant player. Since 1995 it has attempted to keep the medical profession abreast of developments in the private health care market and in government policy. It has also promoted the concept of self-regulation through a quality assurance programme which develops evidence-based management guidelines for doctors. SAMA is one of the main accrediting agencies for continuing professional development (CPD), and has already initiated a distance-based learning programme through its mouthpiece, the South African Medical Journal. It thus appears to have a growing ability to exert professional leverage over private practitioners.

While these changes in the broader environment create the conditions for greater standardisation of care and therefore improved quality, their impact on quality has yet to be demonstrated. On the other hand,

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b In a national survey of 120 doctors, 76% indicated that they dispensed medicines from their practices. It has been suggested that dispensing could account for 60% of a GPs income.

c The national umbrella groupings include the South African Managed Care Coalition (SAMCC) and National Alliance of Health Providers’ Group (NAHEPGRO).
increased competition and narrower profit margins may entrench a two-tiered system of private primary care, with cash-paying patients or those covered by low cost schemes receiving sub-optimal care. Table 2 summarises the nature of influences on GPs.

<table>
<thead>
<tr>
<th>Table 2: Factors influencing GP behaviour</th>
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<tbody>
<tr>
<td><strong>Level</strong></td>
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<tr>
<td>Individual</td>
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<td></td>
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<tr>
<td>Immediate environment</td>
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<tr>
<td>Other Providers</td>
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<tr>
<td>Suppliers</td>
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Table 2: Factors influencing GP behaviour continued

<table>
<thead>
<tr>
<th>Level</th>
<th>Factor</th>
<th>Influences</th>
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</thead>
<tbody>
<tr>
<td>Broader environment</td>
<td>Policy Environment</td>
<td>- Policies and attitudes towards private providers e.g. on dispensing, contracting of clinical services</td>
</tr>
<tr>
<td></td>
<td>DoH</td>
<td></td>
</tr>
<tr>
<td>Regulatory Environment</td>
<td>DoH</td>
<td>- Registration</td>
</tr>
<tr>
<td></td>
<td>HPC (SA)</td>
<td>- Practitioners</td>
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<tr>
<td></td>
<td></td>
<td>- Private hospitals/facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Training institutions</td>
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<tr>
<td></td>
<td></td>
<td>- Professional censure</td>
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<td></td>
<td></td>
<td>- License to dispense drugs</td>
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<tr>
<td></td>
<td></td>
<td>- Recertification</td>
</tr>
<tr>
<td>Financing Environment</td>
<td>DoH</td>
<td>- Financial stability in private sector</td>
</tr>
<tr>
<td></td>
<td>Medical aids</td>
<td>- Degree of competition</td>
</tr>
<tr>
<td></td>
<td>Insurance companies</td>
<td>- Changes in payment systems</td>
</tr>
<tr>
<td></td>
<td>Medical aid administrators</td>
<td>- Emergence of low cost insurance</td>
</tr>
<tr>
<td></td>
<td>Board of Healthcare Funders</td>
<td>- Emergence of managed care contracts</td>
</tr>
<tr>
<td></td>
<td>Managed care companies</td>
<td></td>
</tr>
<tr>
<td>Educational Environment</td>
<td>Medical schools</td>
<td>- Academy of Family Practice</td>
</tr>
<tr>
<td></td>
<td>College of Medicine</td>
<td>- Undergraduate training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Postgraduate training</td>
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<td></td>
<td></td>
<td>- Culture of continuing professional development (CPD)</td>
</tr>
<tr>
<td>Professional Environment</td>
<td>HPC(SA)</td>
<td>- Specialist societies</td>
</tr>
<tr>
<td></td>
<td>SAMA</td>
<td>- Ethical standards and self regulation</td>
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<tr>
<td></td>
<td></td>
<td>- CPD</td>
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**Interventions to improve the quality of private STD care**

Table 3 lists possible interventions to improve the quality of STD care.

**Table 3: Possible interventions to improve the quality of STD care**

<table>
<thead>
<tr>
<th>Level</th>
<th>Factor</th>
<th>Possible interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate environment</td>
<td>Patients</td>
<td>◆ Patient education&lt;br&gt;◆ Establish/support consumer groups</td>
</tr>
<tr>
<td></td>
<td>Other Providers</td>
<td>◆ Support IPA peer review and CPD&lt;br&gt;◆ Work with GP opinion leaders&lt;br&gt;◆ Improve relationship between public and private providers&lt;br&gt;◆ Develop local treatment guidelines – District, IPA&lt;br&gt;◆ Promote common GP information and surveillance systems&lt;br&gt;◆ Use of public pharmacies/dispensaries&lt;br&gt;◆ Provide subsidised drugs and/or investigations</td>
</tr>
<tr>
<td></td>
<td>Funders</td>
<td>◆ Reverse policy on STD exclusions&lt;br&gt;◆ Managed care principles (quality vs. cost)</td>
</tr>
<tr>
<td></td>
<td>Suppliers</td>
<td>◆ Provide alternative sources (to drug companies) of accredited CPD e.g. through public sector, universities, professional bodies and IPAs</td>
</tr>
<tr>
<td>National</td>
<td>Policy Environment</td>
<td>◆ Clear policy towards private sector&lt;br&gt;◆ Implement public-private partnerships</td>
</tr>
<tr>
<td>Regulatory Environment</td>
<td>◆ Practitioner re-certification&lt;br&gt;◆ Practitioner accreditation&lt;br&gt;◆ Incentives and subsidies&lt;br&gt;◆ Strengthen regulatory capacity</td>
<td></td>
</tr>
<tr>
<td>Financing Environment</td>
<td>◆ Implement social health insurance&lt;br&gt;◆ Reverse policy on STD exclusions by medical schemes&lt;br&gt;◆ Provide financial incentives to quality</td>
<td></td>
</tr>
<tr>
<td>Educational Environment</td>
<td>◆ Accredited CPD providers&lt;br&gt;◆ Distribution of STD treatment guidelines&lt;br&gt;◆ Appropriate undergraduate training&lt;br&gt;◆ Training of existing GPs</td>
<td></td>
</tr>
<tr>
<td>Professional Environment</td>
<td>◆ Promote self-regulation&lt;br&gt;◆ National consensus on STD Management</td>
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</table>
Establishing systems to improve GP knowledge of STDs and STD management is clearly of crucial importance. A number of actors could and should take responsibility for this. They include the Department of Health (from national to district level), SAMA, IPA umbrella groupings, PHC managed care organisations, HPC(SA), medical scheme administrators and tertiary education centres. Various STD management guidelines are currently available in the public and private sectors. A first step would be to obtain consensus on, and public endorsement of, minimum acceptable standards for STD management from all stakeholders in both sectors. Distribution of guidelines could be supplemented by CPD accredited workshops or seminars on STD management.

The recent introduction of re-certification will make a significant contribution to ensuring that GPs keep up to date with new medical knowledge. The regulations on continuing professional development list broad categories of required activities but, apart from ethics, do not specify types of knowledge. However, it could be argued that a core curriculum should include topics of major national or public health significance, such as STD care.

To ensure that knowledge gets translated into practice, two broad strategies are possible:

1. To apply financial levers such as provision of subsidies or linking re-imbursement with certain standards of care

2. To strengthen factors promoting professional values and quality of care.

Theoretically, health care funders could link reimbursement of providers with achievement of quality standards, such as appropriate syndromic management of STDs. The current information systems of providers or fund administrators generally do not capture the types of data which would make quality judgements possible (such as linking diagnosis and management). However, as formal contracts between providers and funders start to become the norm, the possibility exists to insert clauses on minimum standards for, and monitoring of, public health priorities.

Various forms of subsidy are possible for patients not covered by medical schemes. Private providers could be remunerated for STD consultations, provided with drugs or allowed to refer patients to public dispensaries for drugs. The investment in private providers could be justified by the fact that the majority of STD patients are currently seen in the private sector. However, there is the real danger that subsidies (such as free antibiotics) promote inappropriate dependency on the public sector. The implementation of the proposed social health insurance would make effective STD care more financially viable by increasing the pool of people covered by health insurance schemes (many of which are likely to include a primary care component).

The emergence of representative and legitimate bodies amongst private providers opens up the possibility of greater peer pressure to conform to acceptable standards of practice. The achievement of national consensus on STD management amongst the various private sector groupings could provide both an educational function and establish a moral imperative for private providers. Alternative forms of pressure would be to raise consumer awareness and public accreditation of providers who agree to adhere to guidelines or who have received appropriate training in STD management.

All of these approaches imply greater state intervention, whether in promoting regulatory measures at national level, or in educational activities and incentives at district level. It is clear, however, that the State, on its own, does not have sufficient regulatory or financial power to significantly improve the quality of privately financed and provided care. To do this will require partnerships between government, professional associations and groups of private providers at local level. Such partnerships may be complex to achieve and manage, and are likely to be heavily influenced by parallel policies on, for example, dispensing by GPs.
or contracting of primary care clinical services. Attempts to improve the quality of private sector STD management could offer broader lessons on appropriate forms of collaboration between private and public sectors which do not undermine the broader health sector transformation goals of reducing inequity in health and health care.
There is evidence that it is common practice amongst the poorer groups in the country to use private primary health care. Data are discussed to provide some perspective on the magnitude of this utilisation pattern. The chapter explores why low income groups pay out of pocket for the services of private providers, even where the care is often worse than in the public sector.

Themes from ten focus groups in Eastern and Western Cape are discussed. The essence of the themes is the perception that public sector treatment is not effective, that clinics cannot treat all illnesses and that the way that patients are treated in the public sector is unacceptable. People believe that they receive better quality care from private providers.

The chapter concludes that most patients are keen to use the private sector and that private practitioners play an important role in PHC delivery in many small towns. It is clear that the relationship between public and private services is intricate. There is a need to educate the public about the range of services that is available at public sector clinics, to overcome the incentives for private doctors to convince patients that private services are better, to ensure that politeness and respect are shown to patients in public sector clinics, and to establish acceptable working relationships between the public and private sectors (through contractual mechanisms, regulation, elimination of perverse incentives and perhaps accreditation of private providers).
Introduction

The inter-relationship between public and private sectors appears intricate yet firmly bound. The resources of the private sector are currently an important part of the health care delivery system in many towns. People often use both the public and private sector for the same health problem whilst doctors are often employed as district surgeons or medical officers as well as having their own private practices. The same private GP visited by patients on a cash basis may also be employed in the town’s hospital/health centre, may also be the district surgeon, responsible for medico-legal work and ultimately emergency cover. In return, payments from the state for the rendering of these services form an important part of his or her income. Without these payments, the viability of their remaining in practice may be questionable, and in turn this has ramifications for the whole population of the town, whether they use private or public services. Yet state payment is currently riddled with problems of inadequate monitoring and the perverse incentives inherent in any fee-for-service system.

This section explores to what degree and why low income groups pay out of pocket for the services of private providers. Results of an analysis of two household surveys are drawn upon, and qualitative information from focus groups is summarised. The complex inter-relationship between the public and private sectors at primary care level is then discussed.

Evidence is drawn primarily from two sources: an analysis of household survey data on illness/injury and health care expenditure and qualitative data generated by an ongoing study examining the desirability of contracting out primary care to private providers. McIntyre et al. analysed the Project for Living Standards and Development (LSDS) and the 1995 October Household Survey (OHS) and their analysis is heavily drawn upon here.

Use of private providers by low income groups

LSDS data (Table 1) suggest that 58% of all South Africans who seek care for an illness do so in the private sector. In the lowest income quintiles (1 and 2) this is 37% and 42% respectively, implying that this is also a common practice amongst poorer groups. These figures appear quite high, and McIntyre et al. point out that this may be an overestimate due to some poorly worded answer choices in the LSDS survey, which resulted in all respondents who had seen a part-time district surgeon (PDS) being likely to answer as if they had seen a private doctor. Whilst most PDS are private GPs, they deliver services to patients under contract to the state and patients do not pay. The LSDS data can perhaps be taken as a reflection of the role played by the private sector in the delivery of primary care (particularly in rural areas), but an overestimate of the amount of patients who are paying cash for these services.

An alternative source of estimates for the degree to which the private sector is used is the October Household Survey (OHS). Table 2 shows estimates of the percentage of ill or injured seeking care who use private services according to the OHS data. These figures are considerably lower than their LSDS equivalents, especially in the rural areas. The OHS reports an overall private sector utilisation figure of 31.2%. Note that both these estimates are percentages of those seeking care, in income quintiles 1 and 2 it is estimated that only 73% and 79% respectively of those ill or injured seek care.  

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b New Purchaser/Provider relationships in primary care is a three year research project funded by the UK government's Department for International Development. The project is being jointly undertaken by the London School of Hygiene and Tropical Medicine, the Centre for Health Policy of the University of the Witwatersrand and the Health Economics Unit of the University of Cape Town.

c covering 8 848 households and conducted in 1993

d covering 29 700 households
Table 1: Percentage of those who sought care who used private services (LSDS data)

<table>
<thead>
<tr>
<th>Income quintile</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>38.8</td>
<td>30.6</td>
<td>37.1</td>
</tr>
<tr>
<td>2</td>
<td>44.7</td>
<td>36.7</td>
<td>42.6</td>
</tr>
<tr>
<td>3</td>
<td>46.3</td>
<td>42.7</td>
<td>44.9</td>
</tr>
<tr>
<td>4</td>
<td>56.0</td>
<td>55.0</td>
<td>55.4</td>
</tr>
<tr>
<td>5</td>
<td>74.6</td>
<td>84.8</td>
<td>83.3</td>
</tr>
<tr>
<td>Total</td>
<td>48.9</td>
<td>64.9</td>
<td>57.5</td>
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Note: Income quintiles are shown in reverse order e.g. quintile 1 is lowest.

Table 2: Percentage of those ill or injured who used private services (OHS data)

<table>
<thead>
<tr>
<th>Income quintile</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
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<tbody>
<tr>
<td>1</td>
<td>13.1</td>
<td>24.8</td>
<td>16.5</td>
</tr>
<tr>
<td>2</td>
<td>18.5</td>
<td>24.0</td>
<td>20.7</td>
</tr>
<tr>
<td>3</td>
<td>17.5</td>
<td>29.9</td>
<td>24.2</td>
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<td>4</td>
<td>20.8</td>
<td>37.3</td>
<td>32.1</td>
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<tr>
<td>5</td>
<td>35.9</td>
<td>55.4</td>
<td>53.0</td>
</tr>
<tr>
<td>Total</td>
<td>18.4</td>
<td>40.1</td>
<td>31.2</td>
</tr>
</tbody>
</table>

Note: Income quintiles are shown in reverse order e.g. quintile 1 is lowest.

According to LSDS data, use of the private sector is higher in rural areas for all income quintiles except the fifth (highest income quintile). This pattern is contradicted by the OHS data, where urban use of the private sector is consistently higher for all income quintiles. A key explanation for this difference in the lowest income quintiles may be the classification of a visit to the district surgeon as use of the private sector. However even the lower figure from the OHS data means that a considerable proportion of poorer groups are paying for health care.

For those without medical insurance, primary care in rural towns in the Eastern and Western Cape is available from the clinic or the district surgeon at no charge, or a private GP. Anecdotal evidence suggests that private GPs charge a flat rate varying from R40 to R80 including drugs. In metropolitan areas the popularity of groups of clinics such as Carewell and Primecure is increasing as another private sector alternative. These clinics charge approximately R50-R60 for a consultation with a nurse/referral to a doctor, drugs, laboratory tests and x-rays. In either case, this payment represents a substantial sum, especially when services at a public sector clinic could be obtained for free.

d District surgeons are private GPs employed on a part time basis by the Province to render a range of curative PHC and medico-legal services on their behalf.
Private doctor versus the clinic: views from the Eastern and Western Cape

As one component of a larger study, ten focus group discussions (FGDs) were run between November 1998 and May 1999 in five rural towns in the Eastern and Western Cape. The purpose of the discussions was to determine possible reasons for the decision to pay for health care rather than use public sector clinics. Two FGDs were conducted in each town, one with women aged 20 to 30 years and one with women over 35 years. Recruitment took place within the community rather than at a particular facility, to try to capture the views of users and non-users of a variety of services. Women were invited to participate in the FGDs if they were not in full-time employment and did not have medical aid scheme coverage. Participants were asked to describe the facilities and services available to them for medical treatment if they or their children got ill, what their perceptions of the quality of service at each was and other benefits and disadvantages of using that service.

All of the five towns had recently had district surgeon/GP practices operating, but in two of these the district surgeon contract has recently ended. One of these towns was now without a doctor, with only a private GP visiting one morning a week. On other days the nearest doctor was 50km away in the next town. In the second town in which the district surgeon contract had ended, two private doctors remained and now did sessions at the community health centre.

Dissatisfaction with all public sector funded services, be they publicly run clinics or district surgeons, is a clear theme emerging from all the FGDs. Perceptions of the quality of treatment available from private doctors was on the other hand constantly favourable. In the hierarchy of preferences revealed by the FGDs a private GP was always seen as infinitely preferable to any other option. District surgeon services were commonly thought of as superior to the clinic, and in some cases considerably so; the clinic was sometimes dismissed entirely either for its poor quality of service or due to misconceptions as to the nature of services that it offers.

One participant summed up the decision process that seems common to many as follows: “I would never go to the state doctor (district surgeon)... I will rather sit at home with my sick body and wait till I can lend money than go there.” In many comments like this, the clinic was not even mentioned as a third option. Another client, recognising the clinic’s existence, summed up her decision process as “If we have money, then we can go to the doctor. If I feel seriously sick on a Thursday (the day of week when private GP visits town), then I’d go to the doctor if I have the money. Otherwise during the week I’d have to go to the clinic”. Themes emerging from the FGDs are described below to attempt to identify the factors shaping such attitudes to public sector care.

Theme 1: Quality and choice come from paying for a service

“It’s that paying story versus that free of charge story” / “We get it for free so we have no choice”.

The services of a private doctor are vastly preferred to any public services available. This was even true if it were the same doctor e.g. if you go and pay Dr X you will get better treatment than if you see him as a state patient. Comments demonstrate a clearly perceived link between the payment for the service and its improved quality; “You pay and therefore you get better service” / “You have to go to a private doctor if you want to know how far your illness is”. Participants in a town with a private doctor working on sessions were adamant that if you paid to go and see him in his rooms, you received better treatment than if you saw him at the public sector facility. “At the private doctor, you feel good when you walk out of there”. In all towns, perceptions of private service were that you received better medicines (“the best medicines”), a more thorough examination, privacy, respect and that all patients were treated equally. One participant said “I believe that you can rather spend your money and then at least you know you are getting proper treatment”.

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In contrast, participants expressed frustration with the poor treatment that they received in public sector facilities alongside reluctance/fear to complain. In one town this frustration was expressed as follows: “It is not as if we have a choice, no matter how poor the service is we have to accept it because we are treated free of charge”. Most people seemed to know where and how they would complain, but had no faith that it would change anything. “You go through all that and nothing comes of the matter”. They felt that to complain would be pointless and may lead to worse treatment in the future.

**Theme 2: The treatment that you receive in the public sector isn’t effective**

“Our people feel that they are not getting well and so they go back again and again and again”.

Participants doubted the effectiveness of the treatment that they receive from publicly funded services. Common complaints were a lack of a proper examination and the poor quality or ineffectiveness of the drugs prescribed. “I go twice or thrice to the district surgeon/clinic and come back with lots of tablets that don’t help” was a prevalent theme. When patients are not satisfied with the care that they have received or unsure of the explanation that they have received, they shop around for other opinions, often ending up with a private practitioner.

Participants said of district surgeons and public sector facilities, “They just pump you full of tablets. They never bother to tell you what is really wrong with you. It’s only tablets and more tablets” / “Most of the time you get only tablets and you aren’t even examined” / “They just give you the same tablets month after month, they don’t know if the circumstances have changed” / “I am not even sure some nurses know how to read BP” / “If the clinic’s medicine doesn’t seem to help you, you then go to the doctor out of your own accord”. A participant in the Eastern Cape said “We don’t have the money to pay the doctor, so our children often have to make do with the medicines we receive from the clinic, and that’s the reason the children become seriously ill”.

**Theme 3: The clinic can’t treat what is wrong with me**

“The clinic is for babies, pregnant women and TB” / “There is no clinic here”.

Misconceptions about whether there was a clinic in the vicinity, the nature of services that it offered, whether there was a charge and who should go there were common. In addition there was a general perception that the clinic wasn’t very useful as a health service. “You can’t really go if you are sick because there are no doctors” / “I don’t think that the clinic is equipped to deal with chronic illness” / “It’s just for children and TB and diabetics”. In an emergency one participant felt “I don’t think the clinic is much help, because in an emergency you will probably die first”.

On the other hand, some participants were quite positive about the clinic’s services, but still dismissed their usefulness for their own complaints. “There is no problem with the service, it is just that they cannot treat all illnesses there because they do not have the doctor or the best of medicines” / “There is only so much they can do, but they do their best because they are not doctors”.
Theme 4: The way patients are treated in the public sector is unacceptable

“Ugly” attitude of public sector health workers…“If you visit the clinic, you feel repressed and oppressed”.

People complained equally of the rudeness of district surgeons and nurses in clinics or day hospitals. For instance, one participant described how the district surgeon came out of his room and said to the people waiting “Look at you, you look like a bunch of sheep”. People commented “We are treated as if we are nothing” and about nurses in public sector facilities it was said “They have no way of speaking to people, that is why we stay away at times because it is so off putting when they are rude to you”.

A common theme is how the poor attitude of public sector staff discourages patients from attending. “I just stay away from that place because I get too angry”/“I don’t feel like going because of the way that they treat the people”/ “…these nurses, some of whom come to work drunk”. In one town it was said, “Young girls do not want to come for birth control as they are too scared because they know the nurses will talk”. At another “I haven’t had my sugar tested for a long time because the surgery is always full and the atmosphere isn’t pleasant”. Nurses were criticised for having “no respect for privacy”. A non-user of public services explained, “I can’t take these bullying tactics, that’s why I don’t go there no matter how bad I feel”. Generally, nurses are regarded with the least favour; of a facility with both doctors and nurses, it was said, “The doctors aren’t so bad, its mainly the nurses that don’t treat us properly”, and “Nurses don’t care, only in front of the doctors”.

Bad attitudes of nurses, poor drug supplies and unhygienic conditions were all highlighted as weaknesses of the clinic’s services. Nurses were criticised for showing favouritism, being “bitchy”, “liking to criticise people and to insult them”, and “playing doctor”. Suggestions for improvement of clinic services included that attitudes of staff must change, there must be more respect, and that everyone should be treated the same.

It is important to note that attitudes to clinic services were not entirely hostile. In one town the clinic was praised for its accessibility. “I will go there for blood and sugar tests; if I feel my head spinning I go there”. It was commented that it was good to be able to talk to the sisters because they were women and “You don’t sit for hours”, and that “You can be on your way in an hour”. In another town it was said, “The relationship between the sisters and community is good. She’s part of the community. She lives here and she knows what most of the people’s situations are like”/“If there could only be more sisters like that…” Another participant said of the same clinic sister, “She has very nice ways. I like her a lot. But the medicine they give you there is purely water…really”.

Comments about the services provided by private doctors were always highly favourable. Much emphasis was understandably placed on being treated with politeness. “He’s very good…very friendly as well”/“Very good…he’s always got a smile on his face and he’ll always greet you politely”/“The facilities aren’t that wonderful, they’re very basic but his medicines are very good and he loves sending you to hospital”. (This is in contrast to referral practice in the public sector: “It’s almost like they wait for you to be half dead or they are so fed up of seeing you and then they refer you to hospital”). Spending time talking to patients and examining them thoroughly was also frequently mentioned as a big difference from public sector services.

Other themes arising from the FGDs include excessive waiting times at some district surgeons and clinics. Some district surgeons operate a policy of using the same waiting area for their cash patients and their district surgery patients, with those paying cash being treated first. In effect people will pay cash to jump the queue. “If you want to go home early, you have to pay”. The view that white people are treated first and more favourably both in clinics and district surgeon practices, but particularly in district surgeon practices, was common, especially amongst the over 35 age group. Difficulties and expense in arranging emergency transport was also criticised, particularly in the Eastern Cape. The inaccessibility of public sector services at night and at the weekend is also a frequent reason why patients may turn to the private
sector. In the case of one public sector facility, it was commented that the security guard must call a nurse who must then decide whether to call a doctor and “By then, everybody is dead”. It was also noted that neither doctors nor nurses like coming out at night and are frequently rude.

Some differences between the two provinces and the two age groups were also noticeable. In particular, the younger age group in the Eastern Cape were the most positive about the services offered by the clinic. Also the most positive comments about the clinic services were made in the town where there was no longer a GP/district surgeon and some investment had been made recently in upgrading the clinic service. “It’s very neat” / “It’s always full” / “The people sit in a nice queue” / “If there is a serious problem with your baby, then they’ll let you go first” / “It’s not like before, then they just took people randomly and white people went first”.

Conclusions

Use of the private sector by low income groups appears widespread from the quantitative and qualitative data presented here. Two aspects of the role of the private sector in rural town primary care delivery should be recognised: first, that many patients are keen to use it in preference to the public sector and second, that private sector practitioners play a pivotal role in public health care delivery in many towns.

Overall, strong lessons for policy emerge from the data presented here and some difficult challenges for the public sector are raised. Lessons for policy include the need to educate the public about the range of services available at public sector primary care clinics and the quality of drugs available. Patients are not well placed to judge the quality of the services which they receive in the private sector, often appearing to make superficial judgements based on issues such as the likelihood of receiving an injection. A better informed public may be less easily persuaded to part with their money to the private sector for services which they could receive for free. However, the incentive for private doctors to convince patients that private services are better is a formidable obstacle, and one not easily addressed in a situation where the state must depend on doctors having private and state practices running concurrently.

It is equally pressing for clinics to start delivering services in a way that is acceptable to all patients. Underlying the continued strength and vitality of the private sector is the fact that people want to use it whenever they can afford to do so. Disturbingly, much of the evidence cited here points to the fact that they may often be doing so simply to be treated with politeness and respect, something which the public sector should be capable of. The views reported here are only from rural towns in two areas of South Africa, but dissatisfaction with the way in which public sector services are delivered is frequently echoed elsewhere. Carr-Hill expresses how fundamental a problem this is. “When health care is a public service, clinical effectiveness and economic efficiency cannot be the sole criteria. Health care also has to be socially acceptable”. In other words, precisely because people don’t have to pay, because this is a service for the benefit of all citizens, its acceptability is a vital factor in its overall quality. It seems that at present people are voting with their feet that this is not yet the case in South Africa.

How to forge an appropriate workable relationship between the public and private sectors at primary care level deserves greater attention. The present policy appears to be one of “muddle through”, often relying on individuals in a particular town to make things work in the absence of a proper policy framework. Whilst the right to choose a service which is socially acceptable is vital, the choice between public and private sector presently appears problematic in other ways. At present district surgeons, clinics and private GPs are all delivering roughly the same set of services with little co-ordination and some financial incentive for the district surgeon to undermine the role of the clinic. Evidence suggests that people pay high fees for care which may be no better than that of the public sector; often it may be worse. People shop around between the public and private sectors, wasting their own and the health sector’s resources.
In terms of the supply side, policy needs to be clarified on what role, if any, the private sector should play in public sector health care delivery at primary level. If the private sector is to be invited to participate more in the delivery of state services, contractual mechanisms should be revisited and the nature of the partnership reviewed. Equally important is to address the many problems of effectively regulating the quality of services delivered by the private sector. Perverse incentives inherent in any fee-for-service system where the doctor acts as the gate-keeper as well as the service provider could be further eliminated, for instance by access being only through the clinic, as is done in the Eastern Cape, or by changing the nature of the doctor’s terms of employment. Both the Free State and the Northern Province have eliminated the district surgeon contract in favour of part time medical officer appointments. However, it is a fine balance that each province or even region must strike, for if doctors’ incomes are threatened too severely they too will vote with their feet. The important role which many rural GPs play in providing comprehensive medical cover to a town deserves some creative approaches to partnership, perhaps revisiting some of the ideas around the accredited private provider system in cases where provinces have the capacity to negotiate and monitor new contracts adequately.

On the demand side, misconceptions about services available at the clinic should be addressed as well as those concerning the quality of drugs available. In the longer term, the perception that a free service must be a poor service needs to be tackled, although this can only be achieved in conjunction with an improvement in the quality of services on offer. At present, evidence would suggest that in many cases this perception is still all too valid.
State-aided Hospitals

South African health reforms encourage partnerships between public and non-public sectors in district health services delivery. Provincial-aided health facilities (PAHF) are potential partners in this regard, but little is documented about these private-not-for-profit health service providers, which receive subsidies from provincial health departments. This chapter is motivated by the need to inform discussions on the current and potential role of PAHFs in the South African health system, especially in the context of transformation to the district health system (DHS). The review is descriptive, assessing the size of the sector, financing mechanisms, range of services, role in the DHS, and interaction with provincial health authorities. Qualitative and quantitative data were obtained by means of questionnaires, facility visits, review of exiting health information, and key informant interviews.

The PAHF sector consists of 43 hospitals, 22 TB centres and 20 primary level facilities, the majority providing services at the district level. Income is mainly from provincial subsidies, supplemented by private revenue. PAHFs are by no means a homogenous group, with wide variations in revenue-generating potential, resource availability, and range of services. They are an example of public-private partnerships, and have implemented innovative mechanisms including user fees and privatisation of non-clinical services. Provincial health authorities commend their services, and include PAHFs in provincial planning, generally guided by the principle of sharing resources. Though already contributing to DHS development, PAHFs have the potential to extend their involvement even further, within an enabling environment. However, relationships with provincial authorities are informal, and there are no rational frameworks for funding, indicating an urgent need for clear regulatory frameworks to enable PAHFs to continue providing appropriately identified services, preferably in collaboration with district health authorities.

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Stephen Knight
Department of Community Health
University of Natal (Durban)
Introduction

Recent South African health reforms propose incorporation of non-public sectors in the health system in a manner that optimises use of all health care resources to ensure equity. In terms of these reforms, short and long-term plans for restructuring the health system have been developed, but are concerned mainly with the public and private for-profit health sectors, and non-governmental organisations (NGOs). Explicit mention is seldom made of provincial-aided health facilities (PAHF), which are private not-for-profit providers that receive funding from provincial health departments to subsidise their annual expenditures. Though often categorised with public, and sometimes private for-profit facilities, PAHFs have characteristics different from both of these.

Private health care providers, broadly defined as “organisations, institutions, facilities and individuals that work outside the government’s direct control”, are divided into for-profit, and not-for-profit groups. PAHFs fall within the not-for-profit group as any profits they realise are not distributed amongst shareholders. Furthermore, not-for-profits are less likely to contribute to rising health costs or compete with the public sector for its human resources, but more likely to further governments’ equity objectives. PAHFs operate within government’s broad policy framework but, unlike the public sector, are operated by autonomous managers governed by autonomous management committees (or boards). They are a small group of providers, contributing a much smaller quantity of health facilities to South African health services than the public and private-for-profit sectors (Figure 1). This pattern is unlike that seen in many developing countries where the most widely recognised form of private health care provision is through private not-for-profit providers in receipt of public funds. Elsewhere in sub-Saharan Africa, missions or churches are the most important not-for-profit providers, sometimes contributing up to 30% to 50% of total health services.3

Figure 1: PAHFs in the context of South African Health services5-7

<table>
<thead>
<tr>
<th>Health service providers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public sector</strong></td>
</tr>
<tr>
<td><strong>Public health facilities</strong></td>
</tr>
<tr>
<td>343 hospitals</td>
</tr>
<tr>
<td>107 634 beds</td>
</tr>
<tr>
<td>2 604 clinics</td>
</tr>
<tr>
<td>101 CHC and day hospitals</td>
</tr>
<tr>
<td><strong>Private sector</strong></td>
</tr>
<tr>
<td><strong>Not-for-profit</strong></td>
</tr>
<tr>
<td><strong>Provincial-aided health facilities</strong></td>
</tr>
<tr>
<td>43 hospitals</td>
</tr>
<tr>
<td>22 SANTA centres</td>
</tr>
<tr>
<td>7 622 beds</td>
</tr>
<tr>
<td>10 clinics</td>
</tr>
<tr>
<td>10 health units</td>
</tr>
<tr>
<td><strong>For-profit</strong></td>
</tr>
<tr>
<td><strong>Private health facilities</strong></td>
</tr>
<tr>
<td>162 hospitals</td>
</tr>
<tr>
<td>20 908 beds</td>
</tr>
<tr>
<td>74 day clinics</td>
</tr>
<tr>
<td><strong>Other not-for-profits, including NGOs</strong></td>
</tr>
</tbody>
</table>

The PAHF sector consists of:

1. Forty-three provincial-aided hospitals (PAH), situated in the Eastern Cape (18), KwaZulu-Natal (6), Northern Cape (2), North West (4), and Western Cape (13). Many of these were developed through local community initiatives, operating privately and often relying on volunteers. They later requested funding from their respective provincial departments of health. Amongst the not-for-profit PAHs were mission hospitals, developed in the Republic and the “native territories” on the initiative of missionaries who expanded their spiritual work to include health care, and providing the bulk of health care for black people at the time. By 1944, there were 62 mission hospitals in South Africa, in the Cape (18), Natal (32), Transvaal (11), and Orange Free State (1) provinces. However, the number of mission hospitals reduced dramatically in the 1970s when those in the Homelands were forcibly nationalised by the Department of Health acting as an agent for the Department of Bantu Administration and Development. Presently, 21% of PAHs in the country are mission hospitals, which were spared from nationalisation because they were outside the homelands. More recently, the number of PAHs has reduced further as some have closed, a few have converted to private-for-profit, and others (16 in the Northern Cape and 2 in the Northern Province) have been assimilated into the public sector.

2. Twenty-two hospitals for the care of tuberculosis (TB) patients operated by the South African National Tuberculosis Association (SANTA). These are situated in the Eastern Cape (7), Free State (1), Gauteng (3), KwaZulu-Natal (6), Mpumalanga (3), and Western Cape (2). SANTA is a not-for-profit non-governmental organisation that has been operational for fifty years, providing in-patient TB services through its SANTA centres, as well as community-based services through its voluntary branches country-wide. Operation of SANTA centres is almost completely dependent on government funds.

3. Ten neighbourhood health units operated by the Bekimpilo Trust (BT) in peri-urban areas around Durban in KwaZulu-Natal. The BT was established in 1987 to facilitate the establishment of neighbourhood health teams (NHT) that would deliver community-based promotive and preventive health care. However, in 1990, the then KwaZulu Government (KZG) Department of Health contracted BT to provide these services. The first BT NHT was then established, and by 1992 there were 15 health teams providing services in peri-urban and rural areas around Durban.

4. Ten clinics in KwaZulu-Natal (9) and the North West (1) that are affiliated to Catholic Health Care (CATHCA), a private Catholic Church association established in 1987. CATHCA evolved from an initiative to find ways to financially assist Catholic hospitals and clinics and bring all health care interests of the Catholic Church in South Africa under one umbrella body. A total of 21 clinics and two hospitals are affiliated to CATHCA, of which ten clinics and one hospital are PAHFs.

Though not subject to public sector administration, PAHFs are heavily subsidised by provincial departments of health (pDoH). Thus, the overall public sector budget cuts have affected PAHFs too, with some receiving up to 40% reductions in their subsidy. It is within this context that some PAHF managers initiated the formation of a National Forum for Private Provincial-Aided Health Institutions (NFPPAHI) to represent the interests of PAHFs (Box 1). NFPPAHI identified the need to clearly define the role of PAHFs in the health system, especially since although national authorities recognise the essential part they play, it is yet to be determined how PAHFs will fit into the re-structured health system.

The chapter describes the current and potential role and contribution of PAHFs in the South African health system, particularly in the context of DHS development. It is a descriptive review with participation from provincial health authorities and PAHF service providers. Qualitative and quantitative data were collected by questionnaire survey, field visits to a sample of facilities, review of existing health service data and reports, and structured interviews with key informants, including managers and planners from national and provincial health departments and PAHF managers.
Only private not-for-profit health facilities in receipt of public funding were included in the review. Questionnaires were distributed to all 85 PAHFs. However, SANTA did not respond to the questionnaire, so the only data presented for SANTA centres are their quantity and provincial distribution. The rest of the report presents the findings for PAHs and primary level facilities only. The response rates were 91% for PAHs (39 of 43), 90% for CATHCA clinics and 100% for the BT units.

Box 1: The South African National Forum for Private Provincial-Aided Health Institutions

The challenges presented by new labour legislation and new mechanisms of redistributing the national budget to provinces prompted PAHF managers to get together and develop collective responses. Initially, strategies were on a provincial basis, but it was later felt there was need for a national strategy for greater effect. Thus, a not-for-profit voluntary association, the NFPPAHI was established, aiming to co-ordinate the actions of PAHF management boards so as to render an effective service appropriate to South Africa. NFPPAHI hopes to establish a unique identity, separate from both the public and private-for-profit sectors.

An inaugural meeting was held in October 1998, two further national meetings have been held, and provincial forums are being established. A constitution has been developed, with objectives to:

- Enable discussion, co-ordination, planning and submission of policy on the provision of health services by PAHFs so as to enhance and support DHS development throughout South Africa;
- Promote training of members so they may render constructive service to their respective institutions;
- Promote development of mechanisms for co-ordinating PAHF services with those of provincial health departments;
- Promote, initiate and maintain symbiotic relationships with:
  - All relevant national employee organisations
  - Professional medical associations
  - Professional therapeutic associations
- Establish and co-ordinate effective and economical medical and general supplies networks to serve PAHFs nationally;
- Advise members on:
  - Labour relations matters
  - Appropriate tariffs for medical procedures and hospital admissions.

Policy Framework for PAHFs

Current legislative and policy frameworks are unclear on how PAHFs fit into the health system. Subsidies are based on historical agreements, often without formal contracts. Though the statutory basis for the subsidies is provided by old hospital ordinances, these are likely to be repealed once new provincial health legislations are enacted. The current, but soon to be replaced, Health Act of 1977 neither makes specific mention of PAHFs, nor provides a statutory basis for subsidies to private facilities. However, in terms of Regulations to the Health Act, PAHFs are registered as private facilities with the National
State-aided hospitals

Department of Health (nDoH). The Draft National Health Bill defines a private health establishment as “one that does not constitute or is owned or controlled by an organ or quasi-organ of the state”, while a public health establishment is the converse. Neither the Health Bill nor the White Paper for the Transformation of the Health System make explicit mention of the role of private health providers in receipt of public funds. Both documents encourage participation of non-public providers and make provisions for regulating the private sector, but no distinctions are made between for-profits and PAHFs.

**Provincial distribution of PAHFs**

*Quantity and distribution by level of care*

All provinces except the Northern Province (NP) have PAHFs. The quantity and contribution made by PAHFs varies between provinces. In terms of levels of care, PAHFs comprise 65 hospitals (43 PAH and 22 SANTA centres) and 20 primary level facilities. The hospitals comprise an equal number of district hospitals (49%) and specialised hospitals (49%), and one level 1 hospital in KwaZulu-Natal (KZN) that also provides regional hospital services. The Eastern Cape (EC) has the largest number of hospitals (38%) followed by Western Cape (WC) with 23%, KwaZulu-Natal (18%) (Table 1). SANTA centres contribute 69% of the specialised hospitals.

The 20 primary level PAHFs are distributed in KwaZulu-Natal (19) and the North West. The quantity of primary level PAHFs is small compared to the 2 705 provincial and local authority clinics, community health centres and day hospitals in the public sector.

**Table 1: Distribution of provincial-aided hospitals by level of care**

<table>
<thead>
<tr>
<th>Type of facility by level of care</th>
<th>EC</th>
<th>FS</th>
<th>GT</th>
<th>KZN</th>
<th>MP</th>
<th>NC</th>
<th>NP</th>
<th>NW</th>
<th>WC</th>
<th>TOTAL n</th>
<th>TOTAL %</th>
</tr>
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<tbody>
<tr>
<td><strong>Provincial-aided Hospitals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>District (level 1)</td>
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<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>6</td>
<td>32</td>
<td>49</td>
</tr>
<tr>
<td>Mixed level 1 and regional (level 2)</td>
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<tr>
<td>TB (SANTA) hospital</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
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<td>22</td>
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<td>Other specialised PAHs</td>
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<td>0</td>
<td>0</td>
<td>7</td>
<td>10</td>
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<td>Specialised (sub-total)</td>
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<td>3</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>32</td>
<td>49</td>
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<tr>
<td><strong>Total PAHs</strong></td>
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<td>1</td>
<td>3</td>
<td>12</td>
<td>3</td>
<td>2</td>
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<tr>
<td><strong>Total Provincial Hospitals</strong></td>
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<td>60</td>
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<td>32</td>
<td>45</td>
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<td><strong>Private sector Hospitals</strong></td>
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<td></td>
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</tr>
<tr>
<td><strong>Total Private Hospitals</strong></td>
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<td>7</td>
<td>66</td>
<td>27</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>27</td>
<td>162</td>
<td></td>
</tr>
</tbody>
</table>

a Four level 1 hospitals in the North West and one in Eastern Cape have recently been re-designated to Community health centres, but are included in the hospital data

b These include 1 maternity hospital, 1 geriatric care and rehabilitation hospital, 3 homes for mentally and physically handicapped, 4 chronic nursing and after care homes, and 1 convalescent care facility.

c Number of hospitals according to 1998 Hospital and Nursing Yearbook
**Bed Status**

There are 7,622 beds in PAHF hospitals, 74% of which are in specialised hospitals, and 26% in level 1 PAHs (Table 2). The majority (68%) of PAHF beds are dedicated entirely to the care of TB patients (5,018 SANTA beds and 288 TB beds in level 1 PAHs).

**Table 2**: Provincial distribution of PAHF beds by level of care

<table>
<thead>
<tr>
<th>Type of facility</th>
<th>EC</th>
<th>FS</th>
<th>GT</th>
<th>KZN</th>
<th>MP</th>
<th>NC</th>
<th>NW</th>
<th>WC</th>
<th>TOTAL n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1 hospital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute general</td>
<td>765</td>
<td>-</td>
<td>-</td>
<td>579</td>
<td>-</td>
<td>-</td>
<td>122</td>
<td>208</td>
<td>1674</td>
<td></td>
</tr>
<tr>
<td>Specialised (TB)</td>
<td>26</td>
<td>-</td>
<td>-</td>
<td>259</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>0</td>
<td>288</td>
<td></td>
</tr>
<tr>
<td>Specialised (psychiatry)</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>793</td>
<td>0</td>
<td>0</td>
<td>838</td>
<td>0</td>
<td>0</td>
<td>125</td>
<td>208</td>
<td>1964</td>
<td>26</td>
</tr>
<tr>
<td><strong>Specialised hospital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TB hospital (SANTA)</td>
<td>1345</td>
<td>150</td>
<td>1150</td>
<td>1443</td>
<td>480</td>
<td>0</td>
<td>0</td>
<td>450</td>
<td>5018</td>
<td></td>
</tr>
<tr>
<td>Other specialised PAHs</td>
<td>43</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>145</td>
<td>0</td>
<td>452</td>
<td>640</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td>1388</td>
<td>150</td>
<td>1150</td>
<td>1443</td>
<td>480</td>
<td>145</td>
<td>0</td>
<td>902</td>
<td>5658</td>
<td>74</td>
</tr>
<tr>
<td><strong>TOTAL PAH beds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>2181</td>
<td>150</td>
<td>1150</td>
<td>2281</td>
<td>480</td>
<td>145</td>
<td>125</td>
<td>1110</td>
<td>7622</td>
<td>100</td>
</tr>
<tr>
<td>%</td>
<td>29.0</td>
<td>2.0</td>
<td>15.0</td>
<td>30.0</td>
<td>6.0</td>
<td>1.9</td>
<td>1.6</td>
<td>14.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hospital size**

PAHs are generally small in size, all with 200 beds or less. Eighty-eight percent of level 1 PAHs and 90% of specialised PAHs have less than 100 beds each (Figure 2). KwaZulu-Natal has the largest level 1 PAHs, contributing 43% of total level 1 beds. Smaller level 1 PAHs serve their nearest local communities, while some of the larger PAHs serve whole districts or regions. The implications for service delivery are that the smaller level 1 PAHs would be more suited to a role of supporting provincial district hospitals, as hospitals this size would be considered too small to fulfil the role of a district hospital.

The national Department of Health recommends that a level 1 hospital should have a minimum of 30 beds, and facilities with less than this should be classified as community health centres or clinics. Seven (21%) level 1 PAHs have less than 30 beds. Perhaps these should be assessed in terms of accessibility, utilisation, case mix, catchment areas, density of catchment populations, and availability of other services in their district, with a view to determining the appropriateness of their designation.

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\(d\) (This includes cots)

The level 1 PAH with some level 2 functions is included in level 1 PAH data
Figure 2: Size of PAHs: number of beds per hospital

Human Resources

Medical personnel

Eighty percent of PAHs have access to the services of a medical officer (MO) (18% have a full-time MO, and 62% are predominantly nurse-based, utilising the services of a part-time or sessional MO). Seventy percent of specialised PAHs and 30% of level 1 PAHs do not use the services of a medical officer at all.

Nursing personnel

PAH nurses are generally full-time and often the front-line staff, performing extended roles such as handling emergencies, performing x-rays, and managing pharmacies. Some specialised PAHs often utilise non-nursing staff, including general assistants, for nursing care. The average nurse to bed ratio is 0.37 nurses per bed (all PAHs). The ratio for level 1 PAHs is 0.35 nurses per bed, which is low compared to a national survey\textsuperscript{16} that found an average ratio of 0.7 nurses per bed for level 1 hospitals. The implication is that level 1 PAHs are operating with less than expected nursing staff levels.

All primary level PAHF are nurse-based services, which is appropriate for that level of care. Only a third of CATHCA clinics have trained primary health care (PHC) nurses, and BT has none. The BT units have access to the services of two medical officers, one part-time and the other voluntary, while 45% of the CATHCA clinics receive regular consultation visits by medical officers.
**Auxiliary personnel**

Few PAHs employ auxiliary personnel (Figure 3). The majority of PAHs with auxiliary staff employ them on a part-time basis.

**Figure 3: PAHs with auxiliary personnel**

![Bar chart showing percentage of PAH with auxiliary staff](chart)

**Salaries and conditions of service**

PAHF managers were asked to compare basic salaries and benefits provided to their staff with those of provincial staff.

**Salaries**

Seventy-four percent of PAHs, the BT and half the CATHCA clinics pay their staff the same salaries as provincial staff. However, though PAHF salaries are fairly comparable to provincial scales, rank promotions are often delayed resulting in some PAHF staff earning fixed salaries for years.

**Benefits**

Staff benefits compared include housing subsidies, medical aid, annual leave, sick leave, compassionate/family responsibility leave, and study leave. PAH staff receive an average of 4.5 (75%) of these 6 benefits. CATHCA clinic staff receive 3.3 (55%), and BT staff receive 67%. Medical aid and housing subsidies were the benefits most frequently not provided.

Overall conditions of service for PAHF staff are poorer than those of their public sector counterparts. Lower salaries and benefits may contribute to maintaining lower costs for PAHFs, but may also affect their ability to attract and retain staff, especially in rural areas. PAHF staff are not included in public service central bargaining chamber salary negotiations, and so do not benefit from any salary adjustments provided to provincial staff. Thus, in order to ensure adjustment of PAHF staff salaries, provincial departments of health have to locate additional funding to increase the subsidies. However, this is becoming more difficult.
due to budgetary constraints. With the new Basic Conditions of Employment Act\textsuperscript{15} and increasing involvement of labour unions, PAHF managers and cash-strapped provincial departments of health are challenged to effect conditions of service in terms of the statute.

**Range of Services**

**Level 1 PAHs**

This diverse group of facilities includes large well-equipped PAHs, PAHs with a limited range of services and facilities, and others providing services that provincial departments of health usually should, such as training of health professionals and district hospital services. Basic services expected to be available in a level 1 hospital include x-ray, laboratory, operating theatre and acute and emergency services. With the exception of laboratory services, these services are provided by the majority of level 1 PAHs (Figure 4). However, it must be noted that in many PAHs, x-rays are performed by a professional nurse or doctor, and theatre utilisation as infrequent as once to three times a month was reported in 20\% of level 1 PAHs. Only 10\% have an on-site laboratory, which is low compared to a national survey,\textsuperscript{14} which found that 45\% of district hospitals had an on-site lab. Injury-on-duty services are available in 79\% of PAHs, providing a source of revenue from the Compensation Commissioner.

![Figure 4: Services provided by level 1 PAHs](image)

A smaller proportion of level 1 PAHs are involved in the training of health personnel, including medical interns (4\%), nurses (14\%), midwives (7\%) and community health workers (14\%). Of note, one PAH in KwaZulu-Natal was awarded a contract by the national Department of Health to be the national training centre for the Decentralised Education Programme on Advanced Midwifery (DEPAM).
Specialised PAHs

Apart from one maternity hospital that admits short-stay patients, specialised PAHs provide services for chronic patients, including nursing care for physically and mentally disabled individuals and invalid children, geriatric care, rehabilitation services, and convalescent care. Two specialised PAHs provide training for enrolled nursing assistants and care givers.

Provincial-aided hospitals overall seem to be making do with small staff establishments and a limited range of facilities and services. It is important that factors like staffing levels and availability of health facilities, often used as quantitative indicators of quality, do not compromise the quality of patient care. This is especially so at a time when the move toward equity in South African health services is being placed high on the agenda,¹⁴ and quality assurance and hospital accreditation processes are on-going in both the private and public sectors.

Primary level PAHFs

All the CATHCA clinics are fixed facilities, providing a wide range of promotive, preventive and curative health services (Figure 4). Some clinics (44%) also provide mobile services, collectively visiting 16 mobile points a month. Though only 20% of the clinics are designated as 24 hour services, 50% actually have nursing staff “on-call”, providing services including obstetric deliveries, primary medical care (PMC) and STD treatment after hours. Family planning services in CATHCA clinics include counselling and advice but not the provision of contraceptives.

The BT units are open five days a week (8 hours a day), providing primary health services out of ten fixed facilities, eight of which are located on school premises, and also provide two mobile services. All the BT units provide the same range of services including promotive and preventive personal health services (immunisation, health education, family planning), and curative care (STDs, TB, minor ailments in children). BT has recently obtained equipment for sputum testing for TB. Other services provided by BT units and CATHCA clinics include home visits, home-based care, training of community health workers and traditional birth attendants, and community development activities.

One of these units is currently closed for security reasons.
Financing mechanisms

PAHF s are financed by subsidies from provincial departments of health, and partly by private income, presenting a public/private mix of health care provision and financing in South Africa (Figure 2). Another public/private mix model is that of Lifecare Special Health Services, a private-for-profit organisation with 23 hospitals and two district hospitals. Provincial departments of health contract with these hospitals which receive funding on a per-capita basis to provide services to non-private patients.

Table 3: Health care provision and financing in the South African health system

<table>
<thead>
<tr>
<th>PROVISION</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not-for-Profit</td>
<td>For-profit</td>
</tr>
<tr>
<td>FINANCING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>Public sector health services at national,</td>
<td>PAHF s receiving provincial</td>
</tr>
<tr>
<td></td>
<td>provincial and local government levels</td>
<td>subsidies</td>
</tr>
<tr>
<td>Private</td>
<td>Private income generated by PAHF s</td>
<td>Health care financed mainly by</td>
</tr>
<tr>
<td></td>
<td></td>
<td>medical scheme contributions and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>out-of-pocket payments</td>
</tr>
</tbody>
</table>
The methods for financing PAHFs vary between provinces. In the Eastern Cape, Northern Cape, North West and Western Cape, provincial departments of health provide 90% of annual expenditure to PAHFs. In KwaZulu-Natal, the provincial Department of Health negotiates a level of subsidy with each PAHF, and for TB beds in level 1 PAHs, a fixed amount per patient per day is allocated. Funding is not performance-based and none of the provincial health departments use a needs-based formula.

**Figure 6: Sources of income for PAHs**

![Graph showing sources of income for PAHs across different provinces.]

**Sources of income: hospitals**

The main private sources of income for PAHs include patient fees, donations, interest on bank deposits, and fund-raising activities. In terms of provincial averages, the subsidy provides 71% to 90% of annual income for PAHs (Figure 6). There is wide variation between facilities, the subsidy contributing between 31% and 99% of annual income per facility. This reflects wide variation in revenue-generating ability between PAHs, with some PAHs raising minimal revenues.

**PAH patient fees**

Most PAHs have a three-tier system of patient fees:

1. Subsidised rates for “hospital patients” fixed at rates similar to or slightly above public sector
2. Medical-aid patients pay scale of benefit rates in terms of tariffs set by the Board of Health Care Funders (formerly the Representative Association of Medical Aid Schemes)
3. Fixed private patient fee determined by individual PAHs, mainly targeting patients without medical aid who can afford private fees.

In view of the subsidies they receive, PAHs are obliged to provide free services to pregnant women and children less than six years old. They also often provide free services to patients who cannot afford the subsidised rates. In total, 89% of PAHs provide free services to at least one of these categories of patients. The proportion these free patients contribute to total numbers of OPD and in-patients varies between PAHs.
Sources of income: primary level facilities

The subsidies for CATHCA clinics vary between facilities from 9% to 100% of total income. This is for recurrent costs, mostly covering staff salaries and drugs only. BT receives a 100% subsidy for staff salaries, TB and STD drugs and supplies.

Primary level PAHF patient fees

The BT units all provide free services and so do not generate any revenue from patient fees. CATHCA clinics generate a substantial proportion of their income from patient fees (20-47%), with donations and money raised from fund-raising providing the balance. The clinics charge a fee (R5 to R20) for most services, but some services including immunisations, TB treatment, HIV counselling, family planning, mental health and school health services are provided free. However, revenue from patient fees has reduced over the last few years due to declining utilisation of the clinics. One of the reasons for reduced utilisation is that over the years, government clinics providing free services have been established in areas that were previously served by CATHCA clinics. Reduced revenue has forced some clinics to seek alternative sources of income, and recently one clinic has secured overseas donor funding to ensure continuation of services.

Though PAHFs overall generate more revenue than public sector facilities, their sustainability is largely dependent on the subsidies of provincial health departments. With the exception of a few PAHs in KwaZulu-Natal and Western Cape and some CATHCA clinics, PAHFs generate limited revenue to supplement their subsidies. Thus, the subsidy cuts and rising costs have prompted some to reduce services, while others have increased patient fees. However, as observed in some developing countries, increasing fees may instead result in reduced utilisation and further reduction in revenue. Though some are fortunate enough to secure international donor funds, the long-term sustainability of this type of funding is limited. PAHFs managers are thus challenged to seek and obtain more sustainable sources of income.

Management Mechanisms

PAHs are operated by management teams comprising a medical or hospital superintendent (often part-time), nursing services manager or senior professional nurse, and a hospital secretary or administrator. Some have additional personnel on the team. At least one member of management has had management training in 31% of PAHs, while 23% have at least one member with financial management training.

All PAHs are governed by a management board which mainly plays an advisory role, and approves financial decisions like budgets and large capital expenditures. The BT has a board of trustees, while 56% of the CATHCA clinics are governed by community health committees with community representation. Governance structures enable accountability of PAHF managers to civil society, and also provide a mechanism by which communities can be involved in the health service. Although the community health committees had adequate community representation, this was limited at hospital board level. This has been identified as an issue that needs to be rectified in at least three provinces where moves are being made to address it through legislation or policy.

Autonomy

PAHF managers have greater autonomy than their public sector counterparts, operating their facilities without direct provincial health department involvement. They are able to make autonomous decisions regarding personnel administration (recruitment and selection), procurements, labour relations (disciplinary procedures and dismissal), and establishment of financial management systems. Due to their autonomy, PAHF managers have established private patient fees, opened up private wards or beds, developed partnerships
with private consultants to advise on matters like accounting, industrial relations, and to audit financial statements. Fifty-one percent of PAHs have privatised at least one non-clinical service, including catering, cleaning services, security, maintenance, and laundry. It was found that 74% of PAH managers would not wish their facility to convert to a public sector hospital for fear of losing their autonomy. Not bound by the often restrictive public sector administrative procedures, PAHs managers have an opportunity for innovation. However, smaller, and more rural PAHs are less able to realise the potential of their autonomy, especially for revenue generation. This implies that their sustainability will continue to be highly dependent on funding from provincial departments of health.

Role within organisation of health services

Eighty-eight percent of PAHs managers felt that referral pathways are clearly defined in their areas. PAHs serve mainly rural and peri-urban populations, form part of referral networks in their districts or regions, and refer their patients to provincial health facilities. In addition, 79% of level 1 PAHs provide support and function as referral centres for a total of 92 local authority and provincial clinics and community health centres (Table 4). Primary level PAHs also regard themselves as extensions of the provincial health system, and refer their patients to public sector health facilities. Though these referral facilities rarely give feedback, relationships with them are described as reasonable.

Table 4: Level 1 PAHs that are referral centres for public sector primary level facilities

<table>
<thead>
<tr>
<th>Province</th>
<th>Level 1 PAHs that are referral centres (n)</th>
<th>Number of clinics referring to PAH</th>
<th>Number of CHC referring to PAH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape (n=15)</td>
<td>14</td>
<td>43</td>
<td>1</td>
</tr>
<tr>
<td>KwaZulu-Natal (n=5)</td>
<td>2</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Northern Cape (n=0)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>North West (n=4)</td>
<td>3</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Western Cape (n=5)</td>
<td>4</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Total (n=29)</td>
<td>23</td>
<td>88</td>
<td>4</td>
</tr>
</tbody>
</table>

The majority (89%) of PAHs reported having clearly defined catchment areas. Of these, the level 1 PAHs each serve population sizes ranging from as little as 4 000 to as high as 750 000 for a PAH in KwaZulu-Natal that provides hospital services to a whole district. All the specialised PAHs provide services utilised by patients from their whole respective regions or provinces.

Involvement in the South African health system

Almost all (93%) PAHs have representatives on district health committees in their respective districts or regions. The level of involvement of these members varies from playing a planning and advisory role in the management of other hospitals in the district (42%), to giving input by sharing ideas and experiences (42%), to merely attending as members of the committee (16%).
Box 2: PAHF managers’ views on the future role of PAHFs in the South African health system

**Role in DHS**
- Provide services as a shared responsibility with the public sector, and share resources to facilitate the planning and smooth delivery of services at the primary level of care
- To be involved and interact with district level structures in the provision of district health services
- Augment public sector services by providing services where no provincial services exist, thus relieving higher levels of care of inappropriate patient loads
- To play a spearheading role in developing services at the community level, including extension of primary health care services, and training of community health workers and care-givers.

**Role in health system in general**
- As examples from which other health providers can learn some lessons and apply to their situations, especially in terms of:
  - Cost control
  - Revenue generation
  - High standards of care
  - Use of business principles in a public environment
- To act as agents of the state in health service delivery, especially since autonomy enables appropriate re-direction of resources when needed. However, a regulatory environment and improvement in relationships with provincial departments of health are required for an agency type of arrangement
- As provincial health departments move toward devolving authority to their hospital managers, PAHs which are already practising decentralised management, could provide valuable input based on their experiences
- PAHFs could provide a model or pilot site for implementation and/or evaluation of a public/private mix for health care provision and financing.

**Relationships with health authorities**

**National Department of Health perspective**

The nDoH acknowledges the important role that PAHFs can play in service delivery. Co-operation between PAHFs and the public sector are encouraged to facilitate co-ordinated health care provision. It is suggested that perhaps in future the two sectors could develop a purchaser-provider arrangement. The nDoH recognises that PAHFs deliver care at lower cost, and often to needy communities in very remote areas, but feels that national policy isn’t required to determine their role within the health system. The focus should rather be on regional or district contexts, having determined the service needs and what providers are available, be they public, private, PAHF, or NGO. The Department of Health is not laying down any rules and expects provinces to make decisions within overall national frameworks.
Relationships with provincial health authorities

Provincial health departments generally consider PAHFs to be part of the network of health services in their provinces, and commend them for their services to rural populations, efficiency, cost-effectiveness, revenue generation (more than public sector facilities), and autonomous management which lifts an administrative load off provincial health departments. PAHFs and provincial health departments are collaborating in service provision, with interaction occurring mostly at the provincial and regional levels, and less at the district level. Except in the Western Cape, there are no service contracts in place, so the cordial working relationships are not formalised. This lack of structured formal agreements implies that provincial health departments are not effectively utilising the opportunity to use the subsidies as a means of promoting national and provincial health goals. However, processes are underway to develop performance-based service contracts in all provinces, while the contract in the Western Cape is being amended.

Provincial health departments play a limited monitoring and supervisory role, only expecting PAHFs to submit statistics and financial returns at pre-determined intervals. The funding agreements with provincial health departments are historical and subsidies are not based on performance or other objective criteria, which may perpetuate inappropriate patterns of funding and service provision. The absence of formal service contracts and limited regulatory frameworks have caused uncertainties amongst PAHF managers regarding their future role in the health system. Perhaps formation of the NFPPAHI and processes underway to amend existing contracts and develop new ones where none exist are indications that the situation may change.

Specific provinces

Eastern Cape

In the last two years, PAHF managers have been meeting regularly within their regions, and have formed a provincial task team to collaborate with the pDoH in tackling issues like financial management, funding, personnel, and service contracts. PAHF managers relate to their respective Regional Directors (RD) for all but financial management matters, which are handled at the provincial level so as to standardise systems and ensure equity in funding. PAHFs feel they are sometimes treated as public, while other times as private sector institutions, but the pDoH considers them as partners, provides support, and is happy for them to continue as autonomous agents, operating within provincial frameworks. Planning for PAHFs will be informed by a province-wide hospital survey and any changes to the current patterns of provision by PAHFs will occur within the context of the survey results to ensure service provision appropriate for the Eastern Cape’s needs.

KwaZulu-Natal

The BT is the only PAHF with a service contract with the pDoH. However, this was inherited from the former KwaZulu government and has not been updated recently. In terms of the KwaZulu-Natal Provincial Health Bill,17 a PAHF is regarded as a public health care establishment.17 Provincial-aided hospitals are included in provincial hospital planning, and their general service beds are considered to be provincial resources. For example, a level 1 PAH functions as the district hospital for a large health district, and two others provide TB beds. Decisions on the role of specialised beds will be informed by the results of a situation analysis currently underway.

The CATHCA clinics are experiencing problems with sustainability due to reduced utilisation and dwindling revenues. However, they feel they can be transformed in order to continue providing appropriate health services. The CATHCA national office supports partnerships with the public sector and encourages the development of service agreements with provincial health departments.
Northern Cape

Until recently, 18 (40%) of Northern Cape’s hospitals were PAHFs, each governed by a hospital board with its own constitution. Thus, the pDoH negotiated service delivery with 18 different administrations, a situation found not to be conducive for smooth delivery of services. No service contracts existed and subsidies were provided in the absence of a framework for funding. PAHF managers had a great deal of autonomy, functioning without adequate supervision from the provincial department, and hospital boards resisted transformation. The situation changed when the provincial government made a policy decision in 1997 to assimilate 16 of the PAHFs into the public sector. Though provincial health legislation makes no provisions for PAHFs, the pDoH commends the contribution they have made and their ability to keep costs down. The two remaining PAHFs are both chronic care facilities and considered as essential services. They will continue to receive subsidies in terms of performance contracts to be developed.

North West

The North West Provincial Health Bill provides for PAHs by stipulating that grants-in-aid may be made to private health establishments providing services to non-private patients. These grants are conditional on compliance with requirements concerning composition of boards and financial accountability to the province.

Another new piece of legislation impacting on PAHFs is the North West Health, Developmental Social Welfare And Hospital Governance Institutions Act of 1997 which creates hospital boards, community forums and other health governance institutions. The current hospital boards are no longer recognised, and community fora will instead oversee matters pertaining to PAHFs. Thus, although the Bill enables PAHFs to receive grants-in-aid, funding will occur only on compliance with the Governance Act. In this way, the pDoH has developed a mechanism for ensuring PAHFs operate in terms of its goals. In the long term, the Department will look into establishing purchaser/provider contracts between PAHFs and District Health Authorities. The Department won’t make a blanket decision regarding the role of PAHFs since each plays a distinct role. Thus, each PAHF will be assessed individually in terms of a provincial needs analysis, and roles will be defined accordingly. The pDoH recognises the contribution of PAHFs but would like to play a greater role in their operation. Recently, the control of PAHF budgets and most expenditure was handed over to district health managers.

Western Cape

PAHFs in Western Cape had to enter into a contract, a “Standard Agreement” with the pDoH in order to receive a subsidy. The contract dates back to the 1940’s when a need for more departmental involvement in PAHFs was realised. It outlines funding mechanisms and officially recognises the autonomy of hospital boards, but does not stipulate what specific services PAHFs should provide. It is undergoing amendment and will also highlight the need to ensure adequate community representation on hospital boards. The pDoH is happy with the current pattern of service provision and changes will occur only within a context of normal budgetary down-scaling. Subsidies will continue within a regulated provincial framework, and it is expected that once the district health system is functioning, PAHFs will continue to play an appropriately defined role within the districts in collaboration with the public sector.
**Conclusions**

The PAHF sector is small in quantity, but the quality of their services is appreciated by provincial health departments, especially since arrangements with PAHFs are economical. However, lower costs aren’t the only justification for the subsidies, as PAHFs are commended for their effective management. PAHFs also have experience with systems which the public sector hopes to instil in its own health facilities, including decentralised management, user fees, revenue generation and retention, and public-private partnerships.

PAHFs contribute to provincial health service networks, the majority providing services at lower levels of care, the most under-resourced levels of the South African health system. As financially constrained provincial health departments face the challenge to effectively mobilise resources for district health system development and seek non-public sector partners, PAHFs have the potential to play an even greater role, having resources that these departments could mobilise. However, being such a non-homogenous group, their roles would best be defined in terms of the service needs of their respective districts or regions. It is unlikely that new public sector health facilities will be constructed in the near future due to financial constraints. Thus, developing formal service contracts with PAHFs, as envisaged in the Draft Health Bill, would relieve provincial health departments of the pressure to develop new services. Elsewhere in Africa, governments often established contracts with not-for-profit organisations for provision of district hospital services, and a substantial proportion of health services in rural areas were provided by voluntary institutions receiving government grants, thus enabling the state to provide services without incurring capital expenses.

National legislation does not adequately define PAHFs or provide statutory bases for their subsidies. The Health Bill’s definition of private health establishments may be open to wide interpretation, as PAHFs may possibly be considered “quasi-organs of the state” depending on the extent of public funding. Provincial health departments have the task of providing regulatory frameworks for PAHFs through formulating policies or specific provisions in provincial legislation. KwaZulu-Natal and the North West have done so in their legislation, though KwaZulu-Natal defines PAHFs as public and the North West as private entities, highlighting a lack of uniformity. Nevertheless, this indicates that PAHFs are on the policy agenda and are closer to being more clearly defined. Similar processes are awaited in other provinces.

**Recommendations**

- There is a need for performance-based written service contracts between provincial health departments and PAHFs, that should include provisions for monitoring and evaluation. More provincial departmental involvement is required to ensure appropriate funding patterns and service provision that reflects provincial, regional, or district health objectives.
- Decisions regarding the role of PAHFs should be made within district or regional contexts, guided by the principle of sharing resources to ensure equity.
- The experiences of PAHFs with a public-private mix of health care provision and financing provide a good learning ground for provincial health departments to evaluate public-private partnerships with a view to future implementation in the public sector.
- Provincial legislation should include provisions that clearly define the legal status of PAHFs and mechanisms for their funding. This is especially important since purchaser-provider contracts between the public sector and non-public providers are envisaged by health reforms. Furthermore, uniformity in provincial legislation should be ensured so as to standardise practices nationally. More clarity on this matter is required by national frameworks.
- PAHF managers are encouraged to be more involved in the policy development process through advocacy. Such processes could probably best be facilitated by the NFPPAHI.
Health Services provided by religious communities

Faith Based Organisations (FBOs) operate in many parts of the country providing health care services that are an unknown mix of public and private sector health care. An attempt was made to identify services offered by these organisations, and to investigate their interaction with formal health care service structures.

There are a number of church hospitals and clinics operated by FBOs which provide primary health care to more than 70 000 people per month. A growing number of FBOs are offering HIV/AIDS services ranging from awareness campaigns to material support and hospice care. There are numerous rehabilitation centres for alcohol and drug dependants as well as homes and schools for the disabled. Homes for senior citizens offer frailcare or nursing services to their residents.

Most of the FBOs reported good co-operation with the Department of Health and efficient referral procedures to and from their institutions. Funding from the Health and Welfare Departments is an essential lifeline gratefully acknowledged by most of the projects, although some rely entirely on their own fundraising.
**Introduction**

A broad spectrum of religions is practised in South Africa. Many of these religious organisations operate either formal or informal health and welfare services, targeting their own congregation and the broader community. This impacts on access to health care, and on health care provision. For example, while 70% of South African citizens state that they are members of Christian churches, the beliefs and practices of African traditional religions continue to play a part in the life of the majority of these. African Instituted Churches (AIC’s) as a rule do not offer formal health services, but healing is a major aspect of their religious life. The biggest of the AICs, the Zion Christian Church (ZCC), operates a number of formal social projects. One of these is a modern clinic, recently established near the church headquarters in the Northern Province, which brings primary health care to hundreds of patients per week.

Many of the evangelical and/or charismatic churches work at congregational level, and the emphasis seems to be rather in welfare than in health services. Faith healing is practised in many of these churches. The member churches of the International Federation of Christian Churches seem to be very committed to community service, including health service.

Muslim health and welfare services are community-based and not formalised. According to the Muslim Judicial Council, mainly spiritual health care based on the prophetic traditions is offered. The Muslim community operates an extensive network of clinics in marginalised communities.

Care within the Jewish faith community is also community-based. The community mainly provides welfare services, including homes for seniors and disabled people from the Jewish community.

There is a growing spectrum of alternative health services on offer, many of them based on Eastern religious practices. Meditation and yoga (Buddhist, Hindu, Bahai, and Centre for Ubuntu) are used to achieve balance in life as a basis for healthy living. A healthy lifestyle based on vegetarian or other diets is taught as a means of enhancing health.

**Method and limitations of data collected from FBOs**

Data was collected from 89 FBOs. Religious communities with fewer than 20 000 members were not considered. After considering what was to be regarded as health service, it was decided not to focus on mental health, feeding schemes or children’s homes as they do not provide direct health services. Forms of alternative health, as well as rehabilitation for the disabled and substance abusers were not considered in detail.

It was easier to collect data from some organisations, while others were reluctant or unable to supply membership lists because of their policies. A number of religious communities are congregationally based, with the result that their national offices were unable to provide any information of what is done locally. Thus work done by local congregations was difficult to assess. Even in organisations with a central head office, head office staff were not always fully aware of the health services provided. It was easiest to contact organisations in urban areas, specifically in and around Cape Town, where RICSA is based, and Johannesburg, where many of the organisations have their head offices. As a result the data collected does reflect a greater percentage of the activities in these areas than in other parts of South Africa. In spite of these limitations it is believed that this chapter presents information about the majority of the larger religious health services in South Africa.
Overview of health services provided by FBOs

Hospitals

A few decades ago the main input of religious groups into health services was the great number of hospitals and clinics they owned and operated, mostly in the poorest communities and remote rural areas. In the past thirty years the majority of these hospitals have been taken over by provincial health departments; and many clinics have been closed.

The reasons for these closures centre on financial constraints. Providing health services has become extremely costly, and religious communities working with voluntary donations are unable to afford the costs. In addition, the need for more funds, expertise and technology has made it necessary to form partnerships with government to maintain hospitals. The church’s inexperience at teamwork with secular bodies has hampered the success of such partnerships. At present most of the hospitals and clinics are located in KwaZulu-Natal (16), Gauteng (8), and the Western Cape (6) (see Figure 1).

Most of the hospitals currently owned and managed by churches provide general health care; one is a maternity home (Church of the Province of South Africa – CPSA), one a geriatric hospital (Salvation Army) and another a home for chronically ill children referred from the Red Cross Children’s Hospital (Catholic). One hospital (Rhema Church) includes a 30 bed AIDS ward. The hospitals receive the bulk of their funding through government subsidies. The exception is St Aidan’s Anglican hospital in Durban, which supplements its income by providing services to medical aid patients.

Numerous FBOs provide chaplaincy services at both provincial and private hospitals. In some major hospitals the chaplains are part of the team involved with patients, ensuring holistic care. Apart from spiritual help, the chaplains help patients and their families deal with their illnesses or deaths. Chaplains may even become involved in the settling of disputes between management and staff. Caring for carers is an important aspect of their task.

The Christian Medical Fellowship (CMF) provides support to medical staff working in remote areas, including young doctors on community service. Programmes are run amongst medical students to encourage them to go into these areas and CMF offers courses in preparation for such placements.

Clinics and other primary health care facilities

Most clinics currently operated by FBOs offer primary health care, either in rural areas or to destitute people in the cities (Methodist clinic in Durban, Dutch Reformed Church (DRC) Othandweni clinic in Johannesburg). The Catholic Health Care Desk (CATHCA) is responsible for an extensive network of 20 clinics bringing primary health care to some 52 000 people every month. Thumelong, a joint programme of CATHCA and the CPSA in Pretoria operates clinics, welfare programmes and a hospice in the Winterveld area.

The Islamic Medical Association (IMA) operates a number of clinics in urban and semi-urban areas of KwaZulu-Natal and Johannesburg. Medical specialists offer voluntary service in addition to the trained nurse who is constantly available.

The Hindu community supplements health care in numerous poor areas of KwaZulu-Natal through the SaiBaba medical camps and the Ramakrishna Clinic. Both organisations utilise provincial clinic facilities, and bring in volunteer medical specialists and donated medication on weekends. The Ramakrishna Clinic also runs paediatric camps every two months for 500 children.
Referral systems to local hospitals are in place at all the clinics.

Twenty-two clinics reported receiving financial assistance from Government, in some cases supplemented by their own fundraising. The Hindu and Muslim clinic programmes raise their own funds, while the use of volunteer medical specialists cuts expenses. The clinics of the IMA require some payment from their patients.

**Support for medical services**

Numerous FBOs, which are unable to offer their own health services, give support to existing private or public services. For example, the Methodist and Baptist churches are still involved with their former hospitals offering chaplaincy services and moral and material support. Also, teachers from Hindu Ashrams teach therapeutic yoga at two Tuberculosis (TB) hospitals in the Cape Flats; the Ikamva Touch Resource Programme (Lighthouse) supplies used wheelchairs and similar equipment to a township health NGO; and the New Apostolic Church provides the South African National Tuberculosis Association with medicine boxes. Volunteer medical specialists of the Muslim and Hindu clinic services supplement the primary health services at these facilities. The Baptist church brings in medical specialists from their USA partners for a few weeks at a time, but due to legal restrictions they are not able to offer medical services in South Africa.

**Homes for senior citizens**

While homes for senior citizens are not strictly health providers, many have frail care sections or offer nursing care. Due to the rising costs of frail care and the fact that subsidies are decreasing and no longer available for healthy residents, numerous homes have had to adjust their services. In some homes the more expensive treatments have been stopped; in others frail care units have been closed; whilst other homes admit only those able to pay their full expenses.

Homes for senior citizens operated by FBOs are most common in the more affluent communities (see geographical distribution of homes for senior citizens and rehabilitation centres in Figure 1). Originally most of them catered for white residents, although some churches had separate homes for the different race groups. These are now all racially integrated. All homes contacted receive subsidies from the Welfare department. In addition residents pay according to their financial means. The balance of expenses has to be covered by fundraising of the responsible FBOs or the homes.

A few homes offer services to the elderly as well as AIDS orphans (Nazareth House), disabled adults (Aryan Benevolent Home) or destitute people.

**HIV/AIDS**

The Religious AIDS Programme (RAP) was launched in 1996 to establish networking forums for interaction on HIV/AIDS-related issues. RAP understands its primary task to be the mobilisation of religious communities to take up the challenge presented by HIV/AIDS. Most of the spokespersons for AIDS-related projects complained about feeling isolated within their religious groups with their concern about AIDS. Generally the attitude seems to be that “Our people are good people and are not affected by this”. This demonstrates why there is such a need for mobilisation of religious communities to fight the lack of
awareness about the disease and to engender compassion for those affected by it (for geographical distribution of AIDS-related services, see Figure 1).

A group within the Anglican church (Pretoria Diocese) is specifically targeting mainly white congregations, who seem relatively unwilling to become involved in reaching out to people living with HIV or AIDS (PWAs).

The most common intervention is HIV/AIDS prevention by education, targeted mainly at the youth. A few groups specifically offer AIDS-related programmes to children, e.g. the Chiro Sunday School programme used widely in Namaqualand. In many cases HIV/AIDS programmes are offered in their own groups, but some FBOs target a much wider audience, including schools, places of work, farms, conferences, sport events, and groups of sex workers. Peer group training is used effectively by a number of HIV/AIDS education programmes. Both pre- and post-test counselling is provided by 10 FBOs with lay counsellors working in clinics and hospitals.

Support extends also to material support. The Institute for the Study of the Bible’s (ISB) Worker Ministry has a unique approach. Its support for PWAs includes counselling, but also ensuring work opportunities to help them maintain their independence. They use their location in the School of Theology to raise the awareness of future ministers about AIDS-related challenges.

As hospitals face increasing numbers of AIDS patients, more FBOs are offering support by training community members to do home-based care. Some FBOs offer home-based care by paid (St John’s) or volunteer (Tateni) staff. In other instances FBOs offer hospice care for those in the late stages of the disease. This often overlaps with accommodation for AIDS orphans, who may or may not be HIV positive. At least five FBOs were in the process of planning such services. The accommodation offered ranges from 6 beds to 500 beds (an AIDS orphanage planned for rural KwaZulu-Natal by a Methodist mission.).

Box 1: Case Study - Hope Worldwide

Hope Worldwide operates in five centres around SA. With the help of over 2 000 volunteers they are able to offer a massive HIV/AIDS education programme, targeting schools, hospitals, clinics, sex workers and prisons. They also make use of the media. PWAs are encouraged to join support groups, in which they offer each other alternative family support. Food parcels and income generating projects are part of the process and members are encouraged to become counsellors. Home based care is available when needed. Training courses are accredited by Soweto City Health and cover primary health care, sexually transmitted diseases, HIV/AIDS counselling and home-based care. Target groups for these courses include PWAs, who have been shown to be extremely effective in prevention work, and sangomas, who are the first stop for most township residents when they become ill.

Co-operation between denominations and faith communities is emerging in the response to HIV/AIDS. A number of FBOs have reported that they are not offering their own HIV/AIDS programmes as they have joined regional NGO networks for a joint effort. In Mpumalanga a joint response to AIDS includes 39 of the 64 churches working in the area from evangelical and mainline to African Instituted Churches (AIC). They are currently focusing on education, and will extend the services, as soon as funding has been ensured. RAP, the SACC and TEASA are planning a joint HIV/AIDS programme. This seems to have been at least partially motivated by the insistence of government to make funding available to a joint faith-based response to HIV/AIDS.
Rehabilitation homes, centres and schools for handicapped children.

A number of homes and centres for alcohol and drug rehabilitation are run by FBOs, as well as schools for 6,700 children with disabilities. The bulk of these are accommodated in the 34 homes for support and rehabilitation of 5,300 disabled persons; and 7 sheltered workshops for 300 disabled adults.

Twenty-two of these institutions are operated by the Dutch Reformed Church, 16 by the Catholic Church, 4 by the Uniting Reformed Church and 1 each by the Methodist, Lutheran and Anglican Churches. In some cases there was no mention of the religious community responsible for the institution.

Figure 1: Geographic distribution of services offered by FBOs

Training

Training of community health workers is offered by the Valley Trust in KwaZulu-Natal (100 trainees to date) and Tateni in Pretoria (25 trainees per course of 6 months); many FBOs offer training for home-based care.

More specialised training is also on offer: The Leprosy Mission trains health workers in provincial institutions to recognise and treat leprosy. The CMF’s programme to equip doctors for service in rural areas has been mentioned elsewhere. The House of Resurrection and Kerux AIDS programmes are used for...
training and as models for other FBO and provincial AIDS services. World Vision’s Child Survival programme is also used by the Department of Health as a model for staff training. The Seventh Day Adventists are involved in a two year health promotion course at Helderberg Nursing College, using scientifically proven natural methods. Yoga teachers are trained to be primary health care advisors, giving lifestyle and dietary advice based on the Hindu faith.

**Specialist services**

**The Leprosy Mission**

The Leprosy Mission reaches out to victims of leprosy. It is a Christian organisation, but members of other faith communities join in the activities and benefit from their service. The Leprosy Mission offers treatment of leprosy and lifestyle advice to its victims and their families. The bulk of funding comes from the public, a lesser amount from the churches and some from provincial health departments.

**World Vision Child Survival Programme**

World Vision Child Survival Programme in the Bergville area in KwaZulu-Natal is a programme designed to improve survival of children by mobilising and educating the community around child health issues. Bergville health district is closely involved in the programme, and benefits from the District Health Information System established by World Vision. Sixty-five health committees operate in the target area, each under the leadership of a trained health worker. The services that the programme offers include immunisation, nutrition advice, and treatment of respiratory diseases and diarrhoea. Eight youth motivators offer two-week long AIDS awareness courses at the 80 primary and secondary schools in the area. Teachers are also trained to give ongoing support to the Anti-AIDS clubs at the schools.

**Methodist Zululand Mission Air Transport (ZUMAT)**

Public clinics and hospitals in the remote Zululand region of KwaZulu-Natal are served by the ZUMAT planes. They bring in specialists and transfer patients to bigger hospitals. The finances to operate ZUMAT are raised by the church and through offering services to the tourism market.

**Geographic Distribution**

Fifty-six FBOs indicated that they are working in urban areas, while 39 are in rural areas. Some services specifically target informal settlements.

Due to the restrictions mentioned above, the data collected cannot be regarded as a complete reflection of services offered. Yet certain conclusions can be drawn. Figure 1 shows the spread of the services in the 9 provinces. Of 106 services listed, a much higher number is offered in Gauteng (44), KwaZulu-Natal (40), and the Western Cape (37) than in the remaining provinces, ranging from 11 (Free State) down to 9 (Northern Province). It seems then that religious groups offer more of their services in the urban areas and in the wealthier provinces.
Links to the national/provincial/local health services

There was almost unanimous insistence by the FBOs that their contribution was known to and appreciated by the Department of Health. In most cases interviewees revealed that there was good cooperation with the provincial health services. Referrals to and from provincial health services are common and procedures seem to be efficient.

The Department of Health supplies funding to many projects. Decreasing subsidies were noted with regret by hospitals and old age homes. In some cases the funding is for specific aspects of the programme, e.g. 80% of the medical staff of World Vision Child Survival is on the payroll of the Department of Health.

Administration of projects

All projects reported a management system, which includes a Board of Directors, often with strong representation from the religious body, but with the emphasis on the expertise the respective members bring to the organisation.

Conclusions

Religious organisations are providing a variety of health care services in South Africa. In the past the bulk of rural health services was provided by churches. However the majority of religious health services are now found in urban areas.
Inter-faith and inter-denominational co-operation is occurring, most notably in AIDS-related programmes. It has been suggested that some of these combined efforts are due to government funding made available on the condition that there is more than one religious body involved.

Some FBOs are providing services mainly for the benefit of their own membership and it seems that this is especially evident where religious and cultural borders coincide.

Financial constraints, mentioned by many of those responsible for the provision of religious health services, have resulted in shifts in the type of services provided.

**Recommendations**

There seems to be some inconsistency in the funding allocated by the Department of Health. The Mpumalanga AIDS co-operation and St Aidan’s hospital, for instance, are not able to obtain funding, while many small and not very well established programmes do receive grants. More detailed information would be needed to make possible recommendations to the departments of Health and Welfare about a consistent system of funding these valuable services.

Detailed case studies should be done in selected areas to give greater depth to the findings of this report.

The area of healing within the AICs and ATRs has only been touched on very briefly. It needs to be looked at in more depth.

**Database**

A database with detailed information on the FBOs involved in this research will be available on the RICSA website at www.ricsa.org.za.
This chapter records progress that has been made towards the introduction of a District Health System (DHS) model for the provision of primary health care. Lack of consistent and common understanding about the DHS has been noted and some of the key issues are discussed here. It is argued that the DHS is the “means to an end” and not the end in itself. The goal is the provision of an equitable, efficient and effective health service that is based on the primary health care approach.

The chapter provides a recap of some key issues such as the appropriate size of a district, the relationship between the three spheres of government and the DHS and the respective roles of each sphere of government. It also briefly discusses the role of the district hospital. There is also a review of the current thinking on the relationship between district health management and the governance of the DHS.

A “snapshot” is provided of the progress towards the implementation of the DHS in each of the nine provinces.

There is a national management process for the development of the DHS, with the major role being played by the National DHS Task Team. There is also a District Financing Committee (DFC) looking at the financing of the services at a district level. This DFC is making use of district expenditure reviews that are being conducted to provide information to assist with the development of practical budgets for districts.

Much progress has been made but it is clear that there is still a long way to go before there are functional, autonomous districts providing health services in the country.
**Introduction**

This chapter describes the progress made towards the reorganisation and restructuring of the health system according to the District Health System (DHS) model. It also offers some analysis of the process of restructuring and decentralisation, as well as recommendations and suggestions on where there is a need for particular attention to be paid over the next year.

The chapter begins with the proposition that there remains some confusion and differences in understanding about the DHS, and then seeks to describe this confusion. The chapter provides a “snapshot” of DHS development in each of the nine provinces, before describing a number of developments and initiatives that have taken place at the national level. It ends with a conclusion of the key points.

**The district health system - a challenge that remains**

Although the DHS has officially been with us for more than five years, the transformation of the fragmented and inefficient apartheid health system into a coherent and unified national health system capable of addressing the health needs of the population, especially those living in poverty, was and still is a massive challenge.

The DHS must first be regarded as a means to an end, rather than an end in itself. In this instance, the DHS is the “means” to achieve the “end” of an equitable, efficient and effective health system based on the principles of the Primary Health Care (PHC) approach. The features, elements and conceptual framework of the PHC Approach should therefore be reflected in the nature and design of the DHS. This means that the DHS is more than just a structure or form of organisation, but is also the manifestation of a set of activities such as community involvement, integrated and holistic health care delivery, intersectoral collaboration and a strong “bottom-up” approach to planning, policy development and management.

Secondly, it should be understood that the PHC approach and the DHS model apply to the whole of the health system and at all levels of health care delivery. They do not just apply to the “primary” or district level of the health system, as is commonly implied and understood. In a DHS, the organisation and management of the entire health system is district-based, meaning that even policy areas such as health sector financing, utilisation of regional and tertiary hospitals, the relationship with the private sector and governance should be DHS-based or DHS-centred. In other words, the health district and its management structure should be the core building block of the entire health system. Too often however, the DHS is understood as one component of the national health system rather than the underlying framework for the organisation of health care as a whole.

The third point to make is that the essence of the DHS is the organisation of health care according to geographic sub-divisions of a country which are managed through a decentralised management structure. The district management structure is supposed to be the point and level at which different health service activities are integrated into a comprehensive and holistic approach to health care. For example, community-based and facility-based health activities would be implemented as different components of a single health plan for a given population and area. This is in contrast to a health system primarily organised according to specific health services (e.g. a nation-wide family planning programme operating through a centralised and vertical management system), or according to non-geographic population groups (e.g. health care services organised by race or by class).

The DHS therefore represents a truly profound break from an apartheid health system that was characterised by fragmentation, inefficiency, centralised authoritarianism and the separation of curative services from preventative care.
However, while the theory of the DHS may appear to be straightforward, its implementation is much more complex. Part of the complexity is the result of there being different interpretations or understandings of the following areas:

- The appropriate size of health districts
- The roles and relationship between the health district and local government
- The relationship between local government and the provincial department of health
- The relationship between the national, provincial and district levels of the health system
- The role and relationships of the district hospital
- The roles of and relationship between management and “governance” structures.

**Size**

One of the key requirements of a well functioning DHS is that health districts are appropriately sized. An ideal health district would have a population size of between 50 000 and 500 000 within a manageable geographic area. Provinces with a low population density such as the Northern Cape would therefore have large districts with a small catchment population, whilst provinces with a high population density would have small districts with a larger population size. What is important is to get the balance between health districts which are large enough to have a full range of district health services (including a district hospital and certain technical services), but small enough to promote meaningful community involvement and enable management to be “intimate” with the specific details and issues of service delivery on the ground.

A DHS with health districts that are too small will result in having a greater number of health districts, and therefore, more management structures and systems. Not only will this make cohesion and co-ordination more difficult at a national or provincial level, it will cost more and fail to capture certain economies of scale. Having too many small health districts could also create a further dislocation between primary level services and district hospital services because many health districts would not have a district hospital. In all likelihood this would result in district hospitals being managed as separate entities from the rest of primary level health care.

On the other hand, if health districts are too large, district-level management can become unwieldy and bureaucratic, removed from “the coalface of service delivery” and too remote from the community. The relationship of geographical demarcation for effective decentralised management and national/provincial co-ordination and cohesion is therefore important.

**The relationship between local government and the health district**

The interim nature of the post-apartheid local government (LG) structures and systems has been a major stumbling block to the implementation of the DHS. Previous Health Reviews have described some of the difficulties of DHS development being a parallel process to that of LG. In the past two years however, there has been a more concerted effort by the national and provincial departments of health (DoHs) to link DHS development to LG development.

An important step will be made when LG boundaries, legislation and policies are finalised, so that health systems development can be aligned with LG development. The Local Government Demarcation Act of 1998 made provision for a national Municipal Demarcation Board (MDB) to demarcate all municipal boundaries throughout the country in time for the November 2000 municipal elections.
The hotch-potch of different post-apartheid municipalities - Transitional Metropolitan Councils, Transitional Metropolitan Substructures, Transitional Local Councils, Remaining Areas, District Councils, Service Councils, Regional Service Councils, Transitional Rural Councils and Transitional Representative Councils - will soon be rationalised into three new categories:

- Metropolitan municipalities (Category A)
- Local area municipalities (Category B)
- District municipalities (Category C).

Since the MDB was established in 1998, the following progress has been made:

- 5 Metropolitan Municipalities have been identified (Cape Town, Durban, Johannesburg, East-Rand and Pretoria)
- About 50 District Municipalities have been proposed (to be finalised by the end of January 2000)
- Work has begun on the demarcation of approximately 500 local municipalities (to be finalised by April 2000).

As far as the DHS is concerned, the following LG issues shall need to be resolved: a) the alignment of the new LG boundaries with health districts that were previously demarcated; b) the role of district municipalities versus local area municipalities in health service delivery; and c) the relationship between district health governing bodies and LG.

For the DHS to be aligned with LG, many health district boundaries will probably have to be re-drawn. However, most, if not all, district municipalities will be too large (geographically and demographically) to act as health districts, while many local area municipalities (especially in the rural areas) will be too small. While metropolitan municipalities are of a manageable geographic size for decentralised health management, their population numbers will exceed those that are recommended for well functioning health districts.

Therefore, areas that are roughly half way between the size of District Councils and local area municipalities may need to be configured as health districts. In the five Metropolitan municipalities, health districts could correspond to metropolitan sub-structures. In the rest of the country, “health districts” could be structured either as sub-divisions of district municipalities, or as a collection of several local area municipalities. It should be stressed at this point that the purpose of suggesting an intermediate level for “health districts” is not to create a new level of governance or bureaucracy, but to have an appropriate geographical area for population-based health care planning and management.

The way that health districts relate to LG will also depend on the choice made between the three governance options for health districts:

1. LG “governs” the health district
2. A statutory District Health Authority “governs” the health district
3. The provincial DoH “governs” the health district.

In some instances, the provincial governance option will be interim until LG has the capacity to deliver a full basket of district health services. There are therefore a number of possible permutations, including:

- One District Council “governs” two to four “health districts”
- Several local municipalities “co-govern” one “health district” — i.e. the local area municipalities would share the role of “governance” but there would be a single health management team
The provincial DoH “governs” all health districts where LG capacity is insufficient

A statutory District Health Authority, which may include elected LG councillors, “governs” the health district

Each of these options will carry a specific set of funding, policy and accountability issues with regard to the provincial DoHs (see below). The national DoH has also undertaken a review of nomenclature so as to avoid confusion, especially with the term “district”.

**The relationship between LG and the provincial DoH**

Even if the boundaries of LG are aligned to appropriately sized health districts, there are other issues about the relationship between the provincial DoH and LG with respect to health service delivery that will need to be clarified.

While LG will be an independent sphere of government with a constitutional duty to provide “municipal health services”, it will be important for both the national and provincial DoHs to have mechanisms for ensuring some standardisation between different health districts, and for being able to ensure the redistribution of health resources in pursuit of equity. For example, in order to promote easy and flexible staff mobility within the health system, staffing and remuneration policies should cut across health districts. Another example would be for the provincial DoH to have some authority to ensure a common health information system so that district health indicators are comparable and can be easily aggregated.

The ability for provinces to ensure some resource redistribution from the advantaged to the disadvantaged health districts will be very important if equitable health care delivery is to be achieved. Given that the bulk of health care resources are tied up in personnel, the DoHs, Local Government and the unions will have to make sure that human resource rules, regulations and laws are developed to serve the needs of those dependent on public services.

The balance of authority and responsibility between provinces, LG and health districts must be carefully fine-tuned to ensure both the benefits of centralised co-ordination, cohesion, redistribution and economies of scale and the benefits of local autonomy and decentralised management.

Another important area will be the financial arrangements made between the provincial and local spheres of government. If some variation of the LG governance option is chosen, LG could be paid in one of two ways to deliver health services. They could either get a block grant from the province and be free to decide how to apportion this money to their different sectors, or LG could receive funds specifically from the provincial DoH to provide a specific set of health services.

It is possible that the financial relationship with the provincial government will partly depend on the type or category of LG. For example, metropolitan municipalities are more likely to receive a block grant in addition to having a considerable amount of locally raised revenue, and thereby have the freedom to choose how to make use of their global budget. Smaller municipalities that choose to render health services may do so under much stricter service agreements or contracts with the provincial DoH.

Work to explore the policy direction of introducing performance and service agreements between provincial DoHs and LG has also been commissioned by the national DoH through DeLoitte and Touche.
The relationship between the national, provincial and district levels of the health system

The DHS is a strategy expected to result in decentralised management. This requires the transfer of responsibility, resources and authority from central levels of management to the periphery. Experience from other countries shows that decentralisation is nearly always resisted by central officials. Conditions that contribute to the continued centralisation of resources, authority and power include the centralisation of finances and the hierarchical culture of the civil service. In addition, officials at the periphery of the health system are usually lower ranked than officials in the centre – therefore, while there is a decentralisation of responsibilities and activities, there may not be a concurrent decentralisation of authority and seniority within the health system, especially at district level. The conditions described above exist to some degree in South Africa, and need to be addressed if we are to achieve meaningful decentralisation.

Compounding the tendency towards centralisation are several vertical lines of authority and management at the provincial and national level which are still inadequately integrated, resulting in some uncoordinated policy development, duplication of activities and confusion at the district level. While some vertical systems and lines of reporting are always required in a system as complex as a health system, there needs to be an appropriate balance between vertical differentiation and horizontal integration.

If the DHS is to become successfully established, the provincial and national DoHs will have to accept a diminished role. They will have to learn to adapt and change their roles from being line managers to being providers of broad policy direction, support and technical input, while the day to day issues of delivery and implementation are managed at the district level. Currently the national and provincial levels of health management are too involved with issues of implementation at operational level rather than focusing on appropriate central functions, such as the provision and management of regional and provincial health services, human resource production, strategic policy development, research, legislation, advocacy, international liaison, mass media health promotion and health sector financing.

While role clarification between the provincial and district level will generally be based on a differentiation between strategic and operational activities, role clarification between the national and provincial levels may be more difficult as the provinces’ ability to develop their own health plans, policies and strategies independently of national health plans, policies and strategies is ill-defined.

The methods and mechanisms whereby central officials interact with their counterparts at the periphery also need to change. The practice of officials from the periphery coming to the centre en masse to receive instructions or to report to the centre still happens more frequently than the practice of central officials visiting the periphery to provide support and assistance. Increasingly, implementation strategies for improving the quality of health care will need to be tailored to the specific conditions and circumstances of individual provinces and districts and standardised plans or common “recipes” intended to suit all provinces or all districts should be abandoned.

The role and relationships of the district hospital

District hospitals should form an important and integral part of the DHS. They are crucial for providing support to primary health care services and for providing basic level one hospital services such as Caesarean sections and basic paediatric in-patient care.

In some provinces however, there is a tendency to remove district hospitals from the umbrella of health districts, leading to an artificial divide between level 1 hospital services and primary level care. The protagonists of the separation of hospitals from primary level care argue that this is necessary to prevent
clinics and community health centres from being “dominated” or “exploited” by hospitals (i.e. to avoid creating hospicentric health districts). Another argument for this separation comes from LG which may be unwilling to take on the responsibility of managing the full basket of district health services which includes district hospitals.

While it is important to avoid hospicentric health districts, separating the management of hospitals from primary care services is not the solution. Separation will aggravate the division between two symbiotic components of a single system as well as potentially blocking the ability of district health managers to use the hospital resources in support of district and PHC development.

On a more positive note, the importance of district hospitals to effective PHC delivery is beginning to be recognised, and several initiatives to improve the quality of care in their district hospitals have begun. These include training courses for district hospital managers, developing guidelines for conducting a situation analysis of district hospitals, defining a core package of district hospital services and improving the information systems of hospitals.

The role and relationship between district management and “governance” structures

In all provinces, there has been an emphasis on strengthening the structures and systems through which the community and public are able to influence health care delivery and make it more accountable. All districts are expected to have a “governing structure” designed to hold district health management teams accountable, and the current policy is for all provinces to eventually hand over this responsibility to LG.

However, the term “Local Government” can sometimes be ambiguous as it includes a conflation of both employed or salaried health workers/officials as well as councillors/politicians elected as community representatives of the district.

Figure 1: Co-operation between management and governance structures within a health district
At a sub-district level, health workers are also expected to relate to community health forums, clinic committees or hospital boards. A potentially complex network of community structures and health worker structures will therefore be present in every health district, and it will be important for these networks to be set up with a clear sense of the responsibilities, powers and functions of each structure to avoid conflict, confusion and poor integration.

**A snapshot of progress in the nine provinces**

As the quasi-federal state of South Africa slowly begins to take root, we can expect to distinguish more clearly subtle but significant differences in the way Government operates in each of the nine provinces. The section below attempts to provide a snap-shot of DHS development in each of the nine provinces, with a focus on the following areas:

- Demarcation
- The establishment and appointment of district managers and District Management Teams (DMTs)
- The role of regional offices
- The co-ordination and rationalisation of policies and plans at provincial level
- The degree of decentralisation of authority
- The development of effective governance structures.

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### Eastern Cape

The Eastern Cape has 21 health districts and 5 regions.

**District Managers and DMTs:** 16 of the 21 health districts have fully appointed District Managers (DMs) who are at Deputy Director level. In several districts, there have been other appointments to the District Office. For example, four Assistant Director posts have been filled in about eight districts to manage the following portfolios: Health Information Systems (HIS), Maternal, Child and Women’s Health (MCWH), Communicable Diseases and Environmental Health. Various management strengthening initiatives have also been initiated by the provincial DoH. However, authority, and especially financial control, is still fairly centralised. The imposition of new policies, plans and demands from above, sometimes at short notice, still happens and indicates that districts are not yet properly established as decentralised management structures.

**Regional Offices:** Regional Offices still exist, but the Permanent Secretary and top management are exploring the possibility of scaling down the regional offices.

**Relationship with LG:** The link between LG and the provincial DoH varies. In Region E, for example, there are no local authorities rendering health services. However, in Region A, local authorities are significant health service providers, and tension between the Regional Office and the District Council has resulted in a slow progress with district development. In three health districts, the acting DM is a LG employee. The province is likely to apply both the provincial and the LG governance options for health districts.

**Improving the efficiency and quality of systems and service delivery:** While a lack of co-ordination and integration between the various vertical programmes at provincial level remains a problem, areas of improvement include the development and implementation of stock bin-cards for drugs and supplies, improvements in the care of malnutrition and significant progress towards a district-based HIS, an Eastern Cape PHC package based on the national policy and a clinic supervisor checklist. This year
also saw the implementation of the HIV/AIDS, STD and TB (HAST) module as part of the District Management Certificate Programme, which focused on the improvement of STD/HIV and TB services. This programme is a collaborative programme developed and facilitated by the Universities of Transkei, Fort Hare, Rhodes, Port Elizabeth and the DoH.

**Free State**

The Free State has 14 health districts and 6 Regions.

**District Managers and DMTs:** There are no appointed District Managers in any of the districts, although Assistant Directors have been allocated to co-ordinate district development. District Offices exist throughout the province, but tend to be only staffed by provincial employees. For this reason, most of the Free State health districts remain fragmented, with local authorities continuing to render primary level services independently of other district health services. However, in three ISDS-supported districts, interim integrated co-ordinating structures have resulted in co-operation and co-ordinated health management between the province and local government. Plans by the provincial DoH and the Centre for Health Systems Research and Development are underway to replicate these processes in other relevant districts.

**Regional Offices:** There has been some progress made towards slimming down the size of Regional Offices primarily through the deconcentration of regional staff to the districts. Much of the work of district development is being done by regional offices headed up by a Deputy Director. A significant amount of provincial authority has been devolved to the Regional Offices.

**Relationship with LG:** The provincial DoH have a close working relationship with the Free State Local Government Association (Freeloga) and have also set up a body called the Provincial Facilitating Committee, a forum at which major stakeholders can meet to discuss key policy issues. The Free State seems to be heading towards a universal application of the LG governance option for health districts.

**Improving the efficiency and quality of systems and service delivery:** The Free State has a number of well developed plans and policies. The challenge is to translate these into improvements in the quality of care. In addition to a number of training initiatives, improvements in the organisation of some services, for example mobile services to rural populations, has led to better delivery. The provincial DoH has begun a process for ensuring co-ordination and integration between the different programmes and sections of the DoH, as well as defining the appropriate roles and functions of the provincial and district levels of the government. The failure of the Free State tick sheet system has been a set-back to the development of district-based health information systems but has given the province the opportunity to start afresh with developing a DHIS.

**Gauteng**

Gauteng has 25 health districts and 5 regions.

**District Managers and DMTs:** There are no appointed District Managers although some districts have acting District Managers. There is a proposed organogram for the DMT. LG and provincial health services work together on the basis of co-operation rather than on any form of structured
integration. While some regions and districts have forums/processes for collaboration, these are usually weak. The Interim Provincial Health Authority has agreed that provincial employee and LG employees will have an equal opportunity to apply for DM posts.

**Regional Offices:** Regional Offices exist, but there are problems with the lack of clarification and duplication of roles between regional offices and LG structures. An audit has been commissioned to identify clearly the duplication of functions. Recently, health promotion officers who were attached at regional level have been moved to the district level - otherwise there has been no significant downsizing of the regional offices.

**Relationship with LG:** As a largely urban province with strong LG structures, significant changes and progress are expected to happen soon after the redemarcation process. At the time of writing, some health district boundaries actually intersect LG boundaries, causing significant problems. At the provincial level, senior provincial and LG officials have been meeting since 1995. In May 1999 an Interim Provincial Health Authority was set up, chaired by the MECs for Health and Local Government, Chair of the Standing Committee on Health and twenty-seven representatives of the Gauteng Association for Local Authorities. The province adopted the LG governance option in November 1998.

**Improving the efficiency and quality of systems and service delivery:** In line with the restructuring at national level, provincial programme managers have recently begun to work more as teams or in “clusters”.

**KwaZulu-Natal**

KwaZulu-Natal has 25 health districts and 7 regions.

**District Managers and DMTs:** None of the health districts have appointed District Managers, although they have “District Unit Co-ordinators”. There have been no other appointments to a DMT. Most districts have an interim DMT, but have been weakened over time by their long interim status and their lack of involvement in provincial policy formulation on district issues.

**Regional Offices:** Power and authority is still largely centralised, and the position and role of the regional office are being strengthened, a point of serious concern. The imposition of new policies, plans and demands from above, often at short notice, is still happening, indicating that districts are not being given adequate recognition.

**Relationship with LG:** As with some of the other provinces, the role of LG in health care delivery varies from region to region. In parts of the former KwaZulu homeland, there are no LGs rendering health services. However, Durban, Richard’s Bay and Pietermaritzburg have significant health service rendering LG bodies.

**Improving the efficiency and quality of systems and service delivery:** The province has a number of initiatives aimed at improving the quality of health care, including a provincial EPI survey, a hospital accreditation programme, HIS development, management training for IDMTs and training around governance as some examples. The province has defined its core business from a client’s perspective and plans to review its 5-year plan with emphasis on programmatic intervention and integration.


**Mpumalanga**

There are 16 health districts and 3 regions.

**District Managers and DMTs:** In all the districts District Managers who are at Deputy Director level have been appointed. In some of the districts, there are complete and fully appointed DMTs.

Districts are increasingly becoming established and functional, although power and authority is still fairly centralised. A development since 1998 has been provinces working together with districts. Teams of provincial programme managers “come down” to district level to support district management in developing and implementing an integrated plan. Although there have been some difficulties experienced, this represents a welcome shift from provincial managers playing a line management role to a supportive and facilitating role.

**Regional Offices:** Regional Health Offices were dismantled in the province, but this will be reviewed with reference to the Local Government re-demarcation process which is likely to see the establishment of a LG tier roughly equivalent in size to those of health regions.

**Relationship with Local Government:** As a predominantly rural province, Mpumalanga does not have LG rendering a significant amount of health services. The province seems to be heading towards the statutory DHA governance option.

**Improving the efficiency and quality of systems and service delivery:** The efforts to develop integrated district health plans should lead to improved planning and co-ordination of training. One feature of the current district plans is a tendency to try and do too much all at once, with the result that sometimes too many things are done poorly rather than fewer things done well. Mpumalanga has contracted out the supply and distribution of drugs to a private company, and there have been mixed reports on the success of this. One concern in the province is the tendency for health programme and service delivery units of the DoH to be managed in isolation from the units and sections that deal with the structure of the health system and with support services (e.g. transport, drug supply and administration). As a result the integrated district health plans that are being developed currently do not have adequate involvement and input from a number of key role-players.

**North West**

The province has 5 health regions and 18 health districts.

**District Managers and DMTs:** Sixteen out of eighteen district managers have been appointed, with the two vacant posts advertised. DMTs are in place with 90% of personnel in fully appointed posts, and all district offices are well established in terms of physical infrastructure. The health districts have been further divided into sub-districts, with sub-district management teams, to ensure smaller and more manageable units. Efforts to devolve functions to districts are apparent. The deconcentration of financial management now includes the establishment of cost-centres at district hospital, district office and sub-district level, and budgets have been allocated per district since 1997. Some responsibilities such as procurement on state contract, managing labour relations and appointing personnel below the level of Assistant Director are now managed at district level.
Regional Offices: There is a new proposal to create 5 Regional Director posts and a regional structure which is lean. The province has begun to identify a set of appropriate functions and responsibilities that will be maintained at this level.

Relationship with LG: The province has selected the “provincial option” in terms of governance, partly because it only has two significant health service rendering local authorities – Rustenburg and Klerksdorp. Districts with health service rendering local authorities have initiated a process of developing “service agreements” with them in their areas. In order to ensure further community involvement, the Governance Act no. 1 of 1997 ensured the establishment of Community Health Committees, District Committees and Hospital Boards, and NPCHN was contracted to train the people serving on these structures.

Improving the efficiency and quality of systems and service delivery: A number of decentralised management systems have begun to take root, such as the Health Information System and the TB programme, where all districts have adopted the WHO strategy for TB Control.

Northern Cape

The province is divided into 6 health regions which for practical purposes are regarded as districts. The DoH boundaries are same as those of the present LG District Councils and are therefore used by most other sectors (with the exception of the Department of Education).

District Managers and DMTs: Each district has a fully appointed District Manager. The small population base means that each District Office has a small, but fully appointed, establishment usually comprising a PHC co-ordinator, an emergency service co-ordinator, a nutritionist, a pharmacist and two to three administrative staff. Hospital managers, and in some instances, LG staff are also included in some District Health Management Teams. Significant decentralisation of authority has taken place with each District manager having control over all health service activities up to and including district and community hospitals. Finances have been decentralised, although due to budgetary cuts and the high salary component, District Management Teams have little real opportunity to reallocate finances that are not absorbed by personnel costs. The Nutrition Programme has taken the lead in this field due to the conditional grant from the nDoH with each district nutrition programme manager responsible for the financial management of its sub-programmes, such as the PEM Scheme, PSNP etc.

Relationship with Local Government: PHC services were historically provided by numerous small LAs. Initially the province followed a policy of joint management with the LAs. As a result, in most districts the province took responsibility for supervision and support of facilities, although the services fell under the LAs. Kimberley municipality, the only municipality that provides a significant volume of services is an exception and has remained independent of the newly-established district structures. Most recently the province has followed a policy of provincialisation which has resulted in some services (especially mobile services and ambulance services) being take over by province. This has facilitated the rationalisation of services especially in small towns where small hospitals and clinics have been combined into single facilities.

Improving the efficiency and quality of systems and service delivery: The enormous distances in the province and the small staff complements at both district and provincial level make programme
implementation difficult. Nevertheless there have been improvement in a number of areas. At provincial level there has been progress in the area of financial and human resource management systems, and an extensive programme of management training for district and hospital managers is now underway. District-based projects aimed at improving the collection and use of health information and TB control have also impacted positively at both a local and provincial level. Other initiatives include efforts to improve maternal health and adolescent services. Integrated Management of Childhood Illness (IMCI) has also been introduced.

Northern Province

There are 26 health districts and 6 health regions.

District Managers and DMTs: All districts have District Managers (called Chief Executive Officers), initially appointed on a one year probation basis. The DM post is intended to be a Deputy Director’s post although some DMs are still at the level of Assistant Director. Due to a variety of reasons, first a labour dispute and then the national redemarcation process, the appointment of other members of the DMT have not occurred, although interviews have been conducted across the province. Due to financial constraints, the filling of DMT posts could only be effected utilising existing staff of the same rank - personnel could not be promoted into DMT positions. Although authority is still fairly centralised there are signs of health districts having more authority and taking more responsibility, and regions becoming more consultative and supportive rather than authoritative. While effort are being made to address this, a lack of programme co-ordination and integrated planning at provincial level is having a negative effect on the functioning of districts. This is compounded by communication problems between the province, regions and districts.

Regional Offices: Regional Offices remain in the province. It is expected that many of the regional office staff will be appointed as DMT members, thus resulting in a shrinkage of the Regional Office.

Relationship with LG: In those few districts which have LG clinics, functional integration has not happened, although in recent months there have been several meetings and resolutions made between the provincial DoH and local government representatives. The majority of districts are likely to be adopting the provincial governance option. District Health and Welfare Authorities consisting of community representatives exist in all districts though the degree to which they interact with the management structures in a productive and effective manner has not been formally evaluated.

Improving the efficiency and quality of systems and service delivery: A number of initiatives to improve the quality of service delivery are in progress. These include training in IMCI conducted with the assistance of Medunsa, a quality assurance initiative termed WHISE (Welfare and Health Internal Standard Examination) which is encouraging facilities to develop their own uniform service standards, the piloting of tick registers as part of a district HIS and an initiative to develop a model integrated nutrition programme.

Western Cape

There are currently 25 demarcated health districts with 4 regions.

District Managers and DMTs: All the health districts consist of a mix of LG and provincial services which has made DHS development difficult. There are no District Managers or DMTs in existence.
There are however “task teams” or district co-ordinating meetings set up to promote co-operation and co-ordination between the provincial DoH, District Councils and local authorities. In some districts, certain people (either provincially or LG employed) have been asked to act as local “co-ordinators” of the different service providers within the district. However, this has been an ad hoc process and a job that comes with little authority.

Regional Offices: Regional Offices are provincial structures, headed by a Director, and are particularly strong and influential in the province. There has been no sign or indication of this tier of health management being slimmed down, and this is a concern. In one region, the management of all Day Hospitals remains centralised at the regional level rather than being part of a district-level management structure.

Relationship with Local Government: A bi-ministerial Task Team on the future governance of the DHS set up in 1997 has established a basis for putting sustainable and effective health service delivery in place, and has formally recommended the LG governance option. District Councils are well established LG structures with significant health service responsibility, but without financial autonomy. In terms of active community participation on health decision making, party political agendas within the population may be having a detrimental effect on the functioning of clinic committees in some areas.

Improving the efficiency and quality of systems and service delivery: There are signs of improved co-ordination and rationalisation within the province. For example, there has been movement towards a uniform health information system for all local government service facilities and the province, and recently a common patient-folder has been designed for use across all health service rendering authorities. In addition, the provincial organogram is being restructured to promote greater integration between the line management of community health service facilities and the line management of health programmes.

National management of DHS development

In recent years, a complaint from provinces and districts has been the lack of integration of policy development and planning at national level. To this was added the problem of district development falling as a particular vertical line function, rather than as the core framework of all policy development and planning.

There has now been some re-structuring in the national DoH with the sub-Directorate for Health Systems Development and Policy Co-ordination disappearing in favour of a “task team approach” whereby different sections and departments within the national DoH work towards the common goal of implementing a well functioning DHS. In addition to the National DHS Task Team (NHSTT), there is a National DHS Committee (a sub-committee of the Provincial Health Restructuring Committee) which comprises representation from the NDHSTT, persons responsible for DHS development in each of the nine provinces and three members representing SALGA. It meets once every two to three months to discuss matters of common interest and share lessons on DHS development.

Other activities of the national DoH aimed at establishing the DHS include the further development of a core package of primary level and district hospital services expected to be delivered by health districts, and developing guidelines for appropriate and equitable resource allocation to health districts.
The national District Financing Committee has also been co-ordinating the development of guidelines for conducting district expenditure reviews (DERs). A DER is an important tool for DMTs to understand how resources are used and distributed within the health district, which supports the ability of districts to conduct information-based service planning and budgeting (see box shown below). If DERs are conducted according to a standardised and common format, they can also be a useful tool for provinces and the national DoH to contrast resource allocation and use between districts.

In order to establish a common framework and methodology a task team has been established to help co-ordinate and pilot the conducting of a DER in one district per province. Three such studies have now been completed in the Western Cape, Eastern Cape and KwaZulu-Natal.

**District Expenditure Reviews**

The idea of a DER is to first of all pool together all the public sector resources and funds that contribute to district health care delivery (up to and including Level 1 hospital services). The funds representing these resources are then disaggregated according to a number of cost centres as shown below.

*Figure 2: Process of conducting a district expenditure review*

Another notable contribution to district development by the national DoH included the District Competition which saw a hive of activity amongst several districts as they strove to improve their activities around a set of key activities and areas of health. Districts competed in urban and rural categories and peer review was built into the process. Although there were reports of unhealthy competition developing between districts, complaints of unfairness and concerns that were districts suspending their normal developmental activities in favour of improving on a small number of selected indicators, there was general consensus that the competition had been a success. The national DoH intends to conduct this competition on an annual
basis. Given that many of the constraints to “well functioning districts” are due to the lack of an enabling environment, problems with central level management and a lack of policy direction, thought should go towards a competition between provinces to see which province is progressing quickest with DHS development.

Finally, the national DoH has been instrumental in developing and supporting a number of publications aimed at building capacity at district level. These include a District Manager’s handbook and a guide to district health planning.

Additional work being co-ordinated through the national DoH which will have a bearing on the functionality of health districts include the definition of a comprehensive set of PHC services, norms and standards for clinics and the development of a patients’ charter.

**Conclusions**

This chapter has tried to capture some of the key issues that remain as the challenges of South Africa’s attempt to transform the health system whilst continuing to expand and improve service delivery. Given the challenges and difficulties inherited from the past, it could be said that the DoH has done a remarkable job.

On the other hand, given the tragic and frightening reality of an AIDS epidemic that threatens the whole well-being of the country, no opportunity should be wasted to speed up even further the establishment of a health system capable of delivering health care in a way that promotes decentralised management with bottom-up development, effective community involvement and intersectoral collaboration.

Many of the broad policies are now in place, and it is perhaps time now for the national and provincial DoHs to adopt a more differentiated approach to health systems development, whereby the remaining building blocks can be arranged and added to the overall policy framework in a way that is suited to the specific characteristics of each locality.

One way of doing this is to make a bigger shift away from issues of structure, so that issues of delivery take precedence and help to refine the structures that already exist, and how those structures actually function. By concentrating more on the implementation of comprehensive and integrated HIV, TB, Nutrition and MCH Programmes within a decentralised structure for example, we will not only improve health but also help to mould the existing structure of the health system in a more effective manner.

Finally, in a world where many national health systems are actually being increasingly fragmented by increasing social and economic inequities, and by increasingly powerful global forces of commerce, South Africa’s commitment to an equitable population-based health care system is an important and welcome antidote.
The development of district health information systems (DHIS) in the country is beginning to harmonise. This chapter notes that the Health Information System Programme (HISP) has established credibility and is being rolled out from several localities in the country. The results from eight health districts in five provinces are reviewed in the chapter.

In the eight districts reviewed, standard data collection tools are being used now, mostly in the form of tick registers. These registers are different in several respects from one district to another but the most significant difference is in the number of data items required. It is observed that the use of computers for data capture has greatly enhanced the value of HISP. Introduction of computers at clinics has not been excessively difficult, provided that adequate training is given. The added advantage of having the data computerised at the clinic level is that electronic mail is also available and is used to transmit statistics to the district office. The point is made that it is essential to computerise clinics for a district health information system to function effectively.

The definition of what is “essential district information” is still in evolution. Data analysis and feedback is on the whole still weak. However, it is also evident that little is known about what analysis and feedback is useful and appropriate. Both of these issues will require more work. Further issues for the future are the need to get people to use information more effectively, especially in the periphery; integrating district and hospital information systems, ensuring enough district level support for HISP; and providing central support for HISP software.

The chapter concludes that for the proper functioning of clinics and the district health system generally it is necessary to standardise data collection tools. Furthermore sustainable ongoing support must be planned for and provided. Minimum data sets required at provincial level must be defined and set and there must be a provision in the plans for regular review of the process and of the information provided by the data collection and collation process.
**Introduction**

In the last 12 months, district health information systems (DHIS) developments at the provincial and national Departments of Health have become increasingly harmonised. In addition to a variety of district-specific activities, most provinces have agreed in principle, and in some cases have embarked on initiatives, to introduce the Health Information Systems Programme (HISP) process and data capture software at district, regional and provincial offices. The HISP process involves a co-ordinated programme of information training and support.

These initiatives are supported by HISP, National Health Information System of South Africa (NHIS/SA) and the Equity Project, and are based on the work of HISP in the Western Cape. For the short to medium term, initial HISP roll out activities in most provinces are likely to be on a limited, pilot or phased basis. In many parts of the country, there have been steady and sometimes significant changes to district health information systems. Some districts, however, are just beginning to reform and rationalise their information structures. Examples of good practice have been spreading rapidly.

The objective of this chapter is to provide an overview of DHIS developments from a district perspective highlighting useful lessons. Eight districts in five provinces were reviewed for this chapter. To select the districts, key informants were asked to recommend districts characterised by moderate to severe resource constraints where DHIS activities were progressing steadily and where interesting or useful experiences had been noted.

District level developments that represent clear progress are reviewed. The focus is on areas in which there has been emerging consensus in the DHIS community regarding design, structure or functioning of DHIS components. Where appropriate, specific examples from individual districts are provided. Then issues requiring further attention are highlighted. This includes observations and recommendations concerning the proposed nationwide HISP roll out. Concluding remarks and a summary of the more critical recommendations end the chapter.

**Areas of progress at the district level**

In each of the districts reviewed for this chapter, there have been significant strides made toward the development of an appropriate district health information system. Many of the positive developments are similar across districts, suggesting that there is emerging consensus on several key issues and that examples of good practice are beginning to be shared. Four main areas of progress are reviewed in the sections below.

**Implementation of standardised data collection tools**

In several provinces, a great deal of effort has been invested in the development of standardised data collection tools for the daily recording and monthly compilation of clinic statistics (and patient-linked information). These efforts have helped to enable relatively smooth and reliable data flows.

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a Four districts were visited under HST sponsorship during the last three weeks of July 99, and included Impendle/Pholela/Underberg (IPU) and Okhahlamba-Emitshezi (O-E) districts in KwaZulu-Natal, Kwabhaca (Mt Frere) district in the Eastern Cape, and South Peninsula district in the Western Cape. Two districts in Mpumalanga were visited earlier in the year, under UNICEF sponsorship, as part of DHIS developments in the Northern Province. Finally, further insights are drawn from the author's work with two districts in the Northern Province (Halegratz and NMTTS).
In all but one of the districts reviewed for this chapter, tick registers are used to collect the raw patient contact data needed to compile routine monthly statistics. (There remains, however, an astonishingly wide variety of data collection and data storage tools in use throughout the country.) For provinces or districts that are developing similar registers, Table 1 below outlines some of the advantages and disadvantages of the tick register models encountered in the districts visited.

### Table 1: Comparison of alternative tick register models

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eastern Cape model</strong></td>
<td></td>
</tr>
<tr>
<td>✐ If used properly, statistics compilation at the end of the month takes minutes</td>
<td>✐ Large number of data items may lead to inaccuracy (see discussion below)</td>
</tr>
<tr>
<td>✐ Permits individual facilities to monitor data items of their choosing (the register is large enough to include several blank columns)</td>
<td>✐ Can worsen duplication if clinic- or patient-retained records are also in use</td>
</tr>
<tr>
<td>✐ If used improperly, or if only a few tick columns are used routinely, can be a waste of resources</td>
<td></td>
</tr>
<tr>
<td><strong>KwaZulu-Natal model</strong></td>
<td></td>
</tr>
<tr>
<td>✐ Relatively small number of data items may be associated with higher accuracy (see discussion below)</td>
<td>✐ There is no provision for keeping track of running totals, meaning that statistics compilation is demanding</td>
</tr>
<tr>
<td>✐ A4 size makes it less cumbersome than A3 models; may be more suitable for mobile services</td>
<td>✐ No space to permit monitoring of locally determined data items</td>
</tr>
<tr>
<td></td>
<td>✐ Space for diagnosis and treatment remarks appears insufficient</td>
</tr>
<tr>
<td><strong>Mpumalanga model</strong></td>
<td></td>
</tr>
<tr>
<td>✐ The register is not bound, but printed as separate A3 pages. This means that changes to the data sheet can be made easily and quickly</td>
<td>✐ There is no provision for keeping track of running totals</td>
</tr>
<tr>
<td>✐ Printing and distribution of the register sheets could be decentralised and fully customised at the district level</td>
<td>✐ Space for diagnosis and treatment remarks is limited – leads to the use of multiple rows for each patient</td>
</tr>
<tr>
<td></td>
<td>✐ Summary tables at the bottom of the data sheet are complex and require considerable effort to complete</td>
</tr>
</tbody>
</table>

*Note: A simple statistics summary form is used with all models to compile monthly statistics.*

The registers currently used in the Eastern Cape, KwaZulu-Natal and Mpumalanga differ with respect to physical size, design and layout. More importantly, however, they differ in terms of the quantity (and content) of data required for each. A recent review of tick register models, conducted for the Health Systems Trust (HST) by the Department of Community Health at the University of Natal,1 compared and contrasted an “Eastern Cape model” tick register used in Okhahlamba-Emtshezi (O-E) district with a provincial model issued by the Department of Health in KwaZulu-Natal. A key difference between the two registers is the number of data items required (46 tick columns vs. 14 respectively).
As part of the appraisal, a detailed assessment of individual patient entries in a selection of O-E registers found that only 65% of the expected number of “ticks” were actually recorded. In the KwaZulu-Natal register by contrast, 97% of the expected number of ticks were recorded. It should be noted that since the number of data items is different between the two registers, the “expected number of ticks per patient” is also different. Based on the diagnosis recorded for each patient entry reviewed in the study, a patient recorded in the O-E register should receive, on average, 2.5 ticks. By contrast, each patient recorded in the KwaZulu-Natal register should receive 1.4 ticks on average. It is unwise to generalise from these results, but if data quality is negatively correlated with data quantity, as the study suggests, then provincial management should evaluate carefully when choosing a standardised data collection tool.

Where standardised tools have been introduced, there is evidence that efficiency has improved. The burden of information collection has been reduced as complex systems have been trimmed and streamlined. Unfortunately, in many cases the standardised tools are not being used as they were designed, and this may be leading to additional inefficiency. In Mpumalanga, because of a lack of space for recording patient-specific information, many of the data sheets examined at one clinic contained entries for only 3–5 patients, whereas the data sheet is designed to record 25 patients. Other examples can be found in the Eastern Cape and the Northern Province.

It is evident that the basic data collection tool is an important element in the overall District Health Information System (DHIS) and efforts to develop appropriate tools can pay off. Problems with design can lead to potentially significant inefficiency and, possibly, problems with data quality. For this reason, sharing of data collection and analysis of experiences need to be actively facilitated at the provincial and national level.

**The use of computers for data capture**

In each district visited, computers are in place at the district office level to handle data capture, analysis and presentation, and data storage. HISP software is installed and in use on a routine basis in 5 out of the 8 districts visited. In Mpumalanga and in the Impendle/Pholela/Underberg (IPU) district, spreadsheets are used for data capture and storage instead of a database system.

The experience of districts indicates that the introduction of computers at the district level has not been excessively difficult. In the majority of districts visited, the individuals involved in computerised data capture had had limited computer experience prior to DHIS efforts. Nevertheless, computers are presently used routinely. At the same time, however, ongoing support has been needed in several districts to help solve hardware and software problems and to enable the district information staff to become more productive.

The foundation of this progress is, of course, training. In most of the sample districts, especially those with ISDS and/or HISP involvement, resources have been targeted for training both in basic computer literacy and in using the HISP software specifically, but there is evidence that additional training or more concentrated follow-up is necessary.

In one of the clinics visited in KwaZulu-Natal, for example, a computer is used routinely to compile clinic statistics. The clinic also uses electronic mail to transmit the monthly statistics to the district office. Based on discussions with the staff using the computer, it was evident that this fairly sophisticated process was not always possible, because of periodic problems with either hardware or software. At the time of this author’s visit, the clinic was unable to transmit via e-mail, and no one at the clinic could determine why the system was not operational. This would clearly have implications for the logistics of data reporting.
The key message is that computers and computer support will be needed in the district to facilitate data capture, analysis and reporting. It is unlikely that a district office will be able to function effectively without a computer based information system, for example. The challenge for district management will be to determine the most appropriate balance between paper-based and computer-based tools for information management throughout the district. The district offices visited seemed to be coping well with relatively modest computer assets. Computerisation at sub-district offices or even clinics may yield benefits, but only if sufficient support is available. In all cases, investments in computer technology within the district should be based on clear objectives and on assessments of cost effectiveness.

**Defining a broader package of “essential district information”**

Presently, most provinces have adopted or will be adopting a provincial primary health care (PHC) Minimum Data Set (MDS). To a large extent, HISP and NHIS/SA have driven this process. It is clear, however, that an MDS for PHC is only one component of a broader set of information needed for more comprehensive district management. This broader set of “essential district information” would include, for example, management data on drug supply and transport systems, hospital data, human resources information, financial data plus qualitative and descriptive data.

To date, there has been some progress in some districts on broadening the data set available to district management. In O-E district, hospital data and indicators have been incorporated into the basic data set captured and maintained on the HISP software by the district information officer. The O-E district data set also includes data items for school health. However, the hospital and school health data sets combined include over 80 data items, only some of which are likely to be useful to district management.

Other examples exist of efforts to augment the essential district information package with information relevant to district management. In the Eastern Cape, for example, the minimum data set for PHC includes data items on essential drug availability. In Kwabhaca district, the transport co-ordinator generates useful monthly transport performance indicators. In the time available for district visits, it was difficult to determine whether or not this additional data has had any impact on district or peripheral level decisions regarding, e.g. drug supply or transport.

**Data analysis, reporting and feedback**

In each district visited, information staff have been working to improve data analysis and efforts are underway to generate useful feedback. In most of the districts reviewed, examples of both monthly and annual reports are available and have been disseminated to various target audiences within the districts.

In IPU district, for example, the district information officer routinely produces a monthly report, which includes about a dozen raw data tables as well as several graphs and charts. In O-E district, the district information officer has started to generate analysed data, but its dissemination and use remain unclear. Kwabhaca district also routinely generates tables and charts that are compiled into reports and provided both to district management and to clinic supervisors.

In addition to what has been observed during district visits, there are several good examples of district reports that have been produced in various places around the country (e.g. district reports from the HISP pilot districts, the 1997 report of the Stellenbosch Health District). On the whole, however, analysis, reporting and feedback remain quite weak at the district level.
One contributing factor may be the ambitious nature of many monthly reports. Several reports that have been reviewed for this chapter are excessive – they probably include too much information. This situation may be due in part to general perceptions about what a “sophisticated” DHIS ought to be producing. A larger number of smaller topic or programme-based reports might be a more effective model. Comprehensive, sometimes dense district annual reports seem to be the gold standard; the logical conclusion is that a monthly report ought to be just a condensed version of an annual report. There is evidence from several districts, however, that the information provided in overly ambitious monthly reports – or in monthly reports that consist mainly of numerous graphs and charts without much contextual analysis – is not being absorbed either at the district level or in the periphery.

In truth, we know very little about what constitutes useful and appropriate feedback, particularly where data are concerned. Initial results from a study in the Northern Province indicate that perceptions of feedback are all over the map. The implication is that a great deal of “feedback sensitisation” will be needed, especially at the periphery, and that such sensitisation will require, again, considerable ongoing support. This issue will be considered in more detail in the next section below.

**Key issues for the way forward**

As districts continue to develop and refine their information systems over the next year, guidance, support and careful thinking will be needed in several key areas. The sections below outline some of the more critical issues. Ideally, ways of dealing with the issues raised below should be incorporated into provincial and national plans for rolling out the HISP process and software across the country.

**Getting people to use information more effectively**

People must be encouraged and enabled to use information in a meaningful way. This issue is raised in this chapter precisely because information use remains very limited in many districts, despite the commendable and significant efforts of DHIS workers across the country over the last few years. This situation can be partly explained by the simple fact that in many districts, particularly those that are struggling to get off the ground, resource allocation decisions are still made largely at managerial levels higher than the district or sub-district. As district management teams become more involved and experienced in the budget cycle, information about activities and outcomes will naturally become more essential. In other words, district management teams are, in many places, only beginning to make decisions that require accurate and reliable information input on a routine basis.

As alluded to above, information use at the periphery, e.g. at clinic level, is particularly weak. Again, this may be partly because many clinic staff do not have much experience seeing any operational consequences resulting from their data collection efforts. As decisions by district and sub-district managers begin to have more and more operational impact at the level of service delivery (e.g. on staffing patterns or drug supply), information use at the periphery is likely to become more relevant and thus will be perceived as more essential and useful.

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b The recommendations in this section grew out of discussions with Dr Jorn Braa during a joint visit to Kwabhaca district in the Eastern Cape. Dr Braa has provided similar recommendations to district health information staff in Region E.
In the meantime, efforts will need to focus on simple ways to improve the relevance and application of information at the periphery. In particular, three areas will need more attention:

- Ensuring that enough clinic staff have basic exposure to information concepts and skills
- Ensuring that monthly reports are relevant, useful and can be absorbed, especially at the periphery
- Ensuring that clinic supervisors are sufficiently capable of providing feedback and support on data collection, analysis and review.

Monthly reports should be as simple as possible and should seek to avoid information overload. For example, a monthly report might consist of no more than two pages (front and back to save paper!) and could include raw data in time series - to provide a month-by-month review of clinic activity - and one or two indicators that speak to a particularly relevant problem. Finally, clinic supervisors represent the most obvious link between information generation at the periphery and analysis/feedback at the district office. Their role as information analysts must be strengthened and they should be encouraged to experiment with ways of making information more real and relevant for the periphery.

**Integrating hospital and district information systems**

Several provinces are introducing comprehensive hospital information systems as a means of improving efficiency and, hopefully, revenue collection at hospitals. These systems are controversial and are both ambitious and resource intensive. In the context of overall district health systems development, the biggest challenge in this regard is to ensure that the new hospital information systems interface well with the district information systems developments that are underway.

The hospital systems tend to be viewed separately from the district systems; this may be logical in terms of the relative scope of the two systems and in terms of operational realities. Nevertheless, provincial managers would be well advised to consider how the hospital systems could contribute to overall district management.

In the Northern Province, plans are being developed to experiment with ways of establishing an appropriate interface between the two systems. One proposal on the drawing board is to introduce patient-retained records simultaneously with the implementation of the hospital information system (HIS) at a district hospital. The objective of the work would be to determine the most appropriate way to “pass on” patient information from the hospital system to the patient, from which it can then be accessed by other facilities (through the patient-retained record). Another proposal is to begin generating routine hospital performance indicators through the HIS and making them available in an appropriate format to district management.

**Sorting out organisational issues**

It is widely accepted that the “six steps” to establishing appropriate district health information systems, developed by HISP and outlined in the DHIS guidelines, is a useful formula for most districts to follow. It is clear, however, that the extent to which districts are able to implement the six steps - in whatever sequence - is dependent on the general level of district health systems implementation in a particular district or province.

In the South Peninsula district in the Western Cape, for example, it has been difficult to build district-wide enthusiasm for an integrated, comprehensive district health information system primarily because the district itself is not “united”. Health facilities in the district are still managed by more than one authority -
there is really no incentive to work together on DHIS development, although efforts have been directed at
this objective. Similarly, in the Northern Province, the DHIS pilot work has to some extent been constrained
by the pace of district establishment. It is difficult to expand DHIS activities into new districts, for example,
when district information officers are not generally appointed and in place.

The biggest challenge in this regard is to ensure that DHIS developments - in particular HISP roll out
activities - are matched by general level of progress in DHS implementation. If DHIS developments out-
pace DHS developments, there is a risk that stagnation will set in as enthusiasm wanes and skills atrophy.

Other issues relevant to provincial and national HISP roll out plans

Ensuring enough district level support for the HISP process

One of the most appealing things about the HISP process (and, indeed, the software, too!) is the
“grassroots” feel about it. This is largely due to the general approach taken by the HISP group: information
systems should be active, inclusive and friendly systems that can efficiently inform decision making at all
levels. The HISP approach attempts to ensure that people get involved and engaged with information –
“humanware” figures prominently in the HISP philosophy, as it should.

HISP’s general approach to DHIS development is manifested on the ground by a great deal of training,
face-to-face support and capacity building. Perhaps the greatest challenge associated with a nation-wide
scaling up of HISP is to ensure that enough resources are available on the ground to maintain the in-depth
and ongoing support that will be needed once initial roll out activities are completed.

In the Western Cape, for example, the HISP group has recognised that more intensive support is
required in the HISP pilot districts to ensure that sufficient skills are in place and that things are functioning
well from a technical perspective. Operationally, this has meant the appointment of HISP facilitators in
each HISP pilot district. This will not be a feasible solution for the provincial departments of health
generally.

Although the need for ongoing support is clearly recognised by the HISP group, as well as key
individuals in provincial and national information units, it is not yet clear exactly what shape such support
will take. Each province has been requested to develop a roll out plan. From an initial reading of available
roll out plans, however, it is not entirely clear that the national or provincial departments of health have
paid sufficient attention to ongoing support needs. For the most part, provinces with capable and adequately
resourced information units (e.g. the Western Cape and the Free State) should have little difficulty developing
HISP support mechanisms at the provincial level. Other provinces, however, will have much more difficulty.

Support structures, with clearly defined roles and responsibilities must be established at each level, but
particularly within provincial and national information units. It would be useful, if not imperative, that
provincial (and national) roll out plans are thoroughly reviewed and assessed in terms of ongoing support
capability before intensive roll out efforts are initiated.
Ensuring enough centralised support for the HISP software

Ironically, perhaps, the HISP software may require proportionately more ongoing support than other systems currently used in the health sector (e.g. stand-alone systems such as PERSAL), precisely because it is based on commercial software packages that are routinely upgraded with new versions.

Technical developments in software generally will continue to have an influence on the HISP application. In particular, the following issues are among those that will influence the use of the HISP software at district, provincial and national levels:

- The eventual replacement of Windows 95/98 (still based on DOS) to Windows 2000 (no longer based on DOS)
- The eventual replacement of Office 97 with Office 2000
- The ongoing need to monitor and fix bugs, improve and maintain the system and manage province-by-province upgrades.

In addition, future plans for the HISP application include the development of additional modules, ultimately leading to a more comprehensive district information system. All of this will require clearly outlined plans and advanced support and guidance for the provincial departments of health.

To date, advanced support for the software has been provided by a small group of people working through HISP (assisted to some extent by a not-much-larger group of HISP enthusiasts in provincial, regional and district information units). It is unclear at this stage exactly who will provide such support in the future, after initial roll out activities are completed. The national Department of Health would be a logical home for an advanced support group, but it does not appear that sufficient capacity is in place to take on this role. This issue should be resolved before the roll out process has proceeded much further than it already has.
Provincial updates

Eastern Cape

Information systems development has proceeded rapidly in the Eastern Cape, particularly in the last year. Early in the year, the HISP software was introduced at all regional and district offices in the province. In addition to using the PHC monthly data module, most regions have also begun to use the TB module to capture quarterly data. Standardised tick registers are used in many districts, and patient retained records are also fairly widespread.

The Eastern Cape is taking a cautious approach to hospital information systems. Work has been done on developing a minimum data set (MDS) for district hospitals. It is likely that the HISP software will be used in some hospitals for data capture. The province is attempting to achieve a high degree of integration between district and hospital information systems.

Free State

In the Free State, a provincial PHC minimum data set is likely to be in place before the end of the calendar year. Efforts are under way to develop standardised data collection tools, based on a clinic register and monthly reporting form as used in other provinces. It is expected that systems in place at facility level will remain paper based for the short to medium term.

A HISP rollout plan has been developed which will include the entire province, focusing initially on two pilot districts. The pace of rollout will be according to the capabilities and conditions in each region and district. A key challenge will be to find sufficient resources to upgrade existing PC hardware and to purchase new equipment.

Gauteng

Broad based information systems work in Gauteng is constrained by the complexity of organisational developments within the province. An action plan for HISP introduction is being developed, but the details of the plan are not available at the time of this writing.

More work is needed on developing standardised tools for data collection and on establishing appropriate structures within districts for managing and using district information systems. In addition, commercial vendors are pushing a range of competing solutions, making it difficult to focus on a single standardised approach.

KwaZulu-Natal

In 1999, the Department of Health in KZN introduced a province-wide standardised clinic tick register, which includes 14 data fields in addition to fields for name, address and diagnosis and treatment, and is generating accurate patient statistics.
A business plan for rolling out district health information systems has been drafted for the province. Support will be focused initially on a small number of learning sites. A provincial PHC minimum data set has been proposed, which includes a large number of data items and indicators – but the MDS is not yet implemented. As in other provinces, activities to strengthen and expand the DHIS may be hindered by the slow pace of district staff appointments.

**Mpumalanga**

District information officers have been in place in Mpumalanga for some time now, and information reporting structures are strong. Mpumalanga has developed a standardised PHC data sheet for monthly reporting which is used in all districts. The data sheet is very complex and includes a large number of data items, and may need re-working. In addition to province-wide developments in the districts, there are some local initiatives to improve the relevance and quality of information generated at clinics, including a project in Lydenburg to test a joint patient and clinic retained record system.

Mpumalanga has declined to introduce the HISP software as a standard system for its districts. It seems, however, that the “six steps” of the HISP process and the HISP software may be initiated in two districts (as pilot sites) and in the regions (for collating existing data from the rest of the districts). This is considered an interim measure; longer term plans for Mpumalanga revolve around the introduction of a comprehensive computerised hospital information system and a corresponding system for district and facility implementation.

**North West**

District structures are well established in the North West; all districts have management teams in place, although district information officers are not appointed. The extent of information use at district level is unclear. Almost all hospitals are linked through a WAN and in roughly 20 hospitals, a Patient Administration and Billing System has been installed.

The North West has developed a plan for HISP rollout and the Department of Health has approved the plan. HISP activities will begin in five pilot districts. The province has adopted a PHC minimum data set and is in the process of developing standard tools for collecting and reporting data. In a very positive development, the province has agreed to purchase sufficient PC equipment to support the rollout.

**Northern Cape**

A business plan for HISP rollout has been developed, focusing on Diamondfields and Namaqualand districts (there are only six large ‘districts’ or regions in the Northern Cape). Standardised data collection tools are in use in some areas, but are not universal throughout the province. The Northern Cape has
awarded a tender for a hospital information system, but on a limited scale, with two initial modules (patient registration and billing) to be introduced in six hospitals.

Most information systems development has taken place in the districts; information systems are relatively strong in Benede Oranje and Kalahari districts, which have benefited from ISDS support, and in Bo Karoo and Hantam districts, which have introduced tools based on the experiences in the ISDS districts. Strengthening of the provincial information unit will be a priority for the immediate future.

**Northern Province**

Since early 1999, two districts in the Northern Province – Halegratz and NMTTS – have been piloting a PHC monthly data package, which includes a tick register system (including a unified monthly summary form) based on the Eastern Cape model and the HISP software. To date, the project has been on a small scale, but will expand to 5 additional districts early in 2000 as part of the HISP rollout in the Northern Province.

The Northern Province HISP rollout will focus initially on building capacity at regional and provincial levels. District level training programmes are also planned, but activities in districts are complicated by the uncertainty associated with district demarcation. Proposals have been developed to explore the integration of the evolving district information system with the ongoing hospital information systems project. The HIS project itself is experiencing considerable problems, including delays in LAN installations and difficulties with change management.

**Western Cape**

As the home of the HISP project, the Western Cape has benefited from significant information systems development activities over the last few years. The HISP software is in use in all regions and some districts and a standard Routine Monthly Reporting Form for PHC statistics is in use throughout the province. Individual facilities or municipal managers have often added fields to the minimum set to enhance the local management relevance of the data collected.

The Western Cape continues to suffer from delays in establishing district structures; this problem is particularly acute in the urban metro areas. These delays are making it difficult to plan and implement information systems that are designed to serve an integrated district structure. Additional concerns in the Western Cape involve the planned implementation of a new hospital information system. The new system is very expensive and there are concerns that the hospital system is obtaining the lion’s share of IT funding in the province, leaving few resources for district based developments.
Conclusions and recommendations

Progress on DHIS development at the district level is readily apparent in many districts across the country. Still, a great deal of work remains to be done. In this concluding section, recommendations for the way forward are summarised.

- As districts begin to roll out the HISP process and software, sufficient attention should be given to the implementation of standardised data collection tools. The advantages and disadvantages of alternative models should be reviewed carefully, as there is considerable evidence that some data collection tool designs may exacerbate inefficiency at the district level. While there are recognised advantages to standardised data collection, observed inefficiencies and inaccuracies in currently used tools highlight the importance of a continued focus on data quality.

- DHIS implementation plans and activities should explicitly consider the ongoing support requirements for a) skills improvement and maintenance, b) hardware and software maintenance and problem solving, and c) nurturing and encouraging an information culture.

- Provincial departments of health should adopt minimum PHC data sets where they have not already done so, and then move on fairly quickly to identifying additional elements of essential information. District management teams should also be encouraged to identify their own district-specific data items and indicators that should be collected in addition to the provincial MDS. In addition to a focus on the content of data collected, attention to the format and presentation of data is critical if data is to be useful for district level decision making. The importance of these issues will become more apparent as districts gain experience working through a budget cycle.

- District management teams should step back and review their practices for analysis and feedback of data and information. Efforts should focus on developing simple monthly reports that can be easily understood and appreciated by district staff.

- Provincial and district staff should experiment with ways of integrating DHIS development work with the hospital information systems that are being introduced in several provinces. “Keep it simple and innovative”.

- HISP roll out plans should be extensively reviewed to ensure that provincial capacity to support the process is either in place or can be developed reasonably quickly.

- A sustainable, long term mechanism for providing advanced support and guidance for the HISP software should be established (or at least proposed) as soon as possible, preferably before provincial roll out activities have moved ahead very far.
The National Drug Policy (NDP) was launched in 1996, and heralded great changes in the area of drug management in South Africa. However, the legislative process has been rocky, with many of the parliamentary gains cancelled by delaying court action. The greatest success has been the development of Essential Drugs Lists (EDLs) and Standard Treatment Guidelines (STGs) for the Primary Health Care Level and adult and paediatric guidelines for the Hospital Level.

Another important step forward was the performance of baseline studies that looked into the delivery of pharmaceutical services in each province. This information was not readily available before, and has allowed provinces to set priorities in the light of the findings.

There is an urgent need for the NDP to be reviewed and new goals, together with priorities and timelines, to be set.
Introduction

A chapter focusing on the provision of pharmaceutical services has been a consistent feature of all South African Health Reviews since 1995. In 1995, the chapter started from basic principles, and showed the priorities being addressed by the drug policy committee in the first year of the new government. A five-point plan was envisaged, looking at drug cost structures in the public sector, the development of an essential drugs list, the promotion of generic drug use, a review of the regulatory authority and incorporation of traditional medicines. The 1996 chapter took a more descriptive approach. It heralded the launch of the National Drug Policy (NDP), the establishment of a representative committee to draw up Standard Treatment Guidelines and the release of the first Primary Health Care Essential Drugs List. In addition, some attention was paid to private sector developments, including mergers and the growing evidence of vertical integration in the sector (e.g. the purchase of health facilities by drug manufacturers and the establishment of manufacturer-owned distribution services). The 1997 chapter tried to measure progress in six key areas of the NDP. In 1998 the focus shifted considerably, with the chapter highlighting pharmaceutical human resource production and distribution in the provision of an equitable pharmaceutical service in the public sector. The quality of services was also touched upon. In 1999, the focus returns to delivery against the key issues of the NDP. This chapter will therefore focus in turn on each of the sections of the NDP, but will seek evidence not only of macro developments but also of implementation and impact at health district level. It must however be acknowledged that the development of the District Health System has been uneven and slow, particularly in the field of pharmaceutical services. The examples quoted from various districts are of value as illustrations, but reflect a rapidly changing reality.

Legislation and regulations

The NDP priority issues were:

- Strengthening the Medicines Control Council
- Rationalising drug registration
- Controlling the registration of practitioners and the licensing of premises
- Enhancing the inspectorate and laboratory functions
- Promoting other quality assurance measures.

The legislative programme in this field has been no less rocky than in other high profile areas, such as termination of pregnancy and smoking (see chapter 2 for more discussion on legislation). There were early parliamentary successes, such as the passage of the Pharmacy Amendment Act (No 88 of 1997), the Medical, Dental and Supplementary Health Service Professions Amendment Act (No 89 of 1997) and the Medicines and Related Substances Control Amendment Act (No 90 of 1997). However, the promulgation of Act 90 has since been prevented by a court action that has had a ripple effect across the legislation. Each of the Amendment Acts is written in enabling language, and therefore relies heavily on Regulations to be meaningful. The uncertainty with regard to Act 90 initially prevented much of the other legislation from being promulgated, as their regulations refer to the contested Act or to Regulations which might be produced in terms of that Act. For example, the Pharmacy Amendment Act enables the creation of different categories of pharmacy support personnel and different scopes of practice for each of these categories. However, as the Medicines Amendment Act had not been promulgated, envisaged changes to the scheduling of medicines could not be effected.
13: Drug policy

Legislation was again thrown into disarray by the passage in late 1998 of the South African Medicines and Medical Devices Regulatory Authority Act (No 132 of 1998), known widely as the SAMMDRA Act. This Act repealed most of the current Medicines and Related Substances Control Act (No 101 of 1965), bar those sections affected by Act 90. Again, this is an enabling Act, and the premature promulgation of the Act in late April 1999 resulted in a non-functional drug regulatory environment. Attempts to get the High Court to set aside the promulgation were initially unsuccessful, but after the full Bench of the Pretoria High Court heard an appeal, the notice of promulgation was withdrawn.

In summary therefore, at time of writing, the basic framework of a strengthened Medicines Regulatory Authority has been set in place (insofar as the law to create such an Authority has been passed) but the “rationalisation” of registration envisaged in the policy is still to occur. Legal mechanisms to control irrational prescribing and to monitor dispensing practices have been enacted, but are not yet operative. Inspectorate and laboratory functions remain inadequate or under-utilised. A code of practice for pharmaceutical marketing remains hostage to the court action preventing promulgation of Act 90. The Department of Health has indicated that the SAMMDRA Act will be returned to Parliament in early 2000 for some fine-tuning. However, the Minister remains committed to both the policy and the legal construct of Act 90.

At health district level it is the control over practitioners that is most chaotic. In essence the SAMMDRA Act recognised nurses as “authorised prescribers”, but within their “scope of practice”. That scope of practice, as well as differentiation into prescriber categories (such as clinical nurse practitioners and specialist nurses) has yet to be finalised by the Nursing Council. In essence, health districts are unable to tell how services will be rendered if only fully-trained primary health care nurses may be registered to prescribe, and also how nurses will be issued with dispensing licenses within the 6 months stipulated by SAMMDRA. There is also no room in the Act for gradual compliance by the State with the legal requirements.

Case study: A district in the Eastern Cape

The Mt Frere health district in the Eastern Cape has two hospitals and 17 clinics. Only 2 of the 154 professional nurses in the health district have completed the one-year primary health care course, and might therefore be eligible for registration as prescribers. There are no qualified pharmaceutical personnel, and both hospital dispensaries should therefore theoretically be closed when the new legislation becomes effective. How the health authorities and statutory bodies will deal with this is as yet unclear.

\[\text{a} \quad \text{There is confusion around what constitutes a “fully-trained PHC nurse”. There is no such category registered with the Nursing Council, but some authorities equate this status with having completed a full-time 12 to 18-month training course.}\]
Drug pricing

The NDP seeks to ensure the availability of safe and effective drugs at the lowest possible cost, by establishing a pricing committee, promoting the use of generic drugs and possibly engaging in parallel importation and international tendering.\(^b\)

However, the court action against Act 90 has thwarted movement on most fronts. The pricing committee cannot be established, generic substitution (without the consent of the prescriber) remains illegal and parallel importation has been the subject of intense intergovernmental and international pressure. The court action has also been cited as a reason for suspending meetings of the National Health Consultative Forum sub-committee on Drug Policy. However, there are continued efforts to introduce a professional fee system (as opposed to one based on a percentage profit on medicines sold) for the remuneration of pharmacists and dispensing doctors in the private sector. International action in the field of parallel importation and compulsory licensing has been fierce. The World Health Assembly approved a Revised Drug Strategy\(^c\) in May 1999 which establishes the primacy of health concerns above commercial interests, and supports an interpretation of the World Trade Organisation (WTO) TRIPS agreement\(^d\) which allows both parallel importation and compulsory licensing practices.\(^e\) However, the US Trade Representative and Vice-President have maintained strong pressure on South Africa via the Bi-national Commission. It could be argued that the US imposed sanctions against South Africa, as a clause in a US Budget Act prohibited federal aid being disbursed to South Africa’s central government until progress was noted towards the repeal of the contested section of Act 90 which provides for parallel importation.\(^f\) South Africa was also placed on a US “watch list” of potential intellectual property rights violators.\(^g\) However, in an ironic twist, in mid-1999 the US Congress saw the tabling of a Bill which would allow America to engage in the self-same practices, so as to afford their citizens access to safe medicines at the cheapest prices.\(^h\) Assurances given by the US government during the September 1999 visit by President Mbeki that it would not oppose TRIPS-compliant efforts to improve access to cheaper drugs have been greeted with some scepticism.

Much of this debate relies on the state having accurate comparative pricing data. A national database has been set up, and shows a persistent gap between international tender prices and those paid by the national procurement process (known as COMED) on the basis of local tenders. The gap between the prices paid by the public sector and private sector prices remains high as well, contributing to the demand for “grey market” goods in the private sector. To quote one example: sulfadoxine-pyremethamine tablets (used in the treatment of malaria) are available in the local private sector at a retail price of R10.28 per tablet (based on a pack of 3 tablets). The State pays R5.05 per tablet for the same product. However, in the United Kingdom, the same product is available for R2.63 per tablet (in packs of 10), and a generic version is available from the International Dispensary Association for R0.17 per tablet (in packs of 1000).\(^i\)

\(^b\) Parallel importation involves the purchase from a supplier abroad of a product already on the local market, manufactured by the same company but sold at a higher price. International tendering involves purchasing on a competitive basis from manufacturers or other suppliers in countries outside South Africa.

\(^c\) This emphasises that “public health interests are paramount in pharmaceutical and health policies” and addresses “the impact of relevant international agreements, including trade agreements, on local manufacturing capacity and on access to and prices of pharmaceuticals in developing and least developed countries.” (Source: E-Drug, 21 May 1999)

\(^d\) World Trade Organisation (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)
(Source: E-Drug, 24 May 1999)

\(^e\) The full report can be seen at http://www.ustr.gov/releases/1999/04/99-41.html

\(^f\) Source - South African Drug Action Programme
Drug selection

The primary vehicle for delivering the agenda set out by the National Drug Policy, was the Essential Drugs Programme (EDP), with the development of a national Essential Drugs List (EDL) for the public sector. First, a Primary Health Care EDL and Standard Treatment Guidelines was developed and launched in April 1996. This was a difficult process, as distribution and implementation of this first edition coincided with the launch of free PHC services. It was the first time in any country that guidelines for common diseases were initially developed, and then an EDL extracted from these guidelines.

In total 85 000 copies were distributed. A study in 1997 on the impact of the PHC EDL indicated that:

- 86% of facilities had a copy of the EDL guidelines
- 65% of prescribers had a personal copy
- 90% of the diagnoses were in the EDL guidelines
- 70% of the drugs prescribed were on the Essential Drugs List
- 85% of the key drugs were available

A second committee was formed in 1996 to review the list. In addition, a committee was set up to develop an EDL for the Hospital level. The second edition of the PHC EDL has a different format from the first edition, in response to criticism of the first edition. Nine flowcharts have been included to assist in the diagnoses of conditions and non-drug treatment also features prominently. The Hospital level guidelines were divided into Paediatric guidelines and Adult guidelines. This has been a very difficult process, and while consensus could not be reached on all issues, the second edition of the PHC guidelines, and the Paediatric and Adult Guidelines for Hospital level were launched nationally by the Minister of Health on 3 December 1998. The combined EDL for PHC and Hospitals contains 473 active ingredients or 693 different formulations when duplications in each list are removed. While still larger than the 10th WHO model list of essential drugs (306 active ingredients), this is a far cry from the 2 600 items that were on the public sector tender order list.

<table>
<thead>
<tr>
<th>Guideline Level</th>
<th>Treatment Guidelines</th>
<th>Active Ingredients</th>
<th>Formulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Health Care</td>
<td>200</td>
<td>152</td>
<td>207</td>
</tr>
<tr>
<td>Paediatric Hospital</td>
<td>113</td>
<td>281</td>
<td>399</td>
</tr>
<tr>
<td>Adult Hospital</td>
<td>186</td>
<td>357</td>
<td>483</td>
</tr>
</tbody>
</table>

Implementation of the EDLs, particularly those for the hospital level, has been slow and patchy. Given the fact that items deleted from the list would have to be phased out to use stock on hand and honour existing tenders, much effort has gone into careful planning of future tenders. Major savings have been

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\[ \text{g} \] Directorate: Pharmaceutical Programme and Planning, Department of National Health, Pretoria, personal communication

\[ \text{h} \] Active ingredients are different chemical entities, whereas the formulations are the different dosage forms which include the active ingredients.
forecast, based on consumption and expenditure figures. A worrying feature has been an apparent dislocation between the EDL committees and those structures responsible for designing programmes and training material.

Case study: A district in the Northern Province

In a study (November/December 1998) conducted in the NMTTS health district in the Northern Province, only 53% of the drugs prescribed in the hospitals’ out-patient departments were on the PHC EDL (first edition), while 84% of the drugs prescribed at clinic level were on the PHC EDL. While 97% of key drugs were in stock at hospital level, only 75% of key drugs were in stock at clinic level. This is very concerning as the out-of-stock periods were also unacceptably long (average 16 days).

What has been omitted in the process of EDL/STG review is the defining of prescriber levels. Which categories of drugs can be made available to all was left up to provinces to decide, but it does pose a problem for those outside provincial authorities. For example, private sector occupational health nurses are unclear as to what drugs they will be allowed to prescribe. This issue needs to be resolved immediately, and cannot be left for the next round of reviews in two years’ time.

Requests for drugs outside of the EDLs, and submissions for additions to the EDL need to be made through provincial Pharmacy and Therapeutic Committees (PTCs). At the moment, some provinces are in the process of establishing these committees. Hospital and district equivalents will be crucial in ensuring that the guidelines translate into rational drug use, rather than remain mere paper exercises.

**Procurement and distribution**

The core NDP aim in this area is to ensure an adequate supply of effective and safe drugs to all people in South Africa. Considerable progress has been made in removing economic barriers to access. Drugs are free to all users of public health services at primary care level. However, this has placed considerable stress on the system. A study at King Edward VIII Hospital in Durban has shown that the paediatric out-patients clinic has seen a two-fold increase in attendees between 1995 and 1999, and that this has been accompanied by a three-fold increase in drug expenditure. The problem is compounded by the restrictive and infrequently adjusted Treasury limits on the amount of capital that may be utilised as stock in certain provincial depots. These new policies have resulted in frequent out-of-stock situations. However, despite considerable stress, there have been demonstrated improvements in the ability of the system to ensure access to key drugs at clinic level. Availability of a list of 30 key items has been maintained above 80% in all regions of the Eastern Cape. The hospital-centred distribution system in the Northern Province has also made possible a steady supply to the periphery.

Currently, the COMED computer system is based on the premise of a private sector contractor. It is hoped that migration of the system to the computers within the national Department of Health will, in time, allow better information extraction, tender adjudication and supplier performance monitoring.

Storage and safeguarding of drugs in the public sector remains a problem. Although agreement has been reached with manufacturers on clear labelling of state stock, the real problem remains at health facility level. There is a national effort to develop standard operating procedures (SOPs) for drug supply management at all levels of the system. This effort involves the national and provincial Departments of Health, the South African Drug Action Programme (SADAP), the Equity project, Initiative for Sub-District Support (ISDS) and a private sector contractor, Vuna Healthcare Logistics. Health district level documents have been drafted by a number of provinces, and are being combined to form a generic document. Depot level SOPs are also being developed. In the longer term, the decision by the Pharmaceutical Electronic Standards Authority to
phase in bar-coding on all pharmaceutical products will allow for better batch tracking and security along
the entire supply chain. This is dependent on the availability of bar-code scanners at all points in the
pharmaceutical service chain, and thus has been recognised as a long-term project.

Case study: A district in the Northern Province

An in-depth situation analysis of the NMTTS district in the Northern Province in late 1998 showed that, while both hospitals and 86% of the 14 clinics surveyed had burglar bars on drug storage areas, there were no written policies on key access, and only 7% of clinics had a caged or lockable holding area for receiving stock. Only 43% of clinics had any form of stock card system in place. At one of the hospitals, examination of stock records showed discrepancies between inventory and physical stock for 11 of the 15 key drugs surveyed, varying from -98% to +190%. However, this is a rural area. In contrast, the central depot in Pietersburg has well developed security systems in place.

Distribution has been strengthened in a number of provinces by the utilisation of private sector contractors to either operate depots and/or transport supplies to health facilities. Contracts have been or are about to be concluded in KwaZulu-Natal, the Northern Province, Mpumalanga, the North West and Northern Cape. One of the key measures of good distribution has been the degree to which the supply of patient-ready packs could be ensured to clinic level facilities. Such packs have to be procured from the supplier or produced in-house. Three provinces could serve as useful contrasts. In the Northern Province and KwaZulu-Natal, the provincial depots have extensive prepacking facilities. Clinics and hospitals supplied by the depots therefore do not need to prepack themselves. In contrast, the Eastern Cape depot in Umtata does not yet have the capacity to engage in large scale prepacking. Clinics in Mt Frere, supplied from the Umtata depot via their under-staffed and under-resourced district hospitals, receive stock in bulk containers. Prepacking is then done under unhygienic and uncontrolled conditions. Labelling is inadequate and batch recall is impossible. The Regulations to SAMMDRA will specify conditions for prepacking. To what extent provinces will be able to comply remains to be seen.

Case study: Districts in the Northern Province and Eastern Cape

As with the rest of the Northern Province, each hospital in the NMTTS health district has a dedicated, lockable one-tonne vehicle for drug deliveries. This enables the hospital to deliver to each clinic every 14 days. This has reduced the number of unscheduled deliveries to an average of 0.6 per clinic per month.

In contrast, Sipetu Hospital in the Mt Frere health district of the Eastern Cape still experiences severe transport problems during the wet summer months. Deliveries from the central store in Umtata cannot be delivered. This impacts upon the 7 clinics, which draw stock from the hospital.

This section of the NDP also deals with the promotion of local manufacture of drugs. Manufacture of drugs in South Africa remains subject to considerable financial and legal barriers. While preference is given to local producers/manufacturers (using a price preference mechanism), the impact of potential parallel importation is still to be felt by the industry as the prices locally are higher than international prices. It remains to be seen whether parallel importation, if used, will weaken South Africa’s domestic manufacturing capacity, or whether compulsory licensing will lead to an increase in local production, and therefore in jobs.
**Rational use of drugs**

Appropriate training of health personnel has been a major issue in the last few years. It has resulted in changes being proposed to core curricula of educational programmes for medical and pharmaceutical undergraduates. However, education of the general public in terms of the Essential Drugs Programme and the benefits to all has been slow.

**Case study: A district in KwaZulu-Natal**

An assessment of health worker and patient responses to the initial designs for Essential Drugs Programme posters was conducted in the Outer West health district in KwaZulu-Natal. While most of the 25 patients interviewed (79%) could identify the key characteristics of an essential drug (needed, effective, accessible), only about half (54%) correctly understood the statement “not every ill needs a pill”. There is still considerable pressure on health workers to conclude every consultation with a prescription.

Baseline studies to assess implementation of the EDP have been conducted by the national and provincial Departments of Health. Indicators of rational drug use that have been employed have included the degree of polypharmacy, prescribing by generic (non-proprietary) name, and prescribing in accordance with the EDLs. Collation of the results from seven provinces, assessed between April 1996 and March 1998, indicates that:

- The average number of items per prescription was 2.5 at hospital level and 2.3 at clinic level (target 1.2 to 1.9)
- 35% of outpatients at hospital level and 38% of those at clinic level received at least one antibiotic (consensus on a target has not been reached, but figures in excess of 25% are cause for concern)
- 31% of drugs at hospital level are prescribed by generic name, and 40% of drugs at clinic level are prescribed by generic name (target 100%).

While prescribing by generic name does not, in itself, indicate rational drug use, it is an important mechanism for reducing costs and the influence of drug company marketing. The above results indicate that progress with regard to generic prescribing is slow. The baseline studies also showed that Johannesburg Hospital spent more on pharmaceuticals than the Northern Province, and that Chris Hani Baragwanath Hospital spent more than Mpumalanga. The pharmaceutical budgets of academic hospitals will need to be reviewed carefully in light of the above findings, but taking into consideration the patient profiles treated at these hospitals. Per capita public sector drug budgets remain unevenly distributed. However, provincial averages hide even more differences. Some regions of the Northern Province show extremely low expenditure per capita, which might indicate problems with access rather than gains in efficiency.

The impact of the Essential Drugs List on rational drug use has still to be quantified and assessed with any rigour. Without a uniform method of recording diagnoses along with prescribed drugs and/or advice, the impact on prescribing for specific disease conditions will be difficult to assess. For example, assessment of the treatment of upper respiratory conditions is difficult, as clinic records may reflect a range of diagnoses such as “chest pain”, “cough”, “wheeze” or “flu”.
Human resources development

The key priority in this area has been to provide adequate numbers of appropriately trained and registered pharmaceutical support personnel. Progress towards reforming the training system for pharmacists’ assistants has been slow. The Pharmacy Council has developed Unit Standards and the process of attaining accreditation has been discussed with potential education providers. However, the entire exercise awaits the publication of the Regulations to the Pharmacy Act. The immediate application of the SAMMDRA Act to the State will again raise the pressure on all concerned to ensure the timeous supply of adequate numbers of trained assistants. A phased-in approach would be more suitable, as it would allow a greater number of assistants to be trained. The production and distribution challenges were extensively covered in the 1998 Health Review.5,17

The required human resources can be separated according to those responsible for prescribing medicines and those responsible for logistic functions and dispensing. Chapters in previous South African Health Reviews have given examples of efforts directed at the former category, such as the rational prescribing courses offered by the University of Cape Town and Medunsa. General drug management courses aimed at district level staff have also been offered at the Public Health Summer and Winter Schools in the Western Cape and KwaZulu-Natal. A nationally driven train-the-trainer programme has provided regional staff in each of the provinces with training on Drug Supply Management. However, this programme has been beset by problems. Those trained are infrequently employed as dedicated trainees, as they are more likely to be regional pharmacists, clinic supervisors or nursing managers. Cascading the training to district level has not proved as easy as expected, nor have budgets for such training been made available. Added to this is the problem of removing clinic level staff from the workplace for 3-day courses.

Pharmacy vacancy rates have worsened in some provinces during 1999, but should also be viewed with considerable caution, as they reflect the current inequitable distribution of posts. An equitable staffing norm, based on workload, is being finalised by the Pharmacy Council. If this were applied, then the greatest need would be in district hospitals (which would then have a national vacancy rate of 75%), rather than regional (50% vacancy) or central hospitals (41% vacancy), with an overall vacancy rate of 59% for pharmacist posts. Table 2 shows the vacancy rates in August 1999, as well as the numbers of state hospitals without a pharmacist.

<table>
<thead>
<tr>
<th>Province</th>
<th>Number of state hospitals without a pharmacist</th>
<th>% vacant public sector pharmacist posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Free State</td>
<td>11</td>
<td>36</td>
</tr>
<tr>
<td>Gauteng</td>
<td>0</td>
<td>39</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>Northern Province</td>
<td>15</td>
<td>45</td>
</tr>
<tr>
<td>North West</td>
<td>7</td>
<td>43</td>
</tr>
<tr>
<td>Western Cape</td>
<td>3</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: Department of Health (August 1999)
Managing drug supply at district level involves a variety of personnel, particularly nurses. In keeping with the team-based approach to health care delivery, many districts have established District Drugs Task Teams. These have drawn together nursing and pharmaceutical staff (where available) in tackling local problems and developing capacity.

**Case study: A district in KwaZulu-Natal**

In the Okhahlamba sub-district of KwaZulu-Natal, the hospital pharmacist from the district hospital has taken a novel approach to cascading Drug Supply Management training. He began with a strategic planning exercise with the clinic nurses, dealing with perceived barriers to the provision of a good quality pharmaceutical service. The group then concluded with a commitment to take responsibility for all aspects of drug management at clinic level, with the support of the district pharmacist. The course material supplied by the provincial Essential Drugs Programme has been dissected into smaller sections, and is being worked through by smaller groups of clinic nurses, limiting disruption to clinic functioning. Each new technique or system covered is then implemented with ongoing supervision and support.

**Research and development**

Operational research is being done on many aspects highlighted in the NDP, such as problems related to prescribing and dispensing, and the economics of drug utilisation. These are not co-ordinated by any structure, nor is dedicated funding made available. Rather, a mixture of academics, researchers, and health service managers has conducted mini-studies, with limited dissemination of results. Intramural research has been supported by SADAP, and the Health Systems Trust and the science councils have supported various universities and post-graduate students.

The envisaged process of reviewing the NDP will provide a particular need for such evidence of impact, arguing for a more co-ordinated approach, with results feeding into a central unit.

**Technical co-operation**

The World Health Organisation has provided technical assistance in the form of the South African Drug Action Programme (SADAP), which is located within the National Department of Health.

Technical co-operation agreements have also been signed with Australia, which facilitate sharing of information especially with regard to pharmaco-economic evaluations and training. In 1998, a group of South Africans attended a pharmaco-economic short course in Australia. It is hoped that this area of study will be developed further within South Africa so that future decisions at various levels (such as national EDL committees, provincial and district PTCs) will be subject to an economic appraisal.

**Traditional medicines**

There is still no clear strategy for ways in which traditional healers can interact with the formal health sector. This is an area that needs a lot of development and clarity. From a regulatory perspective, an inclusionary step has been taken with the promulgation of the SAMMDRA Act, which will register African traditional medicines.
medicines together with others from the complementary disciplines. This will be handled by a separate committee from those dealing with orthodox or veterinary medicine applications or with medical devices. As with many of the legislative issues, this is unknown terrain, and has not been accorded a particularly high priority.

Monitoring and evaluation

An evaluation of the implementation of the National Drug Policy and its impact, was due to occur every three years. There has not been a full evaluation according to pre-determined indicators as yet, but one is due for the end of 1999.

Overview of NDP implementation in the provinces

**Eastern Cape**

This province, perhaps more than most, reflects the ongoing consequences of the homeland policy. Previous homeland areas remain largely under-resourced especially with respect to appropriate pharmaceutical personnel. While much progress has been made in designing appropriate logistic systems and management information systems, these continue to be hamstrung by the lack of infrastructure in many areas. This has also hampered transformation towards a district-driven drug management system. While district and regional posts in the eastern parts have been advertised, they have not been filled as funding could not be secured. Drug availability has improved considerably, but the state drug supply depots remain under-resourced and under strain. With the help of various projects (Equity, ISDS and SADAP), a large number of public sector staff have been trained.

**Free State**

This province is currently reeling under profound staff shortages in pharmaceutical services. The larger hospitals in the capital have been particularly affected of late. Some basic building blocks are in place. The procurement and distribution of medical consumables and pharmaceuticals has been put out to tender. A pioneer public-private venture to supply district surgeon patients with medication has not been a particular success. Although it has succeeded in getting medicine to patients in rural towns, particularly in the south of the province, it has proved to be expensive and inappropriate for more far-flung areas. Training efforts have been intense, and there is evidence of some truly innovative district-oriented practice in the northern parts. The drug budget has also been under considerable pressure.
**Gauteng**

This province provides a clear example of the problems of integrating drug management systems across different health service providing authorities within the same geographical areas. While compact and endowed with considerable infra-structural resources, the province is hampered by historical biases towards large hospitals and curative, tertiary services. These services still dominate spending, and are experiencing problems as resources are shifted to primary care. Pharmacist staffing at central hospitals has deteriorated considerably in recent months. The province was the last to complete a baseline study on EDP implementation.

**KwaZulu-Natal**

This province also shows two different faces, that of the previous provincial administration is well-staffed and resourced, while former homeland areas have made little progress. The depot has managed to ensure a good quality service to all facilities, but systems development still needs attention. Training programmes have been put in place, but coverage is limited by budgetary constraints. The province has a history of relative independence with respect to procurement, concluding separate agreements with suppliers. Efforts to align tenders with the national EDL have been pursued more recently.

**Mpumalanga**

This province took a brave leap into district-based pharmaceutical services, together with contracting a private sector concern to handle depot and distribution services. Both ventures have been bedeviled by budgetary and administrative problems, resulting in poor quality supply to primary care settings. However, as with other provinces, richer areas (such as the Highveld) seem better resourced in all respects than the poorer areas (Lowveld), and hence better able to tackle the challenges of district development.

**Northern Cape**

This province is typical of those newer provinces which have had to develop systems from scratch. The province is also faced with the problems of a small, widely distributed population and extremely low numbers of appropriate personnel. A contract with a private sector partner for the supply of depot and distribution services has been concluded.

Training has always been a strong point, with evidence of improved drug use from some areas.
Northern Province

This province has had the longest experience of working with a private sector contractor. The pharmaceutical services have, to a greater extent than anywhere else, been largely centralised at the provincial level. While this has made them particularly data rich, it has perhaps retarded local initiative and development along district lines. There is also a longer history of training efforts, and follow-up studies across the province have shown some improvement in rational drug use and logistics systems.

North West

As with the Northern Cape, this province has had to develop new structures. Recently, it has contracted a private sector concern to handle depot and distribution of medical supplies. Staffing is inadequate to really transform service quality, and budgetary constraints have had a major impact. As in almost all areas in all provinces, supervision and support systems have also been poorly developed as a result of staff shortages. Crucially, the province has been without a Head of Pharmaceutical Services for almost the whole of 1999.

Western Cape

This province faces similar challenges to those described in Gauteng. It is home to some of the largest and most sophisticated hospitals, and also has features of strong local authority services in the Metropole. While not having to create a depot and distribution system from scratch, it has had to contend with budget cuts in central facilities. District development has perhaps lagged behind the other provinces. There is considerable movement towards creating state-of-the-art hospital information systems in the Associated Academic Hospitals, including computerised stock management and patient record systems. These could in time provide important lessons for other central hospitals.

Conclusions

The National Drug Policy was launched to great fanfare in 1996. The greatest success would seem to be in the preparation of the Essential Drugs Lists and Standard Treatment Guidelines. Implementation of the guidelines remains a challenge. Much of the rest of the policy remains hostage to court action brought by those whose vested interests are at stake. The legislative programme has also been characterised by a lack of transparency. Greater consultation and buy-in could have prevented some of the more distressing mistakes, perhaps even prevented the drafting problems with Act 90 presenting such tempting targets for legal challenges. For example, there seems to be general acceptance that the wording of the disputed section 15C could have been made obviously TRIPS-compliant without abandoning the policy ideal.

Many of the aspects, such as traditional medicines, have received scant attention. The review process will need to re-appraise priorities and re-assess the feasibility of some of the directives issued in 1996. With varying degrees of district development, and different approaches in different provinces, it is more difficult to assess the overall impact of the NDP at district level. Certainly, there is greater access to and awareness of
the PHC EDL/STG, but rational drug use could still be improved. Where data do exist, such as from the
Equity Project in the Eastern Cape, availability of key items has been shown to improve over time.
A greater awareness and use of management information is evident in some areas, notably the Northern
Province. A recently completed follow-up evaluation of the situation in this province has shown some
progress in the hospitals and clinics surveyed.19 For example, cold chain management and inventory control
by computer had improved, there was greater awareness of the National Drug Policy/Essential Drugs List
and attendance of provincial training courses on drug supply management and effective prescribing had
increased. Another positive development was the lower use of injections. Antibiotic use had also been
reduced, but remained higher than the level recommended by some authorities. However, the report
emphasised the chronic lack of appropriate human resources, the lack of clear standard operating procedures
(especially for discrepancy reporting and stock receipting at clinic level) and the lack of financial management
(other than at the depot or head office level).

The greatest question at this time would seem to be: will the new Minister of Health pay as much
attention to this arena of policy as did her predecessor? And will she be able to untangle the legal web,
which has hamstrung implementation of the National Drug Policy? The Harvard policy analyst Michael
Reich has written that “at certain definable, and perhaps predictable political moments, major policy
reform in the health sector is possible”.20 The National Drug Policy took advantage of the post-1994
political will and acceptance of change, but stumbled along the path. Perhaps the post-1999 sobriety and
emphasis on results and action will smooth the path to implementation. Much rests on the review of the
policy.

**Recommendations**

There is an urgent need for a review of the National Drug Policy, and the formulation of a plan that
highlights short-term, medium-term, and long-term goals/objectives. An inclusive review process will do
much to improve the degree of transparency in the development of Drug Policy.

Indicators also need to be defined against which the implementation and impact of the NDP can be
measured, which will provide more concrete evidence of the achievement of set goals and objectives.
Chapter 14

Improving quality of services

This chapter looks at the South African health system from a quality perspective. The concept of quality improvement is discussed and some important principles and dimensions are brought out.

Key findings from the recent national household survey on community needs and experiences of health services, as well as a national literature review on quality in health services are presented. Support and mentoring of health service staff is one issue to be addressed to ensure improved quality of services. Service descriptions in relation to the expressed needs and expectations will also have to be drawn up. Some changes towards providing a quality service nationally and in provinces are looked at. Much of the emphasis has been on the system. The accreditation programme for hospitals and clinics in KwaZulu-Natal is highlighted.

Various approaches to quality issues are demonstrated. Some initiatives at district and facility level are presented as examples of issues facing district management and health service providers. In Region B of the Eastern Cape, a training programme on quality improvement has had some unexpected results, and is now incorporated into PHC training. In the remote rural district of Taung in the North West, the focus has been on patient-centred care. There is a presentation of the use of the Quality Improvement Cycle in providing better services to children under 5 years, in the Lusikisiki sub-district of the rural Eastern Cape. These three examples show how people are dealing with the day-to-day quality issues, and highlight possibilities and opportunities that could be taken up elsewhere.
Introduction

A focus on quality in health services has been developing worldwide in the last two decades. Efforts to improve quality are slowly coming together in a type of quality movement throughout South Africa. The focus on quality has its origins in Japanese industry in the 1950's. In some ways quality is something intangible and individually experienced by different people. There are many approaches and methods to ensure quality service. This chapter assumes an angle that it is ultimately the experience of the user/customer of a particular service that is the final judge of quality of the service and not the objective and scientific measurements of the providers of the service.

There are, however, very definite aspects and dimensions to quality that can and must be assessed and measured. The dimensions of quality generally taken as the most important are:\(^1\)

- Interpersonal relationships
- Access to service
- Effectiveness
- Consistency and continuity of service
- Efficiency
- Technical competence of the provider
- Safety
- Comfort and amenities

Clients/users of the service, service providers and service managers have differing understandings of what is central to quality. These are shown in Table 1.

<table>
<thead>
<tr>
<th>Table 1: Perspectives on the meaning of quality(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Client/User</strong></td>
</tr>
<tr>
<td>Meeting of perceived needs</td>
</tr>
<tr>
<td>Access</td>
</tr>
<tr>
<td>Effectiveness</td>
</tr>
<tr>
<td>Interpersonal relationships</td>
</tr>
<tr>
<td>Continuity</td>
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<tr>
<td>Amenities</td>
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</tbody>
</table>

Many quality improvement programmes, audits, policies, procedures and accreditation programmes focus on the improvement of the systems and processes, in order to improve the quality of the outcome. Four tenets or principles are put forward as the basis for quality improvement:\(^1\)

- Orientation towards meeting the needs and expectations of the patient and community
- Focus on systems and processes
- Use of data to analyse the service delivery process
- A team approach.

The approach is based on the assumption that system design and functioning is responsible for 80–85% of breakdowns. Much of the thinking about health service delivery seems to be coming from this
1950s perspective. It is a problem-solving approach and by assuming linear, cause-effect relationships, is mechanistic. Using this approach, a system can be improved by making it more robust and less susceptible to human whim and error. A linear approach does not fully take into account the inter-relationships of systems. So an existing system is reformed and the usual way of doing things is improved rather than transforming towards a new, better way of doing things.

Successful organisations in the 1990s are transforming rather than reforming, working towards a vision of the ultimate possibility, rather than solving problems that are rooted in the past. By describing the vision and the ultimate possibility for a system or organisation, the focus is different. It changes to a new look at setting up systems and developing human resources so that ultimate vision can be achieved, rather than solving problems that may not even be related to the vision.

Modern thinking recognises the need for a quality workforce with a clear vision of what the quality movement entails and an explicit commitment to that vision. The NHS in the United Kingdom has produced a document outlining their commitment to developing a quality workforce to provide an excellent service.

**Figure 1: The Balanced Scorecard**

The balanced scorecard is one tool that can assist in integrating various aspects of the service. It measures core business across four inter-linked quadrants:

- Starting from needs and services to be provided for the client, then…
- setting up systems and processes to provide those, then…
- developing the human resources in terms of knowledge, skills and attitudes, then…
- determining the financial needs and getting the most out of the financial resources.

This tool takes a client perspective, based on needs, and the measures are explicit in relation to the service to be given. By starting from the client perspective, then setting up systems and developing human resources to deliver these, the organisation is transformed towards client needs. This is in contrast to reforming the system as it exists, to give more of the same, perhaps more effectively.
This approach to quality, through a primary focus on the client, fits the principles and spirit of the Batho Pele Document on Transformation of the Public Service.4

This chapter discusses literature that assesses the South African health system from the perspective of the client, through household surveys. There is a summary of a literature review that looks at the situation in clinics and hospitals in South Africa, using some key system indicators. In the next section some national and provincial initiatives to improve quality are highlighted. Examples of projects to improve quality at a district and facility level are then discussed.

**The current situation**

**Client perspective**

The perspective of clients of the health service is described in the 1998 survey of 4 000 households.6 The survey shows that there are still large inequalities between race groups in this country, and 75% of people do not have medical aid cover, so are largely reliant on the public sector for health services. It also shows that users consistently consider private services to be of higher quality than public services.

A low percentage of people, generally, believed that access (31%), availability of medicines (26%), waiting times (20%) and quality of the doctors (28%) had improved over the last four years. Africans perceived the greatest improvement. Rural Africans particularly experienced an improvement in waiting times. Most of the suggested priorities for the improvement of the public health service related to improvement in quality of care (Table 1). Interpersonal relationships, technical competence and access to drugs rated highest. The reasons for not seeking treatment also related to access and affordability. Services were unavailable or inaccessible to 23% of respondents and 66% said they could not afford to seek medical attention. In the private sector, reduction of costs (accessibility) was the most common suggestion (36%).

<table>
<thead>
<tr>
<th>Suggestion</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Better service</td>
<td>37</td>
</tr>
<tr>
<td>Get the staff to treat patients better</td>
<td>26</td>
</tr>
<tr>
<td>Increased availability of drugs/medicine</td>
<td>24</td>
</tr>
<tr>
<td>Improve staff skills</td>
<td>13</td>
</tr>
<tr>
<td>Nothing</td>
<td>11</td>
</tr>
<tr>
<td>Make it affordable</td>
<td>10</td>
</tr>
<tr>
<td>More convenient hours of opening</td>
<td>9</td>
</tr>
<tr>
<td>Wider range of services</td>
<td>8</td>
</tr>
<tr>
<td>Make it easier to get to</td>
<td>6</td>
</tr>
<tr>
<td>Don’t know</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
</tr>
</tbody>
</table>

The last visit to a health facility (doctor, hospital, and rehabilitation/chronic visit) was rated excellent by 35%, fair by 62% and poor by 3%. People were twice as likely to rate private facilities as excellent, with the greatest disparity being between the public and private hospitals. Racial disparities were also noted,
with whites and Indians more likely to rate a service as excellent. Most people felt safe in both private (97%) and public (94%) hospitals. In the public sector the basic amenities like blankets were not available to 3% of inpatients and 6% experienced the wards as unclean.

Respondents rated the clerical staff to be better in private than public facilities and 22–26% rated the treatment by clerks to be fair to bad in public facilities. Comments were that the clerks were rude and bureaucratic, responsible for discrimination, insensitive, showed favouritism and that documentation was missing or incorrect.

Overall, people using primary and secondary (outpatient and inpatient) services felt that they had been well treated. In all the facilities the patients felt that they had spent longer with the health care provider in the private as opposed to the public sector. Generally the experience with doctors was rated better than that with nurses. In the public sector the patients, particularly rural Africans, were most likely to see a nurse. In the private sector a doctor was more likely to be seen. The comments made about the poor quality of the relationships with the practitioner included: lack of empathy, mistreatment, lack of respect, accusation of parents and a lack of communication.

**System Perspective**

The Department of Health commissioned a literature review on the quality of care in districts in 1999. This review worked from the following definition: “good quality care is care that meets acceptable technical standards as well as the needs and expectations of users and communities”, and focused on what goes on in facilities rather than access and appropriate utilisation. There are definite positive trends and developments, which are ascribed to the emergence of the District Health System. Findings from the review in relation to clinic services, hospital services and interpersonal relationships are summarised below.

**Clinic Services**

In assessing clinic services, the review uses mainly two National Surveys conducted in clinics in 1997 and 1998, as well as a survey in 3 provinces (North West, Northern Cape, and Northern Province) and one in the Eastern Cape. Amongst the improvements are better infrastructure and supplies in certain provinces.

Changes in five infrastructure indicators since 1997 were assessed. These were communication, emergency response, water supply, electricity and refrigerators. Several positive trends were found, particularly in the more rural and disadvantaged provinces. There was improvement in communication generally, and major improvements in electricity supply in the Free State, Northern Province and KwaZulu-Natal. The overall situation in the provision of an uninterrupted water supply in clinics has changed little since 1990. The number of clinics reporting interrupted water supply was 29% in 1997 and 34% in 1998. Emergency response time remains a major problem – no improvements were found in the surveys. There seemed to be few problems with availability of a working refrigerator (92% in 1998). In the surveys, essential equipment was checked. Baby scales were available and working in over 90% of clinics and baumanometers in 89%. Haemoglobin could not be measured at one third of the clinics in North West, Northern Cape and Northern Province. This is considered essential for antenatal care.

Drug supplies varied a lot in the surveys, and comparisons were difficult because of different methods of assessment. The Free State showed great improvements in the availability of anti-hypertensive drugs (+22%), anti-tuberculosis drugs (+29%) and antibiotics (+8%). Although there are weaknesses in drug supply generally, there seems to be an adherence to the essential drug list and the availability of certain key drugs was good.
Integration of services at clinics to provide comprehensive services appears to be a priority and has improved in seven provinces. In Gauteng and the Western Cape a quarter or less of the clinics provide antenatal care daily. The vaccine coverage was used in this review as an indicator of service output. It was found to be high enough to provide “reasonable” herd immunity. All provinces except the Eastern Cape (58%) had immunisation rates of over 70% (completed child immunisation schedule), although large differences within provinces are expected.

Support of clinics by doctors and supervision by nursing managers is seen as essential in improving quality. Medical support is less than that of nursing managers, and is lower in rural than urban areas. In 1997, 55% of clinics were visited in the last month by a doctor (lowest in Eastern Cape: 5%). A nurse manager visited 78% of clinics (lowest in Mpumalanga: 55%).

Decisions based on information are crucial to improving quality. This review found that clinics made little use of information, but there was an increasing demand from managers for data from clinics. This information focused mainly on outputs and outcomes. Exceptions are the Eastern Cape and North West, where “quality checklists” that focus on inputs and processes have recently been developed. These may facilitate greater interest and use of information.

There was a mean attendance at clinics of 25 patients per nurse per day. It was also found that there might be a lot of “unproductive” staff time. An appointment system could create a more even patient flow and reduce waiting times. The review suggests that there is adequate staffing at clinics, but that something else is missing. The Women’s Health Project (1996) is quoted in the review: “the data indicate that the staff members do not have a heavy workload and that the service is under-utilised. Staff none-the-less describe themselves as overworked. Given the …lack of support, inadequate systems, inadequate referral mechanisms, lack of appropriate skills and absence of any orientation to the clinic, it is likely that staff feel over-stretched and under-resourced”. This finding is supported by the Midterm Evaluation of the Child Survival Project in Bergville, KwaZulu-Natal, where support and mentoring of practitioners providing the service, was found to be important in ensuring quality. As an initial step following this finding, “area” or sub-district managers were put in place in Bergville. These managers are closer in body, mind and spirit to the primary health care (PHC) practitioners at clinics and communities, and can therefore potentially give better support.

**District hospital services**

The Hospital Strategy Project and its recommendations are taken as a standard against which the district hospital services are assessed. Average nursing ratios are only slightly below what is recommended, but there are huge variations between hospitals. The average medical staffing level was low (66% in the Eastern Cape), with wide variations around the average, with some hospitals having no full-time doctors.

Blood was available for transfusion at all times in 56% of district hospitals, x-rays after hours in 80%, emergency power in 95% and all had an operating theatre, according to the surveys reviewed. Indicators for equipment and drugs showed the following for district hospitals: ultrasound machine 38%, oxygen on all wards 82%, resuscitation equipment 82%, ciprofloxin 74% and zidovudine in 46%. Although all Eastern Cape hospitals had an operating theatre, only two thirds could do a Caesarean section 24-hours a day, probably due to a shortage of medical staff. Other studies reviewed showed that, in many rural hospitals, Caesarean sections were done with one doctor only, acting as surgeon and anaesthetist. Only 5% of doctors in district hospitals had adequate resuscitation skills.
The review summarises the findings on district hospitals by saying: “The evidence at present suggests that the situation in district hospitals is highly variable, although generally worse than that of regional hospitals. Management systems appear poorly developed, and the few studies examining process and outcomes of care highlight serious problems. The lack of sufficient medical personnel in the smaller district hospitals limits their effectiveness as support to PHC services. The challenges to improving quality in district hospitals include as a priority the development of a basic management and health information system. Also important are patient and community feedback mechanisms, making available existing standards (such as those developed by the Council for Health Service Accreditation of Southern Africa, COHSASA), and creating effective referral, support and continuing education processes.”

**Interpersonal relationships**

Attitudes of providers have an enormous effect on the quality of care. Poor attitudes towards the clients seem to be common and are acknowledged by the providers themselves. The problem is thought to come from the effects of socialisation during training and early professional life. Amongst the recommendations from studies reviewed are:

- Redefining professional roles to exclude the right and duty to judge patients
- Improving communication skills
- Vision building
- Team building
- Facilitating new conceptions of the “other”
- Supportive supervision

Schneider’s review looks at quality in terms of the infrastructure and systems. The assumption may be that if these were in place, quality of care would follow. Good infrastructure has to be in place to provide a service, but it does not necessarily follow that services to the client will be good quality. A step on from this review would be consideration and measurement of other aspects like care, compassion, skills, meeting of client expectations and even the perceived “spirit” in the services.

**National and provincial initiatives to improve quality**

**National initiatives**

The Public Service has the Batho Pele document to guide it in providing a customer focused service. The establishment of a Quality Assurance (QA) Directorate in the National Department of Health confirms the department’s commitment to quality and customer service. A policy on quality in health care is in a very early draft stage, and needs support and input from those with a commitment to providing quality services that are working in the field.

Norms and standards, based on best practice, set at a national level will ensure a greater move towards equity. These will be a benchmark from which provinces and districts can relate and determine their own individual standards. The QA Directorate is currently engaged in the process of developing standards for district services at various levels. This initiative builds on the process of developing a core service package for PHC, and the recognition that any service description needs to address the issue of quality and standards.
Shifts in the mindset or paradigm and the patterns in which people think, out of which the goals, rules and feedback structures arise, are the most powerful way of changing organisations.\textsuperscript{9} Visionary leadership is crucial to this. Any policy and lead from the National Department will have to give a clear vision for what a quality service would be like. It will have to be transformational in its approach to ensure a changed service rather than more of the same. National norms and standards will also only improve quality if they are implemented in a client-centred way. They are not, in themselves, the answer.

**Box 1: Accreditation Programme in KwaZulu-Natal**

In 1998 a programme for accreditation of 30 hospitals and 30 clinics in KwaZulu-Natal was started with the Council for Health Service Accreditation of Southern Africa (COHSASA). This programme, guided by international and professional bodies, sets standards for the organisational and service aspects of hospitals and clinics.\textsuperscript{10} Through a process of internal and later external audit of services, over a number of years, the facilities are assisted in achieving the standards that have been drawn up around dimensions of quality, like safety, technical competence and legality in their departments. A meeting between COHSASA and the Provincial Accreditation and Quality Assurance Unit about this programme in KwaZulu-Natal, brought out the following points:\textsuperscript{11}

- Accreditation is empowerment and continued quality improvement.
- Some hospitals in the province have the potential to be internationally accredited and the vision is for such accreditation of the new Durban Academic Hospital.
- Strong leadership is needed in hospitals to improve quality and attain accreditation.
- Upgrading of ablution facilities alone will be of benefit to clinics and hospitals.
- Comments from staff on the accreditation process:
  - Standards gave focus.
  - The process brings staff together.
  - Staff are more conscious of patients’ rights and the Bill of Rights.
  - Staff became aware of the patient’s right to complain.
  - Staff take more responsibility.

This programme has the potential to address the many gaps identified in infrastructure and basic equipment supply and maintenance.\textsuperscript{7} It does this by drawing attention to the quality gaps and empowering the staff at the service delivery level to do something about achieving the standards. It is, however, not client-centred but focused on getting the best system. It is therefore limited by its focus on the bureaucracy of health service delivery and does not address important aspects of quality, such as access and interpersonal relationships.

**Initiatives at district and facility level**

Real change in quality of care for clients and communities will only come through the acting and focusing on the point of service delivery. In this section, initiatives at a service delivery level are given as a few examples of what is being tried in districts and facilities to improve quality. In all these projects, local leadership was an important factor in getting the project off the ground.
Using a problem based approach to Quality Improvement Training (Region B, Eastern Cape)

Training of nurses and supervisors in quality improvement (QI) approaches and tools was done in 1997 in Region B of the Eastern Cape. The development of one of the issues illustrates the value of open-mindedness and looking at the purpose behind solving a problem. Lack of communication was identified as an important issue impacting on quality. Important messages on patients, clinic functioning and staff on and off duties were not conveyed within the clinic. Analysis of the problem led to the realisation that poor communication was the result of: a lack of commitment to the clinic, lack of loyalty to colleagues, as well as a lack of motivation, arising from professional nurses continuously being moved between clinics, and between the clinic and the nearby hospital. This staff rotation was a result of the clinic and primary health care being unpopular postings, so people constantly asked to be moved. Lack of recognition and career paths in Primary Health Care (PHC) were discovered to be the cause of the unpopularity of these postings. Therefore, a problem that at first looked as if it may be solved by starting a book for writing down messages, ended up highlighting the need for developing the career structure for Primary Care Practitioners.

Initially this training had good effects. It improved communication within clinics, between clinics and between clinics and hospitals. It also improved drug availability and the DOTS Programme in some areas. QI approaches and methods were later introduced as part of the curriculum for PHC Practitioner Training in the same Region. However, the facilitation of the process was done by a small group of people, as there are few people with the necessary QI skills. This lack of capacity made all the initiatives difficult to sustain. Individual managers now use QI tools on an ad hoc basis.

Promoting patient centred care (Taung district hospital, North West)

Patient- and client-centredness is part of any discussion on quality. The discussion seems to be mainly around whether it is one principle of quality improvement amongst others or the whole focus. Much of the discussion on quality focuses on the systems and processes, rather than on this key principle.

There has been a realisation in the Taung district hospital, that the limits of the biomedical model have been reached and a different approach to interactions with patients is needed. They decided to use the 3-stage assessment as a tool for a holistic, patient-centred approach. The approach involves an assessment and plan for each of the following aspects of the patient’s problem:

- Individual: What is the patient’s concept of her illness? What are the expectations from this consultation?
- Contextual: What is the setting in which this problem occurs?
- Clinical: What are the clinical issues?

The patient-centred approach has been shown to be measurable and applicable in different settings.

In Taung, a one-day workshop on patient-centredness is now part of their PHC Nurses Diploma Course for the region and several doctors are, supported by the province, to attend post-graduate training at the Medunsa Department of Family Medicine, where this sort of approach is taken.

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a Shaw V, Thetard R, Browne J, (Region B, Eastern Cape Department of Health), personal communication.
Taung district hospital has developed guidelines for patient-centred care, from their contact with the TB patients. This approach is becoming the normal practice in the hospital. By doing this they have found:17 “that the patients have felt very happy because:

- they feel they are taken into full consideration
- they understand properly what is going on with them and what is planned
- they are part of the management plans
- they see the family member/s becoming part of the health team as supporter”.

**Using the Quality Improvement Cycle to improve childhood nutrition services (Bambisana Hospital, Lusikisiki, Eastern Cape)**

Doctors and nurses realised that childhood nutrition was not being adequately dealt with, and that the Road to Health Chart (RTHC) was not properly utilised. In discussion it was decided that the issues around childhood nutrition and growth monitoring would be approached using the Quality Improvement Cycle18 (Figure 3). The process was started as a training workshop with nurses from clinics and the hospital, with one of the doctors involved.

![Figure 2: Quality Improvement Cycle](image-url)

The major issues were identified. A combined hospital-clinic team was formed and sub-teams at each facility were planned. The team then worked with the issues identified at the initial meeting, and identified the key ones and drew up problem statements. Standards were developed around each of the important
issues. The analysis was done over a period of five weeks using registers, auditing RTHCs, checking the knowledge of health workers and evaluating existing protocols.

Based on the findings of the analysis, solutions were:

- Education and training: monthly, on the job during supervisory visits and district health worker training.
- Feedback of problem analysis to staff.
- Organising “Road to Health Days” in the community.

**Implementation of these solutions:**

- Scales have been ordered for, and some supplied to clinics
- Protocols have been developed and presented at in-service training courses
- Training on scales and use of RTHC has been done
- Results have been given back to staff
- Clinic supervisory visits will start, depending on transport availability
- “Road to Health Days” in the community have been organised.

**Monitoring and Evaluation**

This is done through the regular quality improvement meetings for the sub-district and during supervisory visits in the facilities. In-service training, done regularly, addresses the training gaps identified during these meetings.

**Conclusions**

Quality has become a focus in the health services. A number of initiatives at the national and provincial level to improve quality have concentrated on the development of standards. This does not result directly in improved quality of care; there is a need for local initiatives to relate practices to the standards. The Lusikisiki sub-district, Taung district hospital and Region B, Eastern Cape have made a wonderful start to improving quality of care in their areas. They have implemented local initiatives and documented them. They will now be able to identify what is missing in the process and approach so far. Their work can contribute to the development of standards and approaches to improving quality throughout the country. These projects have shown that it is important for districts and facilities to take initiatives to improve quality of care, because they are at the point of delivery and interaction with the client and the client’s perception of the quality of care is as important as the measurable technical standards.

Following the balanced scorecard approach can facilitate a new focus on the client as the most important “customer” of the service. National, provincial, district and facility planning needs to inter-link through the development of balanced scorecards at the different levels as they relate to one another. The client/customer needs are put at the centre of the planning process and there is an integration of the client’s needs, systems and processes, human resources and finances with the technical quality issues no longer being the only focus of quality.

The examples also demonstrate the need for leadership. In order to make quality part of the usual way of doing business, a strong leadership movement needs to develop in the health services. This movement
has to take a transformational leadership approach in initiatives to improve quality of care. It must look at managing from the perspective of a vision for the future. This vision must be of the best possible standards for both the client and service. Leaders cannot afford to wait in the hope that things will align in their favour and to expect that they can then search for a breakthrough.¹²

**Recommendations**

District and other health managers need to:

- Co-design any quality initiative and service description with the community and clients/customers for whom the service is provided, ensuring that measurements and standards are created to assess the achievement of these and are not purely focused on technical standards.
- Take a lead in developing a culture of quality in health services by setting the vision and encouraging and supporting initiatives at district and facility level.
- Take a lead in districts and facilities in empowering individuals to provide quality services in line with the National and Provincial vision (as demonstrated by the examples in districts and facilities described above) and not wait for directives from National and Provincial Health Departments.
- Learn, teach and use the patient-centred clinical model¹³,¹⁴ as the usual approach in consultations.
- Address quality issues and set standards according to best practice rather than minimum standards in all service descriptions.
- Design ways to support and mentor nurses and other health care providers so that they do not feel overwhelmed by their task of providing the service.
- Use the accreditation process¹⁰ and the quality improvement tools¹ to their full potential to address some dimensions of quality, recognising the limitations of the focus and approach and creating a strong context in which a client-centred approach can be taken.
Chapter 15

The production of doctors

This chapter provides an overview of the historical arrangements for training doctors at the eight medical schools in the country and describes briefly some of the more important recent developments at medical schools in respect of equity.

With regard to first year intakes for MBChB students, the year-on-year student profiles from 1994 to 1999 show a trend towards a more equitable racial distribution of students. There has been a decrease in white student numbers, an increase in the number of African students, the number of Indian students has fluctuated but remained high in comparison with the general population and the number of Coloured students remains very low. The picture in respect of total student numbers for all academic years has changed more slowly as could be expected.

This positive trend conceals major differences between one university and the next. Some interesting anomalies are described in the chapter.

Numbers and trends in respect of attrition and throughput of students are presented but the historical data are not very robust. There are nonetheless some conclusions drawn with caution. The selection and admission criteria and processes of each of the universities are documented. All universities have complicated formulae and procedures to ensure that there is an improved and more equitable racial distribution of their undergraduate students. Each university also has a variety of academic support programmes, mentoring, extended curriculum options and outreach programmes to support the candidates who are selected from disadvantaged backgrounds. Some of these initiatives are described and discussed.

Five universities are busy with curriculum reviews. The objective is to ensure that they produce graduates who are appropriately skilled to provide service in the South African context. There should also be an impact on the racial distribution of graduates.
oduction

South Africa has eight medical schools which at any one time train close to 15 000 students in Medicine and Surgery, Dentistry, and a range of allied health sciences. MBChB students account for about half of this student population. Historically, three of the eight schools were set up to train black health personnel, Medunsa and Unitra training almost exclusively African students, while Natal serviced primarily Indian students. Historically white medical schools admitted few, if any, African students until about ten years ago. Where students were admitted, they were subjected to the same institutionalised discrimination which permeated the whole society, as recently highlighted by the *Internal Reconciliation Commission Report* published by the Faculty of Health Sciences at the University of the Witwatersrand.

This picture has changed, particularly since 1994. Institutionalised discrimination is formally a thing of the past, and all medical schools subscribe to policies which admit students irrespective of colour. Furthermore, all medical schools have, since the late 1980s and early 1990s, put in place student selection and academic support mechanisms aimed at facilitating access for students from historically disadvantaged educational backgrounds, in order to address the inequities of the past.

However, in recent times questions have been asked as to whether these initiatives are achieving substantial changes in the student demographic profiles at medical schools: are black African students in particular gaining access to medical schools in substantial numbers? Is not racial exclusion being replaced by indirect exclusion through language and academic barriers? Are students receiving the necessary support to see their studies through once they have been admitted? Furthermore, is the student population at South African medical schools beginning to reflect the demographics of the country?

These are the questions informing this study. And these are questions which are asked in particular of those five institutions which, in the past, were accessible only to students classified as “white”. The first part of the study will look at trends in student numbers and racial composition of student populations in the past five years, while the second part will review selection criteria and academic and non-academic support available to students.

This study was undertaken by the Public Health Programme at the University of the Western Cape. It is based on data collected by means of a questionnaire sent to all medical schools. These are supplemented by a number of interviews and documentation submitted by several schools. All eight medical schools responded to the questionnaire, and are thanked here for their co-operation.

The study employs a mix of qualitative and quantitative methods of data collection and analysis. The racial classifications employed under the old dispensation are used throughout the study to address issues of redress and equity.

The study is a follow-up from Hashim Moomal’s chapter in last year’s *South African Health Review*. While Moomal provided an overview of the production of medical graduates at South African Medical Schools, this year’s study takes a closer look at developments in first-year intakes of medical students, student selection criteria and academic support programmes.

dent profiles 1994 - 1999

In 1994, 1 427 students began their studies for a MBChB degree at South Africa’s eight medical schools.

At three medical schools (Pretoria, Orange Free State and Stellenbosch), the overwhelming majority of students were still white, and a very small percentage African. Amongst the five historically white institutions, only the Universities of Cape Town (UCT) and the Witwatersrand (Wits) exhibited a somewhat
different picture, with a white student population of just under 50% and a black African student population of 22.9% and 14.4% respectively.

In the following years, the picture changed gradually. Figure 1 reflects the fluctuations in first year MBChB student numbers at all medical schools in the years 1994 to 1999.

Figure 1: Total first year intake MBChB students at SA medical schools 1994 - 1999

A number of trends emerge:

- The proportion of white students has fallen steadily since 1994. In that year, just under 50% of students were white. By 1999 the percentage of white students has dropped to around 35%.

- The number of African students has been rising slowly, but consistently, to reach an all-time high in 1999, when African students made up 38% of the MBChB intake (compared to 35% white students). In 1999 African students made up 19.9% of the student population in historically white institutions.

- The number of Indian first-year students has fluctuated between a low of 16.5% in 1995 and a high of 22.3% in 1998. The proportion of Indian students is considerably higher than the proportion of Indians in the population. Indian students are particularly strongly represented at Natal University for historical reasons and increasingly also at the University of the Witwatersrand.

- Coloured students joined medical schools in slowly increasing numbers in the years 1994 to 1997. Since then, their numbers have dropped again, reaching 1996 levels in 1999. They are largely concentrated at the two Cape Town medical schools, UCT and Stellenbosch.
Figures look less equitable when overall student numbers are considered rather than first year intake (see Figure 2). It is evident that white students remain in the majority, more dramatically so, when one looks at developments at historically white universities only. This reflects the historical inequities at many universities.

Figure 2: MBChB students at SA medical schools 1994 - 1999

These figures also hide substantial regional and local differences:

- At the University of Cape Town, both absolute and proportional numbers of black students have been rising steadily since 1996, while numbers of white students have decreased substantially.
- At the University of the Orange Free State (UOFS), overall student numbers have fallen substantially in the past two years, as have the numbers and proportion of white students, while the percentage of African students has increased from 0.9% in 1994 to 14.2% in 1999.
- At the University of Pretoria the number of African medical students has increased over the past five years, from 9 to 115, reflecting a percentage change of total student population from 0.7% to 9.5% while its proportional intake of white students has dropped from 95.6% to 81.8%.
- At the University of Stellenbosch the number of African students remains insignificant, but the university has seen steady and substantial increases in their numbers of Coloured and Indian students. The number of white students has dropped since 1994.
- The University of the Witwatersrand, starting from a somewhat more equitable situation in 1994 saw a drop in its number of African students between 1994 and 1997, a development which has been reversed in the last two years. At the same time, the percentage of white students has dropped from 57.4% to 45.2% and the proportional representation of Indian students has increased from 28.5% to 40%.
- At the three historically disadvantaged universities, black students continue to make up the overwhelming majority of students. At the University of Natal numbers are divided almost equally between African and Indian students, while the University of the Transkei (Unitra) is beginning to admit increasing numbers of Indian students.
15: The production of doctors

Table 1: The proportional representation of medical students at South African universities

<table>
<thead>
<tr>
<th>Race</th>
<th>UCT</th>
<th>UOFS</th>
<th>Medunsa</th>
<th>Natal</th>
<th>Pretoria</th>
<th>Stellenbosch</th>
<th>Unitra</th>
<th>Wits</th>
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<td>15.9</td>
<td>0.9</td>
<td>79.3</td>
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<td>0.7</td>
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</tr>
<tr>
<td></td>
<td>1999</td>
<td>28.6</td>
<td>14.2</td>
<td>76.6</td>
<td>46.8</td>
<td>9.4</td>
<td>1.4</td>
<td>80.0</td>
</tr>
<tr>
<td>Coloured</td>
<td>1994</td>
<td>14.9</td>
<td>2.4</td>
<td>1.5</td>
<td>3.6</td>
<td>1.0</td>
<td>8.8</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>1999</td>
<td>16.1</td>
<td>5.5</td>
<td>1.3</td>
<td>3.6</td>
<td>2.3</td>
<td>15.5</td>
<td>2.4</td>
</tr>
<tr>
<td>Indian</td>
<td>1994</td>
<td>11.6</td>
<td>0.1</td>
<td>19.2</td>
<td>50.6</td>
<td>2.6</td>
<td>0.5</td>
<td>11.5</td>
</tr>
<tr>
<td></td>
<td>1999</td>
<td>15.3</td>
<td>1.7</td>
<td>21.5</td>
<td>44.9</td>
<td>6.5</td>
<td>6.6</td>
<td>17.4</td>
</tr>
<tr>
<td>White</td>
<td>1994</td>
<td>57.6</td>
<td>96.6</td>
<td>0.0</td>
<td>95.6</td>
<td>90.7</td>
<td>0.0</td>
<td>57.4</td>
</tr>
<tr>
<td></td>
<td>1999</td>
<td>37.5</td>
<td>78.5</td>
<td>0.5</td>
<td>4.6</td>
<td>81.8</td>
<td>76.5</td>
<td>0.2</td>
</tr>
</tbody>
</table>

In summary it can be said that the last five years have seen encouraging, albeit slow changes in the MBChB student profiles at South African medical schools, which are reflected in first-year intakes. While this reflects a move towards redressing historical inequities, figures also show very clearly that racially entrenched differences persist and that equity remains a long way off. Historically disadvantaged institutions (Natal, Medunsa, and Unitra) continue to serve an almost exclusively black constituency.

**Attrition and throughput rates**

Information about attrition rates is scanty and unreliable. While most universities keep data on how many students drop out from year to year, all stress that these figures do not reflect reasons for discontinuation of studies. These reasons include failing of courses, internal or external transfers, financial and other personal reasons.

A cautious analysis of available data shows that attrition rates vary dramatically from year to year and between years of study. As a rule, the first, pre-clinical years with their focus on natural and basic medical science subjects display a much higher rate of attrition than the subsequent clinical years. There is also clear evidence that in most cases attrition rates among black, and particularly, African students are substantially higher than among white students. The example of one historically white university illustrates these points:

Table 2: Average attrition rates (%) by race in all years at one SA medical school 1994 – 1998

<table>
<thead>
<tr>
<th>Year</th>
<th>African</th>
<th>Coloured</th>
<th>Indian</th>
<th>White</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>28.8</td>
<td>12.1</td>
<td>8.1</td>
<td>2.6</td>
<td>12.9</td>
</tr>
<tr>
<td>1995</td>
<td>13.9</td>
<td>15.0</td>
<td>8.7</td>
<td>2.9</td>
<td>10.1</td>
</tr>
<tr>
<td>1996</td>
<td>19.7</td>
<td>18.7</td>
<td>5.0</td>
<td>2.7</td>
<td>11.5</td>
</tr>
<tr>
<td>1997</td>
<td>16.2</td>
<td>16.7</td>
<td>9.0</td>
<td>2.6</td>
<td>11.1</td>
</tr>
<tr>
<td>1998</td>
<td>20.8</td>
<td>6.0</td>
<td>11.6</td>
<td>7.6</td>
<td>11.5</td>
</tr>
<tr>
<td>Average</td>
<td>19.9</td>
<td>13.7</td>
<td>8.5</td>
<td>3.7</td>
<td>11.4</td>
</tr>
</tbody>
</table>
While average attrition rates, as well as attrition among white students, remain fairly stable over the years, attrition among black students varies dramatically, making it difficult to identify definite trends, except to say that it remains at a worryingly high level overall.

Table 3 reflects the vastly higher attrition rates in the early years of study (especially the second year) particularly among African students, as compared to the following four years. These may represent a natural weeding out process of students not well enough equipped for the rigours of study in this field. They may also indicate, however, a particular difficulty with the highly theoretical science subjects and their heavy content overload, compared to a greater ability to cope with the more practical clinical years.

<table>
<thead>
<tr>
<th></th>
<th>African</th>
<th>Coloured</th>
<th>Indian</th>
<th>White</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st yr</td>
<td>22.2</td>
<td>0.0</td>
<td>20.4</td>
<td>4.9</td>
<td>11.9</td>
</tr>
<tr>
<td>2nd yr</td>
<td>35.3</td>
<td>30.0</td>
<td>42.9</td>
<td>21.5</td>
<td>32.4</td>
</tr>
<tr>
<td>3rd yr</td>
<td>21.4</td>
<td>0.0</td>
<td>2.2</td>
<td>8.0</td>
<td>7.9</td>
</tr>
<tr>
<td>4th yr</td>
<td>15.8</td>
<td>0.0</td>
<td>2.6</td>
<td>3.0</td>
<td>5.4</td>
</tr>
<tr>
<td>5th yr</td>
<td>9.1</td>
<td>0.0</td>
<td>4.0</td>
<td>0.9</td>
<td>3.5</td>
</tr>
<tr>
<td>6th yr</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Average</td>
<td>21.0</td>
<td>6.0</td>
<td>14.4</td>
<td>7.6</td>
<td>12.2</td>
</tr>
</tbody>
</table>

Concerning throughput rates, i.e. the average time students take to complete their degree, very little reliable information for recent years exists at this stage.

The University of the Witwatersrand conducted a study in 1990 which reported that of students admitted between 1980 and 1983, 13% failed and were excluded, 10% repeated one or more years of study, and 7% withdrew voluntarily. The study emphasises, however, that the student cohort under investigation was overwhelmingly white, male and with no academic experience other than matric. Similar, updated studies are an obvious research need. At present, the University of the Witwatersrand reports that the average length of time students take to complete their studies is 6.1 years instead of 6 years.

The University of Natal reports that students struggling to complete their degree in six years are those coming from schools which lack science facilities such as laboratories. Many of these students take seven to eight years and sometimes up to nine years to complete.

**missions and Selections**

Students applying to study Medicine at any of South Africa’s medical schools undergo a stringent selection process, firstly, because of the academic demands of the programme of study, and secondly, because applications far exceed available places.

The criteria and processes used to select students into MBChB studies (and university studies generally) have been the subject of much controversy and debate over the past ten years as they represent the main mechanism by which racial and gender imbalances in student profiles can be rectified. As a result, all medical schools have in recent years evaluated and adapted their selection criteria and processes. At this stage, the selection of students is in most cases the responsibility of a vice or deputy dean and is made up of
elaborate and time-consuming processes. Table 4 summarizes the selection criteria used by medical schools in 1997 to select students for admission in 1998.

All schools, whose data are available, use a mix of academic and non-academic criteria to select students, although academic criteria account for between 70% and 80% of admission requirements. In assessing non-academic criteria, universities usually look at leadership skills and proven extra-curricular activities as well as community service. In most cases, these are assessed through either a biographical questionnaire or through an interview. A number of schools, such as, for example, the University of the Orange Free State, also award bonus points for what could be called “additional disadvantage”. Thus, students coming from the Northern or the Eastern Cape have between three and six points added to their overall score, while students coming from the rural areas of the Free State have two points added.

Academic criteria emphasize overall matric pass rates (the M-score) as well as subject choices. Requirements for matric pass rates vary, as do requirements for subject choices. Most universities require Physical Science and Mathematics, and in some cases Biology, passed on Higher or Standard Grade, while some schools, such as Pretoria, Orange Free State and Transkei additionally have language requirements. The exception is the University of Natal which does not require certain subject choices, but a minimum of 38 matric points and a matric exemption.

Furthermore, most universities have made arrangements to accommodate “special cases” who do not comply with standard criteria. Responsibility for such cases usually rests with the deputy or vice dean and sometimes, such as in the case of the University of the Witwatersrand, with a specially designated “Special Case Committee”.
### Table 4: Comparison of Selection Criteria – SA Medical Schools for Admission in 1998

<table>
<thead>
<tr>
<th></th>
<th>UCT</th>
<th>UOFS</th>
<th>Medunsan</th>
<th>Natal</th>
<th>Pretoria</th>
<th>Stellenbosch</th>
<th>Unitra</th>
<th>Wits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quota</strong></td>
<td>No</td>
<td>No</td>
<td>N/A</td>
<td>No</td>
<td>Students are selected from separate pools: gender, Science Fac., Non-Science Fac., SADC, Defence Force, Affirmative Action</td>
<td>Gender: 50:50 BSc: +/- 20 BSc III/Grad. +/- 5-10 Disadvantaged</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td><strong>Minimum Academic Requirement</strong></td>
<td>PSM = E on HG D on SG</td>
<td>85% for White &amp; Indian applicants 65% Black Language: C</td>
<td>PSM of 1.2 Swedish rating points</td>
<td>Matric exemption</td>
<td>1st lang. = HG 70% 2nd lang. = HG 60% PSM = HG 70%</td>
<td>PSM C on SG or D on HG B aggregate</td>
<td>Eng. D on HG PSMB D on HG or C on SG</td>
<td>AR = 65 (mean of 5 subjects) PSM 130 (sum of Maths and higher of PS or B)</td>
</tr>
<tr>
<td><strong>Non Academic</strong></td>
<td>Leadership qualities, Extra-curricular involvement</td>
<td>Achievements in leadership, culture, sports plus points for rural and region</td>
<td>N/A</td>
<td>Leadership qualities, Extra-curricular involvement</td>
<td>Sport, leadership, cultural, community service, medical involvement</td>
<td>Leadership, community service, cultural, communication, languages, work experience, disadvantaged</td>
<td>Yes</td>
<td>Leadership, clubs &amp; societies, cultural activity, sport, languages, employment, community service, career info</td>
</tr>
<tr>
<td><strong>Ratio of AR: NAR</strong></td>
<td>80:20</td>
<td>100:20</td>
<td>N/A</td>
<td>70:30</td>
<td>80:20</td>
<td>75:25</td>
<td>N/A</td>
<td>80:20</td>
</tr>
<tr>
<td><strong>Interview</strong></td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
<td>Graduates only</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Maths</strong></td>
<td>E on HG D on SG</td>
<td>Pass on SG</td>
<td>N/A</td>
<td>No</td>
<td>HG 70%</td>
<td>All cand. with &lt; 60% are tested</td>
<td>N/A</td>
<td>Pass at HG &gt;60% at SG</td>
</tr>
<tr>
<td><strong>Select on tests</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
<td>Yes, via Lyceum Colleges</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Recognition of prior learning</strong></td>
<td>Yes – Vice-dean’s decision</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Over offer by 30 – 50%</td>
<td>Admit as many black applicants as possible, then top up</td>
<td>Preference given to candidates from disadvantaged backgrounds</td>
<td>Mature students are considered separately, but general principles of selection apply. Biographical questionnaire. Testimonial from teacher or headmaster.</td>
<td>Equal places male/ female</td>
<td>If rejected early but marks improve, can reactivate application</td>
<td>Admit to 1st year only</td>
<td>Biographical questionnaire</td>
</tr>
</tbody>
</table>

**Note:** PSM = Physical Science and Maths, PSMB = Physical Science, Maths, Biology, AR = Academic Rating, NAR = Non-academic Rating, H = Higher Grade, L = Lower Grade

This table is based on a table compiled by the Committee of Medical Deans, supplemented by information from questionnaires and interviews. We thank Prof. Price for permission to make use of the table.
The production of doctors

demic Support Programs

All medical schools today have academic support programs, which, despite considerable differences in shape and size, share the goal of assisting students from disadvantaged educational backgrounds to adjust to the rigours of academic study. In addition, a number of schools (Cape Town, Natal, Pretoria, Orange Free State and Stellenbosch) have also embarked on large-scale reviews and reforms of their curricula, moving towards problem- and community-based approaches to medical education.

Within their programs schools display marked differences. Table 5 summarises the components making up academic support/development at all medical schools. While most schools make use of mentor and peer support systems and are actively engaged in curriculum reviews, only the University of the Witwatersrand appears to be making staff development a focus of its academic development activities. The University of Stellenbosch has developed an outreach program, aimed at potential high school pupils, while two schools offer extended curricula, which cover the curriculum of the first two years over an extended period of three years, while providing additional support to students.

Below a number of programs or their components are described in more detail.

mentoring Programmes

All medical schools which submitted information about their academic support programmes offer mentoring or peer support schemes to their first-year students. As a rule, senior students volunteer, in some cases for a nominal honorarium, to mentor first-year students in all aspects of student life (e.g. time management, finding their way around campuses, working in groups, adjusting to academic demands). All schools report that these schemes have proven to be highly successful in improving social and academic acclimatisation to university life.

In some cases, peer support schemes are combined with tutorials, which focus on academic support for first-, second-, and third-year students. Students either participate voluntarily in these, or they are identified as being at risk by means of failed tests, etc. and allocated to tutorials. Tutorials can be offered on a one-to-one basis or, more frequently, in small groups run by senior students of high academic merit in the particular subject area.
Table 5: Academic Support Programmes

<table>
<thead>
<tr>
<th></th>
<th>UCT</th>
<th>Medunsa</th>
<th>Natal</th>
<th>Pretoria</th>
<th>UOFS</th>
<th>Stellenbosch</th>
<th>Unitra</th>
<th>Wits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foundation Courses</td>
<td>x</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Tutorials</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suplementary Instruction</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Writing Centre</td>
<td>✓</td>
<td>N/A</td>
<td>x</td>
<td>x</td>
<td>N/A</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Mentor System</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Extended Curriculum</td>
<td>✓</td>
<td>N/A</td>
<td>x</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
<td>N/A</td>
<td>x</td>
</tr>
<tr>
<td>Other</td>
<td>x</td>
<td>N/A</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓/✓ (in mentoring programme)</td>
<td>N/A</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who makes use of above programmes?</td>
<td>All students</td>
<td>x</td>
<td>N/A</td>
<td>✓</td>
<td>x</td>
<td>✓✓ (in mentoring programme)</td>
<td>✓ (in mentoring programme)</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Black students</td>
<td>x</td>
<td>N/A</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Students identified as being at risk</td>
<td>x</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Students on voluntary basis</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>N/A</td>
</tr>
<tr>
<td>Staff Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching Portfolios</td>
<td>x</td>
<td>N/A</td>
<td>✓</td>
<td>x</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>x</td>
</tr>
<tr>
<td>Teaching Rewards</td>
<td>x</td>
<td>N/A</td>
<td>x</td>
<td>x</td>
<td>N/A</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Short Courses</td>
<td>x</td>
<td>N/A</td>
<td>x</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Other</td>
<td>x</td>
<td>N/A</td>
<td>x</td>
<td>x</td>
<td>N/A</td>
<td>✓</td>
<td>N/A</td>
<td>x</td>
</tr>
<tr>
<td>Curriculum Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum Reviews and Evaluations</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Departmental Evaluations</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Curriculum Research</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Other</td>
<td>N/A</td>
<td>N/A</td>
<td>x</td>
<td>x</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>x</td>
</tr>
</tbody>
</table>

b N/A: Information and documentation supplied by the medical school does not comment on this topic.
c A role-modelling system, with doctors from the community acting as role models for medical students in the clinical years.
d Winter Programme for Grade 11 pupils (see below).
e A student advisor’s office at the level of assistant dean which is open to students every day, and recognition of student excellence through congratulatory letters and merit scholarships.
ended curriculum

The Universities of Pretoria, Cape Town and Stellenbosch offer an extended, i.e. seven-year MChB programme. While its content does not differ from the six-year programme, the pace of academic work is slower in the first three years, and additional academic support is offered to students. While students are not forced to attend the extended programme, those who are identified as being at risk on the basis of their academic merit are advised to sign up for the programme. Although no conclusive correlation can be established, indications are that these programmes have had a positive impact on the reduction of attrition rates. At the University of Stellenbosch, attrition within the extended programme dropped from 23.8% in 1996 to 10.3% in 1998. At the University of Cape Town, 100% of all black students passed their first year in 1998.

Nevertheless, these programmes are not without problems: at present, the separation of students into different streams carries with it stigmatisation, which impacts negatively on the acceptability of these programmes. Considerable changes in attitude are required, particularly on the part of teaching staff, towards extended programmes, which are likely to become a common feature in the national university landscape in the coming years.

treach

In 1998 the University of Stellenbosch offered a Winter Programme as part of a recruitment drive to draw the best learners from historically disadvantaged schools to register for study in Medicine and other subjects. It targeted schools and invited academically excellent students to the Winter Programme. The programme tested their ability to cope with university pressures and identified special talents pertaining to the relevant fields of study. The best students (22 in 1998) were then offered bursaries on condition that they maintained their academic performance and that they registered at the University of Stellenbosch.

riculum Reviews

A number of medical schools are presently engaged in curriculum reviews and evaluations, namely the Universities of Cape Town, Natal, Pretoria, Orange Free State, and Stellenbosch.

At Stellenbosch the pre-clinical curriculum has been adapted to significantly reduce the volume of basic sciences; to place increased emphasis on the clinical relevance of science subjects; and to integrate large portions of the content of pre-clinical subjects into clinical components of the course. At the same time, changes to clinical components of the course aim to emphasize health promotion and prevention, use a problem-solving approach, and improve managerial and social skills necessary to function as an independent primary care practitioner.

The University of the Orange Free State has been restructuring its degree for implementation in 2000 to entail five years of undergraduate education and training, to be followed by two years professional training and one year of community service. The new curriculum will make use of skills laboratories in the initial years and will be composed of three phases: Phase 1 (one year): preparation and clarifying perspectives; science base; Phase 2 (two years): theme-based, core course, preparation for clinical training; Phase 3 (2 years): clinical training, reinforcing basic knowledge.
Equally, the University of Natal is restructuring the curriculum to introduce a five-year programme based on problem-based learning with an emphasis on self-directed learning and computer-based education.

All new programmes are at present still in the planning stage or in the very early stages of implementation. Careful monitoring and evaluation of their success and impact in the coming years will greatly contribute to the development of best practice in medical education.

Case Study: University of the Witwatersrand

The Faculty of Health Sciences at the University of the Witwatersrand has established an extensive support system, which is co-ordinated from the Academic Development Programme and the Office of the Assistant Dean (Student Advisor). While the latter is responsible for both academic and non-academic support not directly related to course work, the former takes responsibility for departmental tutorials.

The Assistant Dean’s office incorporates a number of functions:

- Daily consultation hours when students can approach the Assistant Dean or his representative with any academic or non-academic problem. The number of consultations thus conducted has risen from 652 in 1996 to 1 356 in 1998. In addition, students have access to assistance over the telephone at all times.

- A one-to-one tutor scheme (over and above departmental tutorials) which focusses on helping “weak students to overcome difficulties in the methods of study and learning”.

- A mentor scheme in which students identified as requiring additional academic support are allocated a senior student as a mentor, who is expected to deal with issues such as time management, the working pace at university, working in groups, etc.

- A Supplemental Instruction scheme, in which students achieving less than 60% in their year marks receive special instruction from senior students.

- A focus on recognising student excellence by sending out congratulatory letters to all students achieving good results and by awarding 79 university administered scholarships to top matriculants and first class students. Both schemes are reported to be extremely successful in motivating students, and, furthermore, encouraging students to offer their services as tutors.

Departmental tutorials, administered by the Academic Development Programme, offer assistance particularly to students in the first three years of study. Furthermore, course co-ordinators are available to offer general assistance, and students are allocated to staff members who keep track of their academic performance.

At a glance, these offerings provide a wide variety of support for students, undoubtedly enhancing their ability to cope with university life and university study in many cases. They also create the impression, however, of a considerably fragmented set of offerings where a more integrated approach might be more beneficial. An in-depth investigation, focussing on the impact of the programme on students, would be of great benefit to all academic support programmes in the country.
The findings of this study are that:

- The recent intake of first-year students signifies steady progress towards a more equitable distribution and as admissions changes take effect the racial imbalances in the production of doctors in South Africa will be reduced. However, an equitable distribution continues to be far off. At the present moment, particularly white and Indian students continue to be over-represented compared to the country’s overall demographic profile. Statistics reveal substantial regional and local differences within this picture, reflecting in part regional demographics, and in part entrenched historical inequities.

- Medical schools have, in the past years, developed elaborate and sophisticated mechanisms to select students into their programmes, giving weight to both academic and non-academic requirements. Definitive data on the impact of selection criteria on student success do not exist, although most medical schools express confidence that their selection criteria are reliable indicators of student success. However, selection criteria remain a thorny and controversial issue, given their location between a schooling system which does not equip its matriculants for tertiary study and universities’ need to address issues of redress and equity. As medical schools review and restructure their curricula, they will also have to revisit their selection processes to assess the appropriateness of criteria for revised programmes.

- Reliable information on attrition rates is scarce and attrition tends to vary dramatically from year to year. Nevertheless, available data suggest that attrition rates remain at worryingly high levels, particularly among black students and in the first two years of study. This indicates that effective mechanisms to facilitate student success are not yet in place. Furthermore, there is an urgent need to revisit and review particularly the science-oriented pre-clinical years, in terms both of content overload and staff capacity to facilitate learning.

- Academic support programmes and structures for students vary considerably in shape and size. Many share two characteristics, however: they focus almost entirely on students’ development and remediation and they run in parallel to mainstream teaching programmes, thus weakening their impact for two reasons: a) Parallel programmes tend to carry with them the stigma of remediation, reducing willingness to join them b) Academic support programmes which are not in some way integrated into the mainstream of teaching and address issues of curriculum and staff development, lose their effectiveness, when students return into the mainstream.

- At a number of universities, reviews of curricula have begun or are nearing completion. While it is too early at this stage to assess the success and impact on the quality of medical education and students’ ability to cope with their study, monitoring and evaluation research in the coming years is an urgent requirement.

It should be stressed that the findings of this study are based on a limited set of data. While they reveal some definite trends in the change in student demographics at medical schools, they open up, rather than find answers to, many questions concerning student success in their studies, selection of students, academic support, and, lastly, the quality and appropriateness of medical education in general. These are research themes which require longitudinal and in-depth case studies.
Chapter 16

Distribution of human resources

The strong emphases on curative, high-tech health care, hospital-based and doctor-centred care, have in many respects been broken by the shifting of public financial allocations, redirection of training priorities, etc. Though the targets are in many respects being realised, the efforts put public health professionals under tremendous and protracted pressure. Unfavourable side-effects are emigration of health professionals, retrenchments, and declining performance and morale.

Excellent progress has been achieved in addressing racial imbalances of the public health workforce. Racial discrimination has been reduced and affirmative measures have improved racial representation in the make-up of the public health sector management echelon. Unfortunately, highly skilled, competent and motivated staff have been lost in the process. Whites still predominate in the formerly white provinces, and Indians appear in many cases to be over-represented compared with population numbers.

Implementation of affirmative policies and measures has resulted in better equity in gender representation in the public sector management. Women are well represented in the higher professional cadres and in management positions, but not yet at the top. Reasons for their dominance in the nursing and supplementary professions are historical and an international phenomenon. Too few women in middle, senior and top management positions remains a problem, especially in some provinces.

Historically fragmented human resource establishments have largely been integrated into new provincial ones. Significant progress has been made with the dismantling of the homeland and other staff components and amalgamation into new provincial staff establishments. Challenges remain in amalgamating different organisational cultures, mending divides, and managing the down-sizing of bloated establishments. The amalgamation of provincial and local authority staff establishments towards integrated district human resource systems has as yet not really begun.

Some progress has been made to lessen the urban/rural disparities in the distribution of some professionals, especially doctors in the public sector. The PHC thrust, the accompanying shift of resources to PHC settings, the upgrading of public health facilities in rural areas, importation of foreign health professionals, and community service doctors, have all led to a far better deal for deprived areas and populations. More is still to be done to deploy and keep professionals in neglected areas.

Little to nothing has been achieved in accessing private professionals to build and strengthen the public health sector. Private health services and establishments are flourishing but public health is struggling. The private health sector has been alienated and public sector professionals continue to drain to the private sector. There is a need for renewed debate on the purchaser/provider split and other private-public provider options to access the private sector's professional skills.
Worker consultation and participatory management are greatly improved. Developments of the past six years point to the extensive organisation and representation of workers; worker-manager interaction has become common; and the devolution of authority and decision-making is progressing.

Productivity and worker morale are poor. Grievance and misconduct management of public health staff are stable but tense and compromise the efficiency, satisfaction and reliability of the workforce. Though major achievements can be reported on dealing with unrest and disruptions in the workplace, LR, morale and misconduct still pose huge challenges and serious concerns. Many factors inherent in the protracted transformation process militate against the ideal of a contented and motivated workforce. There is a need to address immediate material and non-material needs of personnel.

**Introduction**

**Historical Background**

The 20th Century has seen the professionalisation of health occupations, the establishment of regulatory councils and professional associations, the founding of training schools for an increasingly diverse set of health professions, increasing numbers of professionals, the unionisation of workers and the advent of a very enlightened and legislated labour environment.

There is still, however, wasteful utilisation and inequitable composition, development and distribution of human resources in health.\(^1\)\(^-\)\(^9\)

Allopathic medicine dominates and monopolises health and non-allopathic professionals are marginalized. With this trend there has been a growing emphasis on curative and high-tech health care, accompanied by hospital-based and doctor-centred services, creating a supply of health personnel not appropriately equipped for preventive and promotive care.

In South Africa racial segregation, accompanied by the fragmentation of services and staff into separate facilities, homelands and “own affairs” divisions divided human resources and led to differential and exclusive treatment in training and development.

The 1919 Public Health Act and later legislation organised services and therefore the deployment of health staff under national, provincial and local authorities, further fragmenting public health personnel developments. The resultant urban/rural divide aggravated the disparities in the distribution of personnel in health, catering well for urbanites but under-resourcing rural areas.

Very separate private and public sectors and the deliberate strengthening of the former at the expense of the latter has led to most health professionals working in the private sector.

Males (especially white males) occupied most management positions, and more males were selected for training in the high status health professions than females, resulting in neglect of women (especially black women).

As in all other sectors of the economy workers were not consulted nor did they participate in public health sector management, and the bureaucracy and organisational culture were not conducive to sound labour relations.

Efforts were made over the years\(^10\)\(^,\)\(^11\) to reform the services but the socio-political order prevented this.\(^5\) Since 1994 there has been a commitment to fundamental reform of the health system, including the human resource elements.
Challenges of human resource reforms for health

This chapter provides some insights into the current state, trends and prevailing constraints affecting human resources (HR) in the health sector. Interviews were conducted with health officials managing and developing HR at all provincial and national head offices. This chapter aims to draw the attention of decision-makers at all levels to the quandaries facing human resources for health service and also highlights possible solutions to the observed constraints. Community service for doctors is not discussed as this is the subject of a chapter on its own (chapter 17).

Transformation - impact on human resources

Amalgamation of historically fragmented staff establishments

The transformation of the health sector has been accompanied by a profound and diversified impact on public health employees, but also on the private health care provider. One of the most important challenges was the amalgamation of separate staff establishments, in particular those of the former national, provincial and homeland governments into integrated human resource (HR) establishments for the new provinces. The combined public health sector had 319 238 posts, 225 895 incumbents of those posts, and 93 343 vacant posts by mid-July 1999.

Staff establishments have been transformed with much more difficulty and constraint in some provinces than in others due to the complexities of the former fragmentation, the sizes of the fragments to be amalgamated, and the degree of independence of former administrations. There were three (KwaZulu-Natal), four (Eastern Cape, Free State, Mpumalanga, North West) and even five (Northern Province) administrations, each with its own staff establishment and organisation culture. Gauteng and the Western Cape retained their former cores, and the Northern Cape its former regional office core, necessitating fewer changes. Amalgamation has, therefore, progressed in dissimilar ways and at a different pace in each of the nine provinces. In most provinces amalgamation and restructuring exercises are not yet complete.

A major challenge posed by the District Health System (DHS) has not yet been addressed - the integration of provincial and local authority staff into combined district health establishments. Different legislation, different service conditions and different remuneration packages, as well as divergent management styles and organisational cultures render this necessary integration of staff a daunting challenge. The challenge is even bigger when seen in the light of “lack of capacity” and “bankruptcy” in many smaller local governments. Once again, this integration will tax the staff involved to unprecedented extent, and more so due to the inherent multi-dimensional vested interests and power struggles.

The many faces and formats of transformation of HR

Transformation is more than amalgamation. In the public sector, it is also about shifts in emphasis, reprioritisation of budgets and resources towards primary health care (PHC), with concomitant down-sizing of sophisticated curative and tertiary care. (For the private sector and the relationship between the two sectors the issues and impacts are less clear.) It is also about decentralisation through the introduction of the DHS, devolution of authority to regions (and eventually districts), the establishment and staffing of new offices and posts, as well as the integration or abolition of existing establishments. Each province has managed transformation differently. Some provinces are far ahead, while others are still at the start-up stage. In general these changes demand the massive movement, redeployment and reshuffling of staff.
In the past five years the policy and legal environment of HR management in the public and private health sectors has changed significantly.

New human resource related legislation includes:
- Public Service Act (1994)
- Labour Relations Act (1995)
- Public Service Amendment Act (1997)
- Employment Equity Act (1998)
- Basic Conditions of Employment Act (1998)
- Skills Development Act (1999)
- Public Service Regulations (1999)

National policy documents of relevance for human resources in health include:

Restructuring HR organisational establishments in the provinces - new emphases, new approaches

Several provinces are either engaged in skills auditing processes or have completed audits. The purpose of these audits is to determine new staffing norms and to create new staff establishments in line with new management plans.

Many provincial departments of health have created separate sections for a) HR Planning and Development and b) HR Management and Labour Relations but there is little uniformity in developments among the provinces. In certain health departments Transformation Units also exist (though some are still ad hoc); in other provinces such units resort in the Premiers’ Offices. “Transformation Units” are mandated to monitor and facilitate transformation in departments. As a whole, human resources in public health departments are receiving far more attention, and in more dimensions, than was the case before.

Several “paradigm shifts“ have occurred in the management of HR.

1. Firstly, there is HR transformation in terms of the shift from an “administrative paradigm” to a “management paradigm”.
2. Secondly, there is the “handing over (of) authority and autonomy to large hospitals to determine their own policies”.
3. Thirdly, shifts occurred in “organisational and management cultures”. Managers are more approachable.
4. A fourth shift features a greater “business orientation of the management of the public service”.

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Transformation - pace, confusion, neglect

Transformation accelerated the process of restructuring. Many provincial HR spokespeople complained about the continuous disruptive effects of restructuring on motivation, morale, relationships and staff turnover, resulting in overburdening of remaining staff. Similarly, “new” and “old” management styles and organisational cultures, and “friction” between these, had and still have adverse effects on staff and relationships between them. In KwaZulu-Natal the new management were accused of “not wanting to learn from past experience before implementing new systems and policies”. Also, traces of discontent surfaced concerning “policies being decided up there” (i.e. at national level), for the provinces just to implement and “leaving their hands cut off” in the face of persistent problems.

Staff have expressed concerns about the transformation. There is a perception that “delivery” is being squeezed out of staff who are over-stretched. There is also a criticism that the national Department of Health has engaged in the development of a “silo… of white papers” resulting in haphazard transformation. Some feel that the transformation is not co-ordinated and it’s not very focused. In short, staff are showing signs and symptoms of “burn-out”.

Province-specific constraints and negative effects

Redeployment and absorption of personnel, service prioritisation exercises, job insecurity, minimal promotions, and still imminent retrenchments of supernumerary staff are common concerns, but each province still has historical “baggage” to deal with. Examples are: In former Lebowa (Northern Province) mass promotions during the former regime had to be reversed; in former QwaQwa (Free State) close to 2 000 people were employed before the 1994 elections to appease the people; in Mpumalanga white staff left key positions in health establishments void.

The Eastern Cape in particular has not overcome the challenge of amalgamation entirely. The remnants of both the Bisho-Umtata (division between two homelands, Ciskei and Transkei) and the Bisho-Port Elizabeth (division between a homeland and the former Cape Province) divisions are still strongly entrenched. The resistance to change surfaces in attitudes expressed in comments such as “everything was taken to Bisho”.

In the North West there is an unwillingness amongst staff to move within the province, with the result that traditionally white and black establishments remain either white or black, and with a “cluster of whites in one area” (especially the urban areas) and a “cluster of blacks in other areas” (mainly rural areas) where management is white and black respectively, with negatively divisive results.

KwaZulu-Natal HR officials also referred to the former “two strong administrations”, the “very strong political split” related to former very strong “political loyalties”, and subsequent “feelings of not belonging” to the new dispensation, as well as standing on “ours was the right and better way” which still continues within the current government.

There is thus still much room to “develop one corporate identity, a new one”, in several of the former fragmented provinces.
Affirmative action: redressing racial and gender disparities

Racial representivity

Prior to 1994, the top echelons in government health management were almost “all-white”. At the national health department whites accounted, at the time, for 90.2% of management staff. Already in 1995 a more balanced picture presented itself: 48% whites compared with 32% Africans. Provinces reflect significant differences in their achievements. The challenges posed by racial distortions in staff establishments were less daunting in some provinces (Eastern Cape, Mpumalanga, Northern Province) than in others (Gauteng, Free State, Western Cape).

Statistically the racial balance in health establishment management echelons is most reflective of the provincial total population in the Eastern Cape and Northern Province. The widest variances from total population composition prevail in the Western Cape and KwaZulu-Natal.

However, there are still wide disparities in the lower management echelons as can be seen in Table 1. In most provinces and in the national Department of Health, Africans in general are considerably under-represented in the management corps in comparison with the overall race composition of the country's and provinces’ populations. With the exception of Free State, KwaZulu-Natal, Gauteng and North West, where Coloureds are well represented, their representation in relation to the overall racial composition in the other provinces is slightly lacking. The Indian and especially the white population groups are without exception much better represented in the management corps in comparison with general population numbers. In Gauteng, whites, who make up only 20.1% of the total population of the province, occupy 46.8% of the management posts, as opposed to 43.9% of these posts being occupied by Africans who constitute 75.8% of the people in the province.

Race representation in the national Department of Health is poorer than any province with, relatively speaking, too many whites and Indians, and too few Africans and Coloureds.

Whites and Indians dominate the medical/dental superintendent positions, with whites (11% of the population) occupying 43.6% of these posts and Indians (2.5% of the population) a staggering 15.6%.

While only 5.5% of South Africa’s population consists of white males, they occupy almost a third (31%) of all top and senior management positions (Directors upwards). African males make up 38.75% of the total population but fill only 23% of these posts.

Affirmative interventions are generally positively experienced. In the Northern Cape interviewees were convinced that “the ability to do the job became more important, rather than race and gender”, and that people even “became less aggressive towards each other”.

![Image](https://via.placeholder.com/150)
Table 1: Race and gender representation in management positions (South Africa) in the public health sector, mid-1999 (excludes academic managerial positions)

<table>
<thead>
<tr>
<th>POPULATION: 42 209 490</th>
<th>AFRICAN</th>
<th>WHITE</th>
<th>COLOURED</th>
<th>INDIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Director General</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Superintendent General</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Deputy Director General</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Chief Directors</td>
<td>7</td>
<td>3</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Directors</td>
<td>29</td>
<td>32</td>
<td>39</td>
<td>10</td>
</tr>
<tr>
<td>Deputy Directors</td>
<td>30</td>
<td>109</td>
<td>27</td>
<td>71</td>
</tr>
<tr>
<td>Assistant Directors</td>
<td>30</td>
<td>376</td>
<td>11</td>
<td>224</td>
</tr>
<tr>
<td>Medical/Dental Superintendent</td>
<td>71</td>
<td>19</td>
<td>74</td>
<td>35</td>
</tr>
<tr>
<td>TOTAL</td>
<td>171</td>
<td>542</td>
<td>166</td>
<td>341</td>
</tr>
</tbody>
</table>

| Race Representivity | 50.9% | 36.2% | 6.3% | 6.6% | 100% |

Source: PERSAL data, mid-1999

In the Eastern Cape, however, there still appears to be gross dissatisfaction with achievements in affirmative action, springing in particular from the fact that whites are allegedly unprepared and unwilling to change. “White procedures and practices persist in Port Elizabeth, while the Head Office in Bisho is predominantly black …whites do not want to move to Bisho. Those areas that were traditionally black are still black; those that were traditionally white are still white, although you can say that there is little change here and there. But we need to aggressively change that kind of complex shape”. In fact, it was especially in this province (and to an extent in the North West) that uneasy tinges of racial resistance to change and accompanying racial friction had been aired by HR officials.

There is also some discontent with progress in racial representation in the Western Cape. An interviewee described it as an “extremely racist province” and things “not being made easy for people to stay”. In most provinces there are some staff categories where the racial composition will not be easy to alter due to decades of selective recruitment, e.g. doctors and pharmacists, and an overall scarcity of qualified African financial personnel in the public sector. There is a sense of inadequate support for new managers, especially in the “affirmed groups”.
Gender representation

Gender representation has, like race, also improved. Prior to 1994 the top echelons of the national Department of Health (DoH) were almost all male. Women accounted for only 12.2% of high-level management staff. In 1995 female representation rose to 32%. From the data in Table 1, in mid-1999 35.1% of the 174 senior and top positions in South Africa’s public health service (provincial and national) as a whole, were filled by women. However, when middle, senior and top management posts (i.e. from Assistant Director upwards, and including medical/dental superintendents) are reviewed, 70.9% of the 1400 posts are occupied by women.

It appears that African women are “over-represented” in management positions in five provinces. In the Northern Province African females make up 54.3% of the total population, but they occupy 70.8% of the managerial positions. A similar imbalance, in favour of females, is also evident within the white and Coloured population groups, while male or female dominance in the Indian community differs from one province to the next.

The province with the most equitable management cadre gender representation is the Northern Cape, with 42.9% males. Only the national DoH was more equitable (47.3% males). The provinces with the most inequitable gender representation in the managerial corps are the Free State and Gauteng, with only 20.5% and 20% male representation respectively.

Women, however, are in general very poorly represented as medical/dental superintendents, occupying only 27.6% of these positions. Only Gauteng displays a relatively good gender balance with 44.7% of the positions occupied by women.

Men make up only 29.1% of all management personnel. Yet they occupy 64.9% of all the top and senior management positions (Directors upward). Women make up their overall higher representation by occupying more middle and lower managerial positions, notably in the Nursing profession. Regarding Chief Director posts, 21 (75%) of the 28 positions that are currently “active”, are filled by males, as are 64% of Deputy Director General positions and 100% of Superintendent General positions.

The Northern Cape and national DoH are nearest to a 50/50 male:female management composition, while Free State and Gauteng show least gender balance. However, the imbalances are in favour of women as is the case in all provinces. There was a feeling within the interviewed group at national DoH - and possibly wider level - that women experience a bottle-neck of opportunities caused by an over concentration of females in the lower and middle management post categories. In the Northern Province “gender is a very serious problem in this province…This area, the former Venda, Gazankulu and Lebowa is very conservative; a lot still has to be done in terms of recognising the ability of women in the province, because there is that view that says only men can be good managers”. In the Eastern Cape, “you will find that males are still dominant”, and “management positions are still dominated by males, black males”.

The reason for the female dominance (concentrated in the middle management) is the large number of nursing management posts in the middle management ranks, the bulk of which are occupied by women in this female-dominated profession. In the national DoH and provinces with fewer hospitals there are fewer matrons and the ratio of men to women is more evenly balanced. There is a historically created “bottle-neck” that prevents more of these middle managers from rising to the senior and top posts. It is a matter of time before women rise to the top in greater numbers, however men are unlikely to occupy significantly greater proportions of junior and mid-level managerial positions unless more men enter the nursing profession.
It would be useful in the future to separate the hospital and non-hospital (and even nursing and non-nursing) management comparisons.

**OVERALL:**

When both race and gender variables are considered simultaneously, the Eastern Cape is the only province in South Africa with a managerial cadre remotely representative of their total population.

**Effects and side-effects of affirmative action**

There are divergent views amongst HR officials with respect to the effect of affirmative action, both positive and negative, on management, health care and morale. In general, opinions tend to the positive with particular emphasis on the positive effects of “gelling staff together” and “learning to live and work together with nothing to fear”.

There is a sentiment that “We (have) become more tolerant to each other and to respect each other for what they are… it’s not the colour that’s making the difference now, it’s the person’s ability to do the job”.

However, criticism has been raised about “window-dressing” in the application of affirmative action measures. So were concerns about whites (particularly white males) being discriminated against, disadvantaged and not given opportunities, unmeritorious appointments, and the subsequent “loss of good people and having to use incompetent people”. Furthermore, the process was criticised for “lacking proper planning of transformation” and “putting the cart before the horses”.

Undoubtedly, transformation is taking its toll in terms of staff morale, and some inexperienced and unqualified appointees are not coping with demands of their positions, with resultant high stress levels.

**Strategies and measures to promote smooth transformation**

Provinces have adopted specific measures and targets to transform. “Transformation Units” have been set up to implement affirmative action measures. North West’s recent Premier-initiated 100-days deliverables campaign is an example of speeding up transformation. The Western Cape has a Departmental Transformation Unit, with a Branch Transformation Unit for Health (management and worker representatives), and with Regional Transformation Units in the making. Similar developments are happening in Gauteng where a top-driven structural transformation process is in place at departmental level, now being decentralised to institutional level. The Free State’s Department also has a Transformation Unit consisting of a small committee of provincial staff and worker representatives.

A comment from the Free State that; “We tended to concentrate on the upper echelons, middle management and to an extent the supervisory positions … we have not really neglected, but we are not really putting more emphasis on the people in levels 1 to 4. Our main emphasis in this year will be in those lower categories to make sure that they also see the benefits of affirmative action, not only in the middle and upper levels” illustrates the need for these units.

Although provincial departments are responsible for monitoring their own transformation, the Provincial Health Restructuring Committee (PHRC) is playing an overarching role in facilitating and co-ordinating transformation, especially as it applies to HR, affirmative action and representivity in health. It is acknowledged
that “Provinces can learn from each other, instead of trying to stumble in the interest of transformation in the province, because it’s no use if one province is transforming and the rest of the country is not keeping on par” and “You can’t have one set of rules for the country that is so diverse, with provinces that are so diverse, because the rules were made at national level with good intentions, but the reality on the ground was something else”.

**Human resource shortages, disparities, remedies**

Human resource inequity, shortages and disparities occur in terms of geographical spread, professional category, community location and socio-economic position. Personnel shortages are not necessarily the result of primary or absolute shortages. Many HR shortages originate from maldistribution and mismanagement of adequate numbers of personnel.

A serious problem in the country is that the human resource for health services is concentrated in the private sector. Only nurses and environmental health officers have a larger proportion of all registered professionals in the public sector than in the private sector.

**Geographic inequity**

Inequitable distribution is first and foremost an inter-provincial problem. Some provinces have abundant resident registered professionals while others are seriously deprived. The advantaged, attractive provinces are particularly Gauteng, Western Cape and KwaZulu-Natal and the disadvantaged and less attractive provinces are particularly the Eastern Cape, Northern Cape, Northern Province and Mpumalanga. Intra-provincial shortages are largely due to maldistribution of professionals along the rural/urban divide in all provinces. Health professionals gravitate to the metropoles of Durban, Cape Town, Johannesburg, and Pretoria, and the patients from other areas follow them seeking care.

Private sector beneficiaries are heavily concentrated in large urban areas and so professionals in private practice are also concentrated in these areas. They follow a “market force”. Once the “market” is saturated there is evidence that services tend to become “supplier-generated” and often sustained by over-servicing. There is insufficient regulation against a range of “perverse incentives” that sustain and perpetuate the problem thus impeding any incentive for redistribution to rural areas.

The public sector is similarly concentrated in urban areas. However, government has committed itself to radical decentralisation and “taking the services to the people” and has established interventions to deliberately redistribute professionals.

Table 2 shows the distribution of all registered professionals in the professions indicated. (Not all of these people are still practising and, although those residing outside of the country have been excluded, there are some who register South African addresses but it is not clear where they practise. Caution must be exercised in the interpretation of the figures.)
### Table 2: Provincial distribution of selected health professionals (Public and Private Sectors), 1998

<table>
<thead>
<tr>
<th>PROVINCE</th>
<th>EC</th>
<th>FS</th>
<th>GT</th>
<th>KZN</th>
<th>MP</th>
<th>NC</th>
<th>NP</th>
<th>NW</th>
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#### Medical practitioners

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Note: Totals do not include registered personnel currently residing outside of South Africa

Sources:  
- Health Professions Council of South Africa, 1998  
- South African Nursing Council, 1998
In every single professional category, Gauteng has a larger percentage of the country’s human resources than its own population size (18.1% of the total population): 43.6% of all dentists and 50.1% of all psychologists reside in this province. The same applies to the Western Cape where only dental therapists are not present in large numbers.

The provinces with the lowest proportions of professionals (with few exceptions) in most categories are the Eastern Cape, North West, but especially Northern Province. Only 1.2%, 2.1% and 2.7% of psychologists, physiotherapists and medical practitioners respectively reside in the Northern Province while the population of Northern Province is 12.1% of the South African total. Of the investigated categories only dental therapists are well represented in the Northern Province (12.3% of South Africa’s total). The Western Cape has the least dental therapists per population and the second most professional dentists.

The Northern Cape (2.1% of total population) also has a lower proportion of professionals in all categories, except environmental health officers.

The ratios of professionals to population viewed at the provincial level conceal inequities in their rural/urban distribution. A large proportion of these professionals work in the private sector in urban areas. The population is, in several provinces, more rural and uses the public sector health services. It is the provinces with the lowest number of professionals that have the greatest dependence on the public sector. These ratios must be interpreted with extreme caution.

It is also relevant that the country’s tertiary services, both in the public and in the private sectors, are very heavily concentrated in the metropoles. The ratios are therefore not entirely a fair comparison since these professionals serve a wider population than the province in which they reside; in some cases the whole country.

Table 3 shows a comparison of four important groups of professionals, illustrating the disparities between the provinces but also between the public and private sectors. This latter issue is discussed later. The table shows:

- The total number of practitioners registered with the appropriate council per province and for the whole country
- The percentage of the total number of those professionals
- The ratio of professionals to total population.

Two further sets of data are shown for each province, one for the public sector and the second for the private sector. In the case of the public sector:

- The total number of professionals employed and recorded in the PERSAL salary system are recorded
- This figure is expressed as a percentage of the total number of professionals registered in that profession
- A ratio is expressed of the population assumed to be dependent on those professionals in the public health services. These figures are calculated in terms of 1998 mid-year population estimates per province and estimates of medical scheme coverage (private sector dependants) as in the October Household Survey 1995 (and reported in chapter 13 of the 1998 South African Health Review), assuming that the numbers of dependants have not changed proportionally in the provinces.
In terms of the private sector:

- The balance of the total professional corps is *assumed* to be practising in the private sector. *(Many work in both public and private sectors, and some no longer practice their professions at all but remain registered. There is no accurate record of practising private practitioners.)*

- These figures of professionals are expressed as percentages of the total number of professionals registered in that profession.

- The ratio of population seeking services from each practitioner is expressed based on estimates of medical scheme coverage as indicated above.
Table 3: Comparison of distribution of selected health professionals between public and private sectors, 1998

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Table 3: Comparison of distribution of selected health professionals between public and private sectors, 1998 (continued)

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<td>700</td>
<td>401</td>
<td>3845</td>
<td>1193</td>
<td>309</td>
<td>91</td>
<td>157</td>
<td>385</td>
<td>1450</td>
</tr>
<tr>
<td></td>
<td>% total pharmacists</td>
<td>7.2%</td>
<td>4.1%</td>
<td>39.6%</td>
<td>12.3%</td>
<td>3.2%</td>
<td>0.9%</td>
<td>1.6%</td>
<td>4.0%</td>
<td>14.9%</td>
</tr>
<tr>
<td><strong>All Nurses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>total</td>
<td>22427</td>
<td>12226</td>
<td>46183</td>
<td>33345</td>
<td>7550</td>
<td>3471</td>
<td>11311</td>
<td>11939</td>
<td>25195</td>
</tr>
<tr>
<td></td>
<td>% total nurses</td>
<td>12.9%</td>
<td>7.0%</td>
<td>26.6%</td>
<td>19.2%</td>
<td>4.3%</td>
<td>2.0%</td>
<td>6.5%</td>
<td>6.9%</td>
<td>14.5%</td>
</tr>
<tr>
<td><strong>PUBLIC SECTOR</strong></td>
<td>total</td>
<td>16896</td>
<td>7087</td>
<td>18265</td>
<td>23142</td>
<td>5268</td>
<td>1563</td>
<td>11816</td>
<td>7329</td>
<td>10834</td>
</tr>
<tr>
<td></td>
<td>% total nurses</td>
<td>9.7%</td>
<td>4.1%</td>
<td>10.5%</td>
<td>13.3%</td>
<td>3.0%</td>
<td>0.9%</td>
<td>6.8%</td>
<td>4.2%</td>
<td>6.2%</td>
</tr>
<tr>
<td><strong>PRIVATE SECTOR</strong></td>
<td>total</td>
<td>5531</td>
<td>5139</td>
<td>27918</td>
<td>10203</td>
<td>2282</td>
<td>1908</td>
<td>505</td>
<td>4610</td>
<td>14361</td>
</tr>
<tr>
<td></td>
<td>% total nurses</td>
<td>3.2%</td>
<td>3.0%</td>
<td>16.1%</td>
<td>5.9%</td>
<td>1.3%</td>
<td>1.1%</td>
<td>2.7%</td>
<td>8.3%</td>
<td>41.1%</td>
</tr>
</tbody>
</table>

Notes: Totals do not include registered personnel currently residing outside of South Africa. Please refer to the chapter text for explanation of some of the data in this table.

Sources: PERSAL personnel administration system 09/03/1999
Health Professions Council of South Africa, 1998
* South African Nursing Council, 1998
Notwithstanding the inherent dangers in the assumptions that have been made, broad conclusions are obvious from the figures. The inequitable spread and maldistribution of professionals is even worse in scattered “pockets” of shortages within regions and districts. HR spokespeople in provincial administrations indicate that the deprived areas are: firstly, deep-rural and remote districts (often coinciding with former homelands) with a lack of general infrastructure (roads, water, sanitation, computers); secondly, sparsely populated districts characterised by vast distances and/or poor road infrastructure; thirdly, informal settlements in urban areas and metropoles; and fourthly, various types of health establishments, particularly small rural hospitals and rural clinics “out in the sticks”.

- Western Cape and Gauteng public health services are better staffed than the other provinces and both of these provinces have higher concentrations of private practitioners than any other province.
- There is a public sector ratio of 1 doctor to every 2 073 public dependants and a private sector ratio of 1 to 376 medical aid beneficiaries in Gauteng compared with 1:9 780 and 1:1 477 respectively in Northern Province.
- Northern Province and North West have about one public sector pharmacist per 50 000 dependants while there is a pharmacist for every 16 050 in Gauteng and 15 556 in Western Cape.
- In the Northern Province’s public health sector, there is only one dentist for 291 000 people living in the province while Gauteng has a dentist for every 36 000 people. In the Western Cape the situation regarding pharmacists in the public sector (1:15 556) is even better than the pharmacist to population ratio found in the combined health sectors of the Northern Province (1:20 160).
- It is interesting to note that 39.6% of the country’s pharmacists are in the private sector in Gauteng. This is four times the total number of pharmacists in the entire public service of all provinces combined.
- The public sector ratio for medical practitioners in Gauteng (1:2 073) is better than the situation in five other provinces’ public and private sectors combined, with the Northern Province showing the worst public sector position (1:9 780).
- There are more nurses employed in the public service of the Northern Province than there are registered with the Nursing Council with addresses in the Northern Province. It is possible that these nurses register addresses in Gauteng, in which case the private sector figures in Gauteng may be marginally falsely inflated.
- Although Gauteng and the Western Cape have significantly better nurse to population ratios in the public sector than the other provinces, they are still staffed at only about half of the ratio of the private sector.

**Shortages of health professionals**

Apart from geographical maldistribution of professionals, Table 3 also illustrates that there are acute shortages of certain health professions in the public sector.

Pharmacists are particularly scarce professionals in the public sector in almost all provinces (e.g. in Mpumalanga the 556-bed Themba hospital has one pharmacist only). Health therapists (physiotherapists, occupational and speech therapists), radiographers and emergency care practitioners are also scarce professionals.

Mpumalanga, Northern Province and North West experience the severest shortages of medical practitioners. “At one stage, it was indicated that the total number of doctors we have in this province (Northern Province) is lower than the total number of doctors that are in Groote Schuur … we are really acutely understaffed in terms of doctors”.
The Northern Cape, Free State and Eastern Cape have better doctor to population ratios, but the doctors are unequally distributed with a scarcity in peripheral areas. The Western Cape, Gauteng and KwaZulu-Natal may seem to have an oversupply of doctors (see Table 2). The problem is that many of the doctors work in the private sector and the public sector doctors are also the tertiary resource for the country, and not just doctors for the provincial populations in which they reside. Certain medical specialties are in dire straits because so many of the qualified specialists have left the public sector and the teaching capacity at medical schools has been compromised.

Table 4 shows the trend in registration of selected professionals between 1994 and 1998. In all professions except nurses, the number of registered professionals increased at a faster rate than the population; however, the growth rate in all other professions was considerably slower between 1996 and 1998 than between 1994 and 1996. The rate of increased registration of medical practitioners dropped by a half, dentists by 29%, physiotherapists and dental therapists by over 35%, occupational therapists by 48% and psychologists by 41%. The registration of dental therapists and psychologists increased more rapidly than any other profession between 1996 and 1998, while pharmacists increased by 3%, only slightly faster than the population growth rate of the country.

Table 4: Trends in registration of professionals in selected health professions; 1994-96 and 1996-98

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>1994 (SA population)</th>
<th>% increase</th>
<th>1996</th>
<th>% increase</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(39 534 575)</td>
<td></td>
<td>(40 583 573)</td>
<td></td>
<td>(41 660 406)</td>
</tr>
<tr>
<td>Medical practitioners</td>
<td>26 452</td>
<td>7.3%</td>
<td>28 381</td>
<td>3.5%</td>
<td>29 369</td>
</tr>
<tr>
<td>(including specialists)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dentists</td>
<td>4 029</td>
<td>5.1%</td>
<td>4 235</td>
<td>3.6%</td>
<td>4 387</td>
</tr>
<tr>
<td>(including specialists)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacists</td>
<td>-</td>
<td>-</td>
<td>9 788</td>
<td>3.1%</td>
<td>10 089</td>
</tr>
<tr>
<td>Physiotherapists</td>
<td>3 430</td>
<td>8.8%</td>
<td>3 731</td>
<td>5.6%</td>
<td>3 940</td>
</tr>
<tr>
<td>Occupational therapists</td>
<td>1 888</td>
<td>10.4%</td>
<td>2 084</td>
<td>5.4%</td>
<td>2 197</td>
</tr>
<tr>
<td>Dental therapists</td>
<td>180</td>
<td>31.1%</td>
<td>236</td>
<td>20.3%</td>
<td>284</td>
</tr>
<tr>
<td>Psychologists</td>
<td>3 606</td>
<td>12.3%</td>
<td>4 050</td>
<td>7.2%</td>
<td>4 341</td>
</tr>
<tr>
<td>Nurses</td>
<td>-</td>
<td>-</td>
<td>172 506</td>
<td>0.7%</td>
<td>173 703</td>
</tr>
<tr>
<td>(All categories)*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Health Professions Council of South Africa, 1998

Although HR spokespeople in most provinces (except for Mpumalanga and the Eastern Cape) did not deem professional nurses to be in short supply, their distribution in certain facilities and areas often remains a problem. The acute and chronic shortages of certain health professionals (e.g. pharmacists, radiographers) increase the burden on other professionals, especially nurses. In the face of shortages of qualified professionals, provinces have trained and registered a range of “assistants”. In the absence of these assistants, nurses have to staff dispensaries, x-ray units, etc. In several provinces, qualified managerial and financial cadres and support staff in these functions, are in short supply in district hospitals.
Staff shortages and disparities are not only a “numbers game”. Skills, the appropriate equipment and sufficient support systems all impact on the value of the individual employee. So, apart from having the people, “... one needs to look at the quality of the HR we have ... there is need for training to improve the quality ... At the moment the need is across the board” as very appropriately expressed by one HR manager.

**Strategies to cope with shortages, disparities and maldistribution**

While the total numbers of registered professionals are increasing they are not necessarily available to the public sector. There have been several interventions to increase the number of professionals in the public sector. These include the importation of foreign doctors on country-to-country contracts. These doctors are mostly from Cuba, although there was a country-to-country contract with Germany. This was a short-term intervention designed to allow South Africa time to put measures in place to sustain the staffing levels of doctors in the public service. One of the more permanent interventions is the introduction of “community service”, first for doctors from July 1998, and there are proposals for it to be phased in from 2000 for other health professionals. There has also been a concerted effort to construct residential accommodation in rural areas so that doctors and other health professionals can be attracted to work there. Selection of students from under-privileged areas, bursaries to under-privileged individuals and changes to the curricula are all designed to attract and retain professionals in the public service.

**Foreign health professionals**

Prior to the 1994 elections the homelands were extremely dependent on foreign doctors. In the past few years, the influx of foreign doctors and other health workers into South Africa has alleviated backlogs and compensated for the loss of local doctors abroad. The influx of foreign doctors is substantial, has grown in the past few years, and has distorted the foreign:local doctor ratio in the deprived provinces. This profound influence on the health system is illustrated in Mpumalanga. After amalgamation, a significant number of doctors left the public service and a relatively large number of foreign doctors were employed. Currently 24 of Mpumalanga’s 27 hospitals are run by medical superintendents of foreign origin, mostly from African countries. Almost half of some provinces’ public sector doctors are foreigners (42.3% in Mpumalanga, 43.1% in Northern Province, 44.8% in Northern Cape and 54.1% in North West). In contrast only 9.0% of the Western Cape’s public sector doctors are foreigners.

The disadvantaged provinces are extremely dependent on foreign doctors.
16: Distribution of human resources

Table 5: Numbers and proportions of foreign doctors by province and country of origin, 1998

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>EC</th>
<th>FS</th>
<th>GT</th>
<th>KZN</th>
<th>MP</th>
<th>NC</th>
<th>NP</th>
<th>NW</th>
<th>WC</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuba</td>
<td>40</td>
<td>38</td>
<td>6</td>
<td>51</td>
<td>47</td>
<td>25</td>
<td>47</td>
<td>79</td>
<td>0</td>
<td>333</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>1</td>
<td>4</td>
<td>36</td>
<td>14</td>
<td>4</td>
<td>0</td>
<td>13</td>
<td>5</td>
<td>9</td>
<td>86</td>
</tr>
<tr>
<td>Central Africa</td>
<td>48</td>
<td>6</td>
<td>157</td>
<td>70</td>
<td>47</td>
<td>2</td>
<td>87</td>
<td>31</td>
<td>24</td>
<td>472</td>
</tr>
<tr>
<td>Northern Africa</td>
<td>1</td>
<td>0</td>
<td>10</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Asia &amp; USSR</td>
<td>61</td>
<td>9</td>
<td>105</td>
<td>46</td>
<td>14</td>
<td>9</td>
<td>35</td>
<td>39</td>
<td>8</td>
<td>326</td>
</tr>
<tr>
<td>Eastern &amp; Middle Europe</td>
<td>13</td>
<td>3</td>
<td>81</td>
<td>15</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>10</td>
<td>131</td>
</tr>
<tr>
<td>Western Europe</td>
<td>11</td>
<td>4</td>
<td>54</td>
<td>37</td>
<td>2</td>
<td>2</td>
<td>15</td>
<td>18</td>
<td>51</td>
<td>194</td>
</tr>
<tr>
<td>Pacific Rim</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>South America</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>North America</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Australia &amp; New Zealand</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Total Foreign Doctors</td>
<td>179</td>
<td>64</td>
<td>468</td>
<td>248</td>
<td>123</td>
<td>39</td>
<td>205</td>
<td>178</td>
<td>103</td>
<td>1607</td>
</tr>
<tr>
<td>Total Doctors (%) foreign</td>
<td>(9.1)</td>
<td>(4.2)</td>
<td>(4.6)</td>
<td>(5.3)</td>
<td>(12.7)</td>
<td>(10.5)</td>
<td>(27.3)</td>
<td>(21.0)</td>
<td>(1.7)</td>
<td>(5.8)</td>
</tr>
<tr>
<td>Total Public Sector Doctors (%) foreign</td>
<td>(21.8)</td>
<td>(13.0)</td>
<td>(21.4)</td>
<td>(13.8)</td>
<td>(43.8)</td>
<td>(44.8)</td>
<td>(43.1)</td>
<td>(54.1)</td>
<td>(9.0)</td>
<td>(21.1)</td>
</tr>
</tbody>
</table>

Sources: National Department of Health, 1998
South African Medical Association – Health Advantage, 1999

Most foreign doctors in South Africa originate from Africa, especially Central Africa (29.4%), followed by Cuba (20.7%) and Asia (20.3%). In the North West and Northern Province, more than 20% of all doctors (public and private sectors) are foreign, compared with 1.7% in the Western Cape. In the Northern Province this would constitute over 40% of public sector doctors and constitutes 70% of the medical officers and specialists (interns and community service doctors excluded)!

Compared to the other provinces, by far the highest percentage of permanently resident foreigners were recorded among the foreign doctors of Western Cape (43%) and Gauteng (54%). These are most likely the more experienced foreign doctors who have been in the country for a long time. What this indicates is that once these doctors are no longer obliged to remain in the rural public service they move to larger centers, often into private practice or to the academic centers to specialise. The already pronounced disparity, in terms of the foreign to South African doctor ratio, between these two provinces and the other seven, is thus distorted even further.

Some 49.5% of the foreign doctors in Western Cape originate from Western Europe, and 32% from Central and Southern Africa. Directly opposed to these are the figures for Northern Province, where only 7.3% of the foreign contingent hails from Western Europe, and 48.8% from the regions in Africa.
The Northern Cape (6.7%) and North West (9.3%) employ relatively the highest percentages of Cuban doctors. In the Western Cape there are none, while only 0.1% of Gauteng’s doctors are Cuban.

The importation of foreign doctors goes a long way towards alleviating shortages in short-staffed provinces, districts and facilities. It also injects the health system with foreign skills and experience, while compensating for losses of local doctors to the private sector and abroad. There is, however, a danger that the health system is becoming more and more reliant on foreign professionals but the next few years will tell if the long term strategies to encourage South African doctors to stay in the public service are working. There is now a policy of not recruiting from Africa. Most African doctors have been in the country for many years but it is becoming more difficult for them to obtain work permits. Some have permanent residence. Most have “limited registration” with the Health Policy Council and this keeps them in the public service. It is the country-to-country contracts that have caused the rapid increase in foreign doctors. Since 1995 very few foreign doctors have managed to obtain work permits and settled in the country. Most of these have been spouses of returning exiled South Africans. The figures in this table are difficult to interpret since the new method of allocating interns has been implemented and over 1 200 doctors have commenced community service.

One concern that requires further investigation is the allegation that an ever-increasing proportion of registrars are foreigners. It is alleged that these doctors, once they obtain specialist registration, do not return to their own countries but remain in South Africa as fully registered specialists.

**Other strategies to overcome shortages and disparities**

Apart from the above strategies to increase the numbers of doctors, severe disparities in the distribution within and between provinces persist. HR spokespeople propose incentives of a varying nature, mostly financial and material, to rectify the imbalances. Rural allowances are still paid for doctors but all other health professionals remain excluded. There is often as great a difficulty in recruiting doctors to work in unpleasant and inhospitable urban settings as there is to the rural areas, but no special allowances apply. The *New Public Service Regulations* (effective from 1 July 1999) may bring some flexibility by allocating substantial powers to provincial MECs to “play around with incentives”. Heads of departments may be given the authority to implement local incentive measures, but still in accordance with guidelines, and still subject to the stipulations of the Code of Remuneration (CORE).

Targeted recruitment, sponsoring and training of own HR for shortfalls are to varying degrees in place in all provinces.

The relocation of nursing colleges in deprived areas and the purposeful recruitment of student nurses from such areas are also seen as levers for securing better spread of nurses. The Northern Cape has “outreach services” through which scarce professionals are flown out from Kimberley to remote areas to offer support to clinics.

HR spokespeople have few suggestions for redressing the severe inter-provincial disparities. The strategy of financial allocations prior to “global equitable share” budgets some three years ago (see chapter 3) had the potential to equalise disparities. HR officials are well aware of, and concerned about, the severe inter-provincial disparities; those in the disadvantaged provinces more so than those in advantaged ones. They feel that additional criteria should receive more emphasis in determining the allocation of funds,
especialiy “historical backlogs like having no infrastructure, facilities that are dilapidated” and “real needs and complexities of the provinces”. The feeling is that the redressing of inter-provincial inequity should come from the national department. There is a perception that only some provinces have “tightened the belts by stringent measures to uncomfortable lengths, while others thus knowing nothing of financial constraints” and “The National Department has let us down … they had promised us that we are going to have a steady curve”, referring to the redressing of the inequity.

Private vs. public human resources

This disparity has been alluded to and is illustrated in Tables 3, 5 and 6. The private/public ratios of available registered health professionals vary significantly from one province to another, as do the public sector dependant populations. The richer provinces have the largest affluent populations with medical insurance and therefore have strong private health sectors with the largest numbers of private health practitioners and private-for-profit health establishments. The private sector is therefore concentrated in the big cities and “in strips of towns along highways” and main roads. In contrast, the poorer provinces (particularly the Eastern Cape, Northern Province and Mpumalanga) have the poorest populations and therefore the weakest developed private health sectors with the smallest number of private health professionals. The scale of the disparity is illustrated by Northern Cape figures: of the 41 occupational therapists registered in that province, 39 work in private practice; of the 50 physiotherapists, 46 are in private practice; of the 108 pharmacists, 91 are in private practice; and of the 54 dentists registered in the province, 50 practice privately.

In these professions, enormous disparities exist between the public and private sectors, all in favour of the latter. Only approximately 18% of the total population is dependent on the heavily staffed private sector. About 82% of the population (without medical insurance) depends on the services of only 27.4% of the general practitioners, 7.4% of the dentists and 5.8% of all the psychologists in South Africa.

Health professionals drift to the private sector from the public sector rather than the other way around. A reversed trend of “filtering back” has been observed, coinciding with more competitive remuneration packages and the offering of professional allowances in the public sector – “it is money, money, money”, says one HR manager. Theoretically the private sector can only absorb a limited number of staff but in practice there is a tendency to create the work by over-servicing. Recent amendments to the regulation of the Medical Aid industry may constrain this a little, as may the pure financial inability of patients to continue to purchase private health care. The public sector has decreased its employment of professionals in some provinces owing to “down-sizing and right-sizing manoeuvres” thus restricting the “drifting back” of health professionals to the public sector.

There is a chapter on Public Private Partnerships in this Review so this is not discussed in detail here. Suffice to say that alliances exist between the private and public sectors in all of the provinces. Session appointments are the most frequently employed means of engaging private professionals in public services. The perception and experience of many of the HR officials is of incidents of large-scale fraud, greed, exploitation and “milking” of the public sector in the face of inadequate control systems. The private sector is accused of poaching trained staff without having any obligations to train new professionals. National and provincial policy-makers are therefore discouraging the expansion of private hospitals, “limited private practice” is being phased out and overtime privileges of health professionals in public employ are being limited.
Reforming human resource development - training for priority needs

This is an era of unprecedented training and development of HR in the public health sector, mainly necessitated by the public sector transformation itself, especially the preparation of new cadres of managers (inexperienced or with limited exposure in state bureaucracies). The shift towards PHC and DHS confronted health managers and health providers with entirely novel demands.

All provincial departments of health and the national DoH have units (be they Chief-Directorates, Directorates or Sub-Directorates) for HR development, although the strength of these divisions varies significantly from one province to another. Donor funding and technical support has made it possible to implement many capacity- and skills-building courses aimed at public health sector staff in collaboration with tertiary and entrepreneurial institutions.

In the past few years literally thousands of health care personnel have been trained in a variety of programmes spanning the spectra of longer and shorter, elementary and advanced, in-service and external courses. The nature and extent of these training initiatives vary from province to province along their self-

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>TOTAL</th>
<th>Public sector 1999</th>
<th>Private sector 1999</th>
<th>Public/Private RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Estimated dependants: 34 611 781 82%</td>
<td>Estimated dependants: 7 597 709 18%</td>
<td></td>
</tr>
<tr>
<td>General practitioners</td>
<td>19 729</td>
<td>5 398 27.4%</td>
<td>14 331 72.6%</td>
<td>1:2.65</td>
</tr>
<tr>
<td>Medical specialists</td>
<td>7 826</td>
<td>1 938 24.8%</td>
<td>5 888 75.2%</td>
<td>1:3.04</td>
</tr>
<tr>
<td>Dentists (including Specialists)</td>
<td>4 269</td>
<td>316 7.4%</td>
<td>3 953 92.6%</td>
<td>1:12.51</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>4 410</td>
<td>1 047 23.7%</td>
<td>3 363 76.3%</td>
<td>1:3.21</td>
</tr>
<tr>
<td>Physiotherapists</td>
<td>3 406</td>
<td>463 13.6%</td>
<td>2 943 86.4%</td>
<td>1:6.36</td>
</tr>
<tr>
<td>Occupational therapists</td>
<td>1 986</td>
<td>388 19.5%</td>
<td>1 598 80.5%</td>
<td>1:4.12</td>
</tr>
<tr>
<td>Speech therapists &amp; audiologists</td>
<td>1 388</td>
<td>119 8.6%</td>
<td>1 269 91.4%</td>
<td>1:10.66</td>
</tr>
<tr>
<td>Dental therapists</td>
<td>306</td>
<td>121 39.5%</td>
<td>185 60.5%</td>
<td>1:1.53</td>
</tr>
<tr>
<td>Psychologists</td>
<td>3 808</td>
<td>222 5.8%</td>
<td>3 586 94.2%</td>
<td>1:16.15</td>
</tr>
</tbody>
</table>

Sources: PERSAL data, 1999  
*Board of Healthcare Funders of South Africa, 1999  
◆Chapter 13, South African Health Review, 1998
defined needs and priorities (based on the personnel audits and skills gap analyses). These training programmes concentrate on three dimensions: firstly, to equip new high-level health managers to manage the demands of change; secondly, to prepare staff cadres at regional, district and programme levels for the establishment of DHS; and thirdly, to skill and re-skill health care workers for the increased emphasis on PHC services.3,15-17

**Excerpts from HR development initiatives**

**Management**

Development of the management corps in the public health sector is catered for by a series of initiatives. Of a more generic nature and targeting all public servants are the programmes/courses offered at national level by South African Management and Development Institute (DPSA). At provincial level, the various Premiers’ Offices offer generic management courses for provincial public servants of all departments and at all levels. The Western Cape’s Cape Administrative Academy is a case in point; it caters - in collaboration with a number of partners, both private and public – for generic management training for the entire provincial public staff corps.

Focused training programmes for health managers are illustrated by the following: The Oliver Tambo Fellowship Programme has since 1996 offered management training for senior managers (particularly at Chief Director and Director level) for all provinces and the national DoH. Since its inception, and with an annual intake of 26 candidates, about one hundred health managers have been through the programme. The Northern Cape’s Northern Cape Health and Social Welfare Management Development Project has already trained a first cohort of 38 senior managers, while a second cohort of 207 middle and lower managers in the six regions are being trained on a decentralised regional basis. Towards the end of 1999 a total of 245 managers will have completed this training. Likewise the Free State Gold Fields Management Development Programme has already trained three cohorts (244) of middle and junior health and welfare managers, while a fourth cohort of 62 managers is currently under training – a total of 306 managers. In addition, 182 hospital managers have been trained in the Sub-programme for Hospital Managers.

**PHC and DHS Development**

The nature of PHC and the DHS targeted training is adequately illustrated by the Mpumalanga case, with an indication of the achievements in terms of numbers of nurses trained over the past few years and the diversity of skills developed in that province. Special post-basic and in-service training comprise the following: IMCI (56), PEP (52), DEPAM (15), PHC facilitators (1 013), orientation on EDL (705), family health care clinicians (36), PHC district management (156), HIV/AIDS (82), computer skills (15), lactation (26), development of district plans (60), family planning (26), wound care, CHESS district management (222), performance budget (16), personnel performance management PPMS (350), EPI (16). Furthermore, courses were presented in cold chain management, termination of pregnancy, health information, mental health, TB management, chronic diseases, advanced trauma, care of the elderly and pharmacy assistance. In the Free State emphasis is on the training of PHC nurses. Apart from redressing and upgrading skills backlogs on a mass scale, many of these courses are directly linked to the transformation of the health system in the desired policy directions, especially in promoting and strengthening the move towards PHC and a fully implemented DHS.
A few provinces run ABET programmes for illiterate staff in institutions.

Apart from these novel and need-specific initiatives, traditional HR development at entry level has also undergone profound changes and shifts in emphasis are still ongoing. The training of medical practitioners is changing its emphasis to training for all communities and care settings, accompanied by strides towards balancing historical disparities along gender and racial lines. The training of nurses is also changing. Nursing colleges are being amalgamated, nurse trainee intakes and/or subsidies, bursaries and posts for trainee nurses are being reduced in light of perceptions of “redundancy”, “oversupply” and “overproduction” of nurses. Examples are the North West and Free State where there was zero intake of new trainee nurses in 1999 in the respective two and three colleges. Several provinces cut the numbers of subsidised nurse training posts at colleges and universities (Free State, Western Cape, Gauteng, North West). In the Western Cape the intake of nurse trainees had been reduced from 1 100 a few years ago to 100 in 1999.

In contrast, Mpumalanga targets nurses as the first priority for development programmes; the province more than doubled the intake of trainee nurses into their one small training college from 40 to 100, and started satellite campuses at other places. In the Northern Province the three nursing colleges were amalgamated for purposes of standardisation and de-racialisation, but the 1999-intake of new trainee nurses of 174 is more than the 1998 intake. However, Northern Province is scaling down on the training of enrolled nurses and enrolled nursing assistants, while more emphasis is placed on professional nurses who can run clinics. These are clear responses to the diverse staffing situations.

In the North West and Free State, retraining and bridging opportunities for less qualified/enrolled nurses in current provincial employ are being tailored to enable these staff to fill new roles after the restructuring and imminent rationalisation.

For the first time in South Africa’s history of nurse training there is a decline in the number of student nurses in training - 12 267 in 1996, 11 902 in 1997 and 11 289 in 1998, i.e. an 8% decline over the three years. Pupil nurses increased by 40.4% (2 469 to 4 143), while pupil nursing auxiliaries decreased by 41.6% (2 555 to 1 492) over the same period.

**Morale and productivity**

Apart from cold statistics, there are also softer sides to HR; after all, HR management is about human beings. Questions pertaining to aspects such as interaction in the workplace, worker morale, productivity and efficiency of staff, work satisfaction and dissatisfaction, coping with the work, overload, grievances and misconduct, etc. are all important. These are dimensions that refer directly to the interests of health workers, their motivation and relationships in the workplace.

**Worker morale amongst public health staff**

Worker morale is a sensitive barometer of the “climate” prevailing amongst staff. In particular it is indicative of levels of satisfaction and discontent with working conditions. HR officials (both provincial and national) are generally concerned about the current state of worker morale among public health staff. Morale is almost unanimously depicted as down, as low or even very low – “there is a lot of negativity”.
Concerns expressed by HR spokespeople differ significantly from province to province. The state of morale is apparently also more closely linked to particular health establishments, to specific categories of health sector staff, and to specific levels of staff. Ostensibly staff morale hinges on the prevailing organisational culture and interpersonal climate in that institution. It is not clear whether worker morale is improving or declining. Some HR officials are of the opinion that morale “had dropped”, or “is still on the decline”, or was worst (even “terrible”) during the first years of the democratic government, but more recently is “picking up”.

Low worker morale is ascribed to many and diverse causes both within and external to the health sector. The transformation and restructuring that has been going on for the past five to six years is accused of lowering morale. In certain provinces the effects are more intense than in others. Transformation bred a climate of inflated expectations, job insecurity and exacerbated stress levels; it dampened initiative and confused legitimacy and authority. The latter situation is reflected in questions such as “Who is the boss here?” “Who is taking over here?” “The question of their future is a cause of concern, because some people are not employed; they know that they might be retrenched…so that is one of the major causes of low morale in the province”.

Internal organisational factors, top-down management practices, grievances not taken care of speedily and efficiently, failures in communication systems, dragging feet with affirmative action, etc. all perpetuate discontent among staff, perhaps more so in the more infrastructure-deprived provinces. Furthermore, financial-driven objectives (instead of service-driven objectives), absence of strategic plans to follow, and the loss of skills due to the outflow of especially white males, put tremendous pressure on remaining staff, and resulted in abnormal stress levels. Similarly, the high incidence of corruption, theft and fraud bred perceptions of the system as being “out of control” and “chaotic” and led to a “lack of pride in being a public servant”.

There is a perception that the role of unions is sometimes one of collectively fuelling discontent and demoralising staff, with rippling effects to all staff levels. “There is this advent of trade unions that have come into being … you know … most supervisors at times they don’t know whether they are still supervisors or whether it’s the shop-steward that is in charge … It makes some of the seniors afraid to hold the reins, and one is not sure at times whether ‘I’m doing the right thing’ or who should be doing it”.

Apart from these macro and micro organisational factors, individual “bread and butter” issues such as personal conditions of service, lack of progression and promotion have equally adverse outcomes on worker morale.

Creative developments that undoubtedly do affect staff morale positively and constructively have been highlighted, inter alia: the Clinic Upgrading and Building (CUB) Programme, building of nurses’ homes, provision of air-conditioning and furniture, transport for staff and new hospitals. Other morale-boosters comprise stimulation via training courses, regular staff indabas, sporadic team-building exercises, merit awards, second and third notches, stand-by and overtime-allowances and better salaries. On a different level, the current skills audits, transformation units, increasing devolution of decision-making powers to health institutions themselves, and the introduction of an “employee assistance programme” to promote coping with stress in the workplace, may all eventually uplift staff morale. Without exception, Batho Pele was mentioned as a potent motivational lever to elevate worker morale.

Those measures in place are unfortunately often of such a general or isolated nature that they cannot make any significant difference, especially not in view of the enormous number of staff employed in public health services. Moreover, where constructive initiatives are taken, these are too often dampened or nullified by financial constraints.
Productivity of public health staff

For lack of criteria, productivity and performance are not easily measured. Nonetheless, HR officials ventured general observations on productivity of public health staff. In general, spokespeople in all the provinces (and at national level) are concerned about the current state of productivity. For many it is perceptibly “on the decline”, for others it is “picking up” – but, for now, “in general, productivity is a problem … it is at a low ebb”. In one province productivity was described as “low to very low”, and “across the board (throughout)” i.e. both among general and health care workers, at lower and senior management levels alike. Other HR spokespeople linked low work morale particularly to supervisory and lower staff levels, more often to general workers only. Specifically the HR spokespeople in the Northern Province and Free State depicted productivity and commitment amongst top and senior management over the past few years as very high, particularly due to the demands of the transformation.

Explanations given for failing productivity are in abundance. Foremost is the effect of the taxing and protracted transformation. Concretely blamed are: deterioration of certain services, no improvement in staffing situations, backlogs in promotions, the moving around of people, staff turnover and staff shortages. But more mundane explanations also prevail: “In certain areas we don’t have sufficient resources – people got frustrated because of little things that are not in place … this little gadget is broken, this is finished … next time you push patients off”. But, at the same time an “unhealthy demand attitude for more, irrespective of good quality prevails too often among staff, sometimes resulting in unjustified feelings of relative deprivation affecting productivity adversely; there appears to be a bit of dragging feet here”.

Few strategies or measures of significance were identified aimed at enhancing productivity and performance, particularly not measures of large-scale impact or of systematic application. The following isolated measures were mentioned. The Free State has an initiative to contract Price-Waterhouse-Coopers to develop a “new performance management system” and to pilot it on a limited scale in certain sections of the department before it will be “rolled out to the entire province”. In the North West “we have adopted a strategy called ‘work improvement teams’ to enhance productivity … We developed service standards … We want to provide our service at improved levels. … and our strategy to move towards the ideal is ‘work improvement teams’.” Furthermore, HR development programmes and opportunities for skills development were often deemed key motivational levers to enhance productivity. Specific awards, rank promotions and annual notch increases, etc. would also be motivational levers. The devolution of authority and autonomy to institutions surely holds promising potential to address productivity at ground level, i.e.”to inculcate in institutional managers that sense of ownership of their own institutions”.

Unrest, grievances, misconduct

Structuring Labour Relations in the public health services

Labour relations (LR) is very much part of HR management. There has been great emphasis on LR in the public health sector lately. The Labour Relations Act (1995) introduced a new deal in the LR domain. Among the main achievements are recognition and participatory agreements between management and unions, as well as mechanisms for collective bargaining. LR in the health sector is presently on a healthy footing, generally described as good to even excellent. The Public Service Co-ordinating Bargaining Council (and the emerging sector-specific Health and Welfare Sectoral Bargaining Council) are the national LR structures. Nine Provincial Bargaining Councils/Chambers are operating at provincial level. “Health Bargaining Councils” are anticipated in provincial health sectors, although in most provinces they are still emerging. Managers and labour leaders meet frequently in “provincial sub-committees”, “departmental LR fora”, “management and labour fora” or “departmental LR meetings”.

At provincial, regional and institutional levels there are several significant initiatives with so-called multi-laterals (fora for management and all unions) and bi-laterals (fora for management and one particular union) particularly in those provinces characterised by strong unionisation of the workforce. Elsewhere management and unions meet ad hoc at “worker committees”, “unions and hospital management fora” or “management-shop-steward committees”. Whatever the case, recent years have seen lively activity in organising LR at different levels of the public health sector. From this emerges the trend to devolve LR responsibilities to health institutions so that the managers can address problems unique to a particular institution. [Important note: quite recently - 21 July 1999 - a circular from the DPSA (Department of Public Service and Administration) ruled that the registration of bargaining councils/chambers in the field of labour relations in provinces and departments should be held back for the time being.]

All health departments (provincial and national DoH) have LR components to deal with labour relations, grievances and disciplinary issues. The LR components, however, vary in their size and capacity (skeletal to substantial, consisting of staff contingents varying from 3 to 24), degree of organisation and independence, as well as in their operational efficiency and effectiveness. There are provinces where LR units are incapacitated. In Mpumalanga “Currently our office of LR has three LR officers for the whole province - 11 000 staff members, 13 000 if you count Welfare in … If you have to respond, you find that you just can’t manage”. In the Eastern Cape, the situation is more desperate for the three LR practitioners who have to deal with labour disputes, grievances and misconduct among that province’s 34 004 staff members. “We have no LR unit … we are not that well organised; we don’t have structures … We requested that there should be a fully fledged LR unit here which is accommodated in the organisational structure … But that thing to date has not been successful … we are still waiting for our work study blah, blah, blah … So the people who are doing the LR matters here are not specialists in that field … it is just a task, not a fully fledged unit per se … and now, the whole province depends on the head office”. The Free State, KwaZulu-Natal, Gauteng, Western Cape appear to be well organised. Apart from head office components some also have LR units decentralised to regional and even institutional levels. Unique is the Northern Cape’s roaming LR Health Desk criss-crossing the province on visits to all institutions to consult workers also in outlying areas.

The unions operating in the public health sector vary considerably in numbers and nature from one province to the next. In some provinces (e.g. KwaZulu-Natal, Free State, Gauteng), all nine health-related unions operate in the provincial health sphere, while the Northern Cape recorded six and North West five. The stronger unions (PSA, NEHAWU, HOSPERSA, DENOSA) operate everywhere, not always with the same order of membership strength and bargaining power.

**Strikes, unrest and disruptions**

In terms of the Labour Relations Act (LRA) the parties at the Public Sector Co-ordinating Bargaining Council (PSCBC) have agreed that the public sector health services are an “essential service” (private sector health services are not “essential services”). Public health sector workers therefore may not legally strike but their private sector counterparts may. At present labour unrest, disputes and conflict in the public health sector are efficiently structured, firmly controlled and fairly ordered. There have been no legal (protected) strikes, while only scattered cases of illegal (unprotected) strikes occurred among public health personnel. This resulted in a decrease in the incidence of strikes, unrest and person-days lost in recent years, as illustrated by figures for the Western Cape. In 1997 there were 13 unprotected protest/strike actions compared with 5 unprotected protest actions/picket demonstrations in 1998. Person days lost decreased from 1 047 to 139.5.
The LRA played a major part in ordering the LR scene. It contributed to “interaction between structures” and “bridged the gap of trust”. The establishment of NEDLAC, the spirit of which undoubtedly rippled sideways and downwards, and created numerous fora and interfaces in the public labour sphere to deal with issues timeously and head-on has also helped. The entire atmosphere has fundamentally changed from erstwhile militancy to one of “regulated interaction”. It is not that dissatisfaction or discontent does not exist in the public health workplace. It does and it will always be there. There are still sporadic threats of strikes and disruption, but in most cases these are dealt with timeously and effectively.

With structures in LR in public health departments still emerging, hiccups and deficiencies are to be expected. The limited experience of most roleplayers leaves both unionists and managers somewhat unprepared and ill-equipped for LR activities in the public health sector, especially at branch and institutional levels. Management and union leaders at the higher levels are nowadays fairly well equipped to deal with the prevailing challenges. Managers feel that shop stewards “are far, far, far from understanding the rules of the game”, and are mostly elected on grounds of their radical inclinations, rather than their merits and skills in negotiation. The “struggle mentality still prevails in many institutions”. “Most of these unions either they don’t know what they are doing, or they’re trying to do something that they don’t understand … especially the shop-stewards … I don’t think they are playing the game to a large extent, because when it suits them these guys conveniently just forget that we have agreements in place … The flow of information to members is not as it is supposed to be and this creates conflict”.

** Strikes and unrest in the workplace **

In most provinces and at the national DoH no legal strikes have occurred during the past two years. Illegal industrial actions did occur once in a while, but more often in the form of unprotected wildcat strikes, protest actions or demonstrations rather than full-blown strikes. Threats for industrial action still surface regularly, but these are dealt with pro-actively.

** KwaZulu-Natal ** - While labour disputes, conflict and unrest peaked in the early and mid-1990s, in the period just before and just after the new dispensation came into being, labour unrest has since subsided almost completely. Only sporadic and isolated industrial actions occurred in recent years. During 1998, no protected/legal strike presented, while nine unprotected/illegal strikes occurred, seven in hospitals (both small and large, both in rural and urban environments) and two in laundries. The reasons for these strikes varied widely, including the following: objection to restricted registration of practitioners (a sympathy strike); students striking for the removal of alleged “incompetent lecturers”; demands for overtime-payment and salary progression; dissatisfaction with appointment policy; segregation of facilities and amenities along racial lines; internal strife between Cuban and Nigerian doctors and ensuing group formation; hunger strike among nurses ascribed to quality of food (threw placenta in food and surgical waste in area) resulting in suspension without emoluments; and the colour of uniforms of general assistants matching that of nurses too closely.

** North West ** – “We’ve never really had labour unrest as such, save to say that we’ve had protest actions … during tea breaks”. No legal or illegal strikes occurred since the mid-1990s.

** Northern Cape ** - Monetary matters tops the list of labour disputes. The main concerns are rank promotions and notch increments. However, no legal strikes and only two illegal strikes occurred during 1998, and only during tea breaks.

** National DoH ** - No strike, not even a go-slow presented in the previous 15 months. Salaries are in the forefront of collective bargaining.
So, despite the relative tranquillity of the past few years in the public sector workplace, brooding discontent, demonstrations, wildcat eruptions of June-July 1999 may lead to a building up of tension. Prospects of increasing labour unrest are strengthened by the continuation of restructuring, low and zero economic growth, periodic staff retrenchments, shrinking public budgets, and little success in large-scale job creation. “We are really heading for a serious confrontation … The unions are very much impatient right now … we’ll find management one day physically ejected out of their offices”.

Against this backdrop, current bargaining and conciliation procedures will be taxed to the extreme in coming years. Hard-earned gains in the LR arena can be pushed “over the cliff”, “because workers have been pushed to where they’ve got no choice … there can be a serious chaos”.

**Grievances in the workplace - procedures, profiles and constraints**

The *Public Service Act* and the *Public Service Regulations* provide a uniform framework for the provinces to deal with grievances. In practice, however, the management of public sector grievances is still highly diverse. The nature and extent of grievances, provinces’ abilities to implement current procedures, and their degree of efficiency and effectiveness in acting on grievances differ significantly.

Grievance profiles reveal that promotions (or rather lack of promotion) top the list of grounds for disputes in all provinces. Disputes over merit assessments, notch progressions, non-translation of salary to new rank, etc. follow. Not all grievances are registered; most by far are, in fact, resolved by timely and effective intervention before being registered. Very few cases proceed to the CCMA for arbitration, and even fewer proceed to the Labour Court.

**Profiles of grievances among public health staff**

**North West** - For the 1998/99 period a modest total of 12 grievances were recorded, 10 relating to promotions and 2 to transfers.

**Northern Province** - During 1998, a total of 48 grievances were registered, and for the first six months in 1999 a total of 36. Topping the list of the 1999 cases are: neglect of salary back-payments (14) and termination of posts (8).

**Eastern Cape** - Records on grievances among provincial health staff in the Eastern Cape were not complete - not all cases of grievances are formally registered. However, from the records presented to us, some 37 grievance cases were registered during 1998; and up to mid-1999, a total of 48 cases (the increase more due to a better recording system rather than to real numbers). The nature and variety of grievances varied over a wide spectrum pertaining to *inter alia*: pension not paid out, salary grades, complaint against fraud accusation, basic conditions of employment, appointment of staff, rank promotion, promotion and salary upgrading, recognition of experience, complaints to salary notch, creation of post, alleged dismissal, transfer to Pretoria, non-translation of salary to new rank, overtime payment and re-determination of salary notch. In 1998 plus/minus 10-15 proceeded to conciliation boards; going to the CCMA were plus/minus 5-6 for arbitration only; to Labour Court were 1 or 2 (people that have been suspended and want to be reinstated).

**National DoH** - Most common grievances surfacing during the 15 months preceding July 1999 related to merit assessments and notch progressions and secondly to issues around the management of cultural diversity, and racism issues. In total, 16 grievances were handled during the period, while 9 had
been resolved during the same period. Two cases were dealt with by the Conciliation Board, and two went through to the CCMA for arbitration. But one should keep in mind that not all grievances are registered; most are solved without reaching a level of being registered as a grievance.

The implementation of grievance procedures suffer from long delays and time lapses before action is taken in response to grievances and the complex nature of the procedures. “But what I can say about the process itself, I find it quite difficult, it is not simple, it's very cumbersome” and “The problem with the grievance procedure is the fact that management in all institutions … they don’t attempt to solve the grievance … they don’t do anything about those things … they don’t want to tell the people the truth”.

Apart from these general shortcomings, provincial-specific constraints are obvious. These are linked to provincial implementation structures, lack of basic infrastructure and logistical constraints. The LR practitioners in the Eastern Cape complained most vehemently about these constraints: “You cannot base an investigation on enquiries by just phoning, you must try to go there personally, or else arrange to get the file of the person … So here we have a problem, because we don’t have transport … it will take time for you to get transport to go to this place. So now you end up lying on the phone and try to enquire to what happened blah, blah, blah … it is not effective”.

The grievance procedures have changed as from 1 July 1999 with the phasing-in of the New Public Service Regulations. In essence, the new regulations convey more discretionary powers to heads of departments, speed up the process and provide for the delegation of decision-making to institutional level. Central to the change is that “At the end of the day it’s aimed at sort of bringing the two parties together … it’s a collective agreement”/“… the exclusion of the lawyers means that managers at the institutions will be able to participate without being overpowered by representatives of the employees in the proceedings”.

Indications are thus that the new grievance procedures will go a long way to straightening out most of the existing constraints and deficiencies in dealing with grievances. However, the main dilemma facing public health departments is that managers, particularly those at institutional level, are far from equipped to manage the new procedures effectively.

Misconduct in the workplace - procedures, profiles and constraints

Misconduct among public health sector staff is, in theory, guided by the Public Service Act. In practice, management of misconduct is diverse between provinces. Not only does the nature and extent of misconduct vary quite remarkably, so too do responsible provincial units’ current competencies, efficiency and effectiveness to implement prevailing procedures.

The frequency, nature and order in which misconduct presents vary significantly but registered misconduct cases are the “tip of a huge iceberg”. At the forefront of misconduct are theft and fraud, absenteeism and abscondment, alcohol abuse and misuse of state property.

Profiles of misconduct among public health staff

Western Cape - The following statistics depict the number and nature of reported cases of misconduct for three years. For 1999, there were 94 cases: absenteeism (28), disgraceful conduct (25), abuse of state property (18), theft (13), excessive use of intoxicants (3), negligence in performance of duties (3), other (7). Cases that commenced in 1996 and were finalised in 1996 (101); were not finalised (5). For 1997 – 61 cases: absenteeism (19), disgraceful conduct (14), abuse of state property (4), theft (8), fraud/misappropriation/embezzlement of funds (6), excessive use of intoxicants (5), negligence in performance of duties (3), other
Distribution of human resources

(2). Cases that commenced in 1997 and were finalised in 1997 (63); were not finalised (26). For 1998 – 45 cases: absenteeism (14), disgraceful conduct (9), abuse of state property (14), theft (4), excessive use of intoxicants (1), fraud/misappropriation/embezzlement of funds (2), acceptance of bribes (1). Cases that commenced in 1998 and having been finalised in 1998 (42); not been finalised (171). From the total number of reported misconduct cases over these three years, the following pecking order emerges: absenteeism (61), disgraceful conduct (48), abuse of state property (36), theft (25), excessive use of intoxicants (9), fraud/misappropriation/embezzlement of funds (8), negligence in performance of duties (3), acceptance of bribes (1).

Mpumalanga - Reported cases of misconduct for the year 1 April 1998-31 March 1999 amounted to a total of 84. Most of these were solved by internal disciplinary procedures and mechanisms of the Department of Health, with counselling as a first step figuring prominently, and thereafter followed by disciplinary hearings. An overview of the 84 cases reveals that misconduct ranges widely and includes: theft (20), unauthorised absence/absence without leave/absenteeism (19), unauthorised use of state property/vehicles (9), insubordination (8), fraud and negligence (5 each), abscondment (4), drug/liquor abuse (2), and then singular cases of refusal/failure to attend to patient, misrepresentation, intimidation, administrative irregularities, reckless driving, racial expression, murder of common law wife and allegations.

Eastern Cape - For Region A (Port Elizabeth area) only, and for the three-month period 1 April – 30 June only, a total of 93 cases of misconduct are recorded, with theft (22), fraud (20), absenteeism (16) and abscondment (11) reigning supreme, followed by drunkenness (8), insubordination and negligence (5 each). Other varieties of misconduct for this particular period include misuse of state property, discourtesy, forgery, disobedience, assault, intimidation and incorrect statement. It was put strongly by one official that much of this culture of misconduct was carried over from the previous dispensations in the former homelands (Ciskei and Transkei); that senior officials and foreign staff in high-ranking positions are for various reasons (e.g. fear) too often reluctant to act against culprits.

Despite general satisfaction with disciplinary procedures, notable deficiencies remain that hamper effective dealing with misconduct. Long delays and reluctance to take firm disciplinary steps frustrate LR managers. “The more we have examples of action being taken against people, the less it happens”. But still, “The process is too long, and decision-making too centralised. … Imagine in a province like KwaZulu-Natal with a Department of Health with 65 hospitals and 50 000 employees one official at top level has to sign documents”. In the Eastern Cape, with its meagre LR staff complement, these constraints result in a hopeless case.

Disciplinary procedures have been drastically changed with effect from 1 July 1999. These changes are aimed at addressing the present shortcomings. More powers are devolved to executive authorities (MECs) to deal with disciplinary issues, discipline may be delegated to regional and institutional levels which should expedite the handling of misconduct cases.

It is already foreseen that the new measures do not provide the whole answer. Lack of trained staff and proper structures at institutional level pose the most important challenges. Some are ready for the challenge: “To me this is exciting, it’s an opportunity; we can say to the managers there ‘these are your people, you must discipline them; you must manage HR and LR and discipline the same way you are managing finances of the institution,’ because they’ve been actually running away from that … and that made people not to respect them”.
Conclusions

Firm foundations have been laid for transformation of the HR scene, notable progress is being made towards set targets, and much has been achieved in establishing innovative structures and measures for managing reform. Financial constraints and protracted demands of the transformation process on everyone’s emotions is creating adverse effects on staff, raising discontent and causing resistance to change, all of which pose a threat to further progress.

More inter-provincial co-ordination, exchange and joint ventures on key matters pertaining to health professional development and management are needed. Certain provinces are ahead in HR matters and have something to offer to the other provinces. The identification of best practices in HR management is necessary for fast-tracking developments in those provinces lagging behind. All provinces do indeed lag behind or have lacunae in their transformation armaments and can learn from others.

In light of the vast disparities between provinces in HR issues it is safe to state that those current disparities will not disappear without determined intervention strategies and action. At present there is not enough direction. The problem would not even be moderately alleviated, let alone solved, without a measure of centralised decision-taking. We owe it to the “provinces of neglect”.

The public health departments in all provinces are fighting desperate battles to make ends meet as far as recruitment and retention of professionals are concerned. Meanwhile the private sector has enormous and growing resources. Great care must be taken not to alienate the private health sector from the public sector and vice versa. A healthy public health sector can be created and preserved by aligning it more closely to the private health sector. In particular bold steps should be taken by the public sector to avail itself of the skills and efficiency prevailing in the private sector.
Community service for doctors in South Africa was conceived amid controversy, but has emerged as a symbol of the commitment of the health department and the medical establishment to equity in the health services. In terms of the original objectives of the Department of Health, “to distribute health personnel throughout the country in an equitable manner” the scheme has only been partially successful. Two hundred and fifty nine (less than 25%) of community service doctors are placed in rural hospitals (as designated by the rural allowance), while 55% are working in regional, tertiary and specialised hospitals.

The aim of ensuring “improved provision of health services to all the citizens of our country” has most probably been met. All the health facilities that received community service doctors reported positive effects, except for one tertiary hospital that regarded them as a “nuisance”. The interpretation of the policy as meaning that community service doctors should work primarily in the community health services of some districts, has resulted in many of them visiting outlying clinics regularly, with surprisingly beneficial results for the district health system as well as the community service doctors themselves.

The secondary aim of “providing our young professionals with an opportunity to develop skills, acquire knowledge, behaviour patterns and critical thinking that will help them in their professional development”, has been successfully met by some but not all of the community service doctors. This depends on the level of supervision available, as well as the attitude with which the individual approached the year. In general, the response of community service doctors to the challenges and difficulties in public service hospitals around the country has been encouragingly positive, as they have found meaning in “making a difference” in their situations. In the words of one community service doctor placed in a rural hospital: “My perspective has totally changed from the Stellenbosch Afrikaans way of understanding things”.

A comprehensive policy on human resources for medically under-served areas in South Africa is needed, of which obligatory community service for doctors is only a part. Judging by the initial feedback of this first year, and the willingness of all those involved, there is a solid basis to work from. As we proceed to the next round of community service placements, it is imperative that the experiences and lessons of the first year of implementation are taken account of and used as the basis of ongoing planning. Universities need to supply graduates with the appropriate knowledge, skills and attitudes, and provincial health departments need to manage their human resources in an equitable manner.
Introduction

In South Africa, the maldistribution of health manpower in favour of urban areas has been well documented: in essence, the fewest doctors are found in areas where the need is greatest. There are numerous reasons why doctors choose to remain in urban areas, including better incomes, greater opportunities for career advancement, access to services and schools, and more comfortable living environments. In addition, most medical schools are located in urban centres, and graduates tend to remain where they have formed relationships and social networks during their period of study, even if they were originally drawn from rural backgrounds. The issue is not an exclusively rural one. Urban poor also have limited access to primary care, largely because of the lack of capacity of urban primary care facilities to serve the population within their jurisdiction. This is particularly true in South Africa, where informal settlements in peri-urban areas have grown tremendously over the past decade.

To improve the supply of personnel in under-served areas, three major approaches have been used internationally: incentives, coercion, and facilitation. Although this chapter focuses on one coercive intervention, it must be noted that there are a number of other strategies that have been shown to be more successful in recruiting and retaining doctors in areas of need. These include the selection of medical students from rural areas, meaningful community-based experiences during the undergraduate years, support for post-graduate development through distance educational methods, and attractive conditions of service.

Objectives of community service

“The main objective of community service is to ensure improved provision of health services to all the citizens of our country. In the process this also provides our young professionals with an opportunity to develop skills, acquire knowledge, behaviour patterns and critical thinking that will help them in their professional development”.

Although this is the department’s main objective, key informants raised specific issues that they hope this policy will address. These issues include:

- Emigration of qualified doctors to work in other countries
- Lack of public service doctors working in rural or peripheral hospitals
- The urban/rural divide
- Medical training not preparing young doctors for working in rural South Africa
- Private vs. public health service.

Community service was clearly declared as “service and not training” which was further explained to mean that “community service is different from internship and vocational training in that it is an attempt aimed at redressing the inequalities of the past”. However key informants from Department of Health also highlighted this scheme as a learning experience for newly qualified doctors. They said the aim is for the doctors to gain confidence, and develop their skills and ability to deal with the challenges of working in the most needy areas with minimal resources. It is hoped that community service will address the fear of working without necessary support in the peripheral structures and that therefore in future, more doctors will choose to work there.
Policy formation process

One of the recommendations of the 1994 Ministerial Committee on Human Resource Development (MCHRD) was the introduction of remunerated vocational training for health personnel, starting with medical doctors. The MCHRD then drafted a policy on Post-graduate Vocational Training (PGVT) for medical doctors in consultation with the Medical and Dental Council. This was made available for public comment in late 1995 to interested stakeholders, including the Junior Doctors’ Association of SA (JUDASA), the SA Medical Association, the National Interns Association and University representatives. The majority of stakeholders came out strongly against PGVT for various reasons, one of which was that the 6-year medical training was adequate to make graduates competent to practice. The Portfolio Committee on Health held public hearings, and after consultation with the Minister it was ruled that the option of one year of remunerated community service was the way to go. The Ministry of Health then drafted the policy on community service in consultation with the Council, and also prepared the necessary legislation for inclusion in the Health Professions Amendment Bill in late 1996. The Bill was finally passed by the National Council of Provinces in November 1997, and the President signed it into law on 12 December 1997. Regulations were then published and discussed, with a list of approved health facilities and a date of commencement of 29 May 1998. Stakeholders also gave input to the plan for the allocation process. Given the strong human rights constitution in South Africa, it was argued that community service doctors must be given some choice of where to serve. The first cohort of 26 doctors started their community service in July 1998, followed by the larger cohort of 1 088 in January 1999. It is anticipated that dentists and pharmacists will begin their community service in the years 2000 and 2001 respectively.

Possible indicators

Key informants from the Department of Health put forward possible indicators that could be used to assess the effectiveness of this policy. These are:

- Redistribution of doctors to peripheral areas
  The success of the community service policy will be indicated by the number of doctors, who are South African graduates, working in the more peripheral areas. Institutions designated for the rural allowance should give a clearer picture of the coverage of the most remote areas. It is important to note that many peri-urban areas are also under-served areas.

- Health systems related indicators
  Indicators related to health systems were suggested as means of determining the success of this policy, such as the degree to which community service doctors contribute to a well-functioning health district, or hospital.

- Acceptance of community service doctors by the staff and the community
  It would be important to ascertain communities’ perceptions about the effect of having community service doctors in their areas. The acceptability of community service doctors to other doctors, nurses and other members of the health team is an issue, as is their ability to work in a multi-disciplinary health care system.

- Extension of community service to other professionals
  Five years from now, to what extent will community service have been extended to other professions?
Personal development for community service doctors. Some gains may be:

- Growth in terms of knowledge, skills, professional values and confidence. Critical thinking in terms of decision making, dealing with emergencies, and using available resources. Sensitivity to the needs of this country as a result of this experience and exposure.

- Health indicators

  Take into consideration the impact of HIV/AIDS.

  Long term goal is to improve the health status of all South Africans.

  Compare this year’s health indicators with 5 years later.

- Emigration rates

  Improvement on the emigration rates: more doctors deciding to remain in SA.

Methodology

A formal study monitoring compulsory community service for doctors in its first year of implementation is currently under way. The results of the first part, which is qualitative, are presented here. Two basic issues were investigated: the experiences of the doctors themselves, and the effect of the scheme on the hospitals and the health service as a whole.

Interviews with key informants and focus group discussions were held with managers and community service doctors in 3 provinces: KwaZulu-Natal, the Eastern Cape and the Northern Province. These provinces were chosen as they contain the largest proportions of their populations in rural areas, which was the initial focus of the scheme. District, regional and central hospitals were chosen in each province for this study. Hospital managers and senior nurses were interviewed in addition to the community service doctors themselves and their colleagues, in order to gain as comprehensive a picture of the situation in each hospital as possible.

Table 1: Hospitals visited

<table>
<thead>
<tr>
<th>Name of hospital</th>
<th>Number of beds</th>
<th>MO posts</th>
<th>CS posts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KwaZulu-Natal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emmaus hospital</td>
<td>141</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Ladysmith hospital</td>
<td>591</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Madadeni hospital</td>
<td>608</td>
<td>33</td>
<td>8</td>
</tr>
<tr>
<td><strong>Eastern Cape</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holy Cross</td>
<td>352</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Nessie Knight</td>
<td>180</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Northern Province</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botlokwa</td>
<td>40</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>WF Knobel</td>
<td>259</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Pietersburg/Mankweng complex</td>
<td>970</td>
<td>95</td>
<td>20</td>
</tr>
</tbody>
</table>

Note: MD = Medical Officer  
CS = Community service
The framework that arose from analysis of the data gathered in the current study, is represented in Figure 1.

The policy decision to implement compulsory community service was taken at national level amid some controversy. Clear guidelines were not formulated to support the policy of compulsory community service before the first large group of post-interns was allocated to their community service posts in January 1999. This has lead to some confusion and creative interpretations of what was originally intended.
by the concept “community service”. The implementation of the scheme was devolved to institutional level, where managerial capacity is extremely variable. Some hospital managers and superintendents capitalised on the opportunities afforded by extra medical staff, and went out of their way to accommodate the community service doctors by incorporating them into an existing team. However, in other situations, particularly smaller hospitals and health centres where there is a lack of leadership, the medical services are poorly co-ordinated and the community service doctors found themselves forced to find their own place in the hospital system. From the community service doctors’ point of view, the allocation process that allowed for 5 options in order of choice, was based on insufficient information for most to make informed choices.

**Distribution of community service doctors**

Of the 1 182 interns in the country in 1998, almost all actually applied for community service: 56 decided to either delay their community service year, go to another country or not to register at all. These 1 088 doctors were distributed amongst the provinces as shown in Table 2, amongst community health centres, district hospitals, regional hospitals, and tertiary or specialist hospitals according to Table 3. Thirty-four doctors were attached to the SA military health services.

<table>
<thead>
<tr>
<th>Province</th>
<th>Number of CS doctors 1999</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>126</td>
<td>11.6</td>
</tr>
<tr>
<td>Free State</td>
<td>98</td>
<td>9.0</td>
</tr>
<tr>
<td>Gauteng</td>
<td>169</td>
<td>15.6</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>237</td>
<td>21.9</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>79</td>
<td>7.3</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>17</td>
<td>1.6</td>
</tr>
<tr>
<td>Northern Province</td>
<td>160</td>
<td>14.8</td>
</tr>
<tr>
<td>North West</td>
<td>79</td>
<td>7.3</td>
</tr>
<tr>
<td>Western Cape</td>
<td>119</td>
<td>10.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 084</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Sources for Tables 2 and 3 were different, and is the reason for the small difference in the total number of doctors.
It is important to note that, of the 1,122 community service doctors who reported for duty in 1999, only 259 (24%) were placed in facilities that qualify for the rural allowance. Thus less than a quarter were placed in “inhospitable” rural situations. As Table 3 shows, 45% were placed in community health centres or district hospitals, and the rest (55%) were accommodated in regional, tertiary and specialised hospitals.

### Experiences of community service doctors

Analysis of the qualitative data gathered from the focus groups of community service doctors revealed three major themes, and some secondary ones. The attitudes and morale of the community service doctors was generally positive, largely as a result of feeling that they were making a difference, even though they felt that their supervision and support was generally poor. The learning that they described was largely that of developing self-confidence and independent decision-making, rather than clinical skills. The allocation procedure was felt to be less than fair by most community service doctors. Other issues such as conditions of service and social factors were highly dependent on the situation: they were major problems for some, and no issue at all for others.

### Major issues

#### Supervision and support

The level of supervision available to community service doctors was variable. In teaching hospitals, first-year medical officers are given very little opportunity for independent decision-making. In isolated rural hospitals community service doctors were often the only full time medical staff. In some hospitals, other doctors were hesitant to supervise the community service doctors, as they did not feel sufficiently qualified themselves: “We are not specialists, we just have experience”.

Most community service doctors reported that they could at least get help over the telephone when they needed it. But even this was a problem in the more remote hospitals in the Eastern Cape, where telephone access was limited.

Community service doctors in the group of hospitals in northern KwaZulu-Natal reported extraordinarily positive experiences of receiving support from committed seniors, citing this experience as a reason to stay on for the next year. However, a number of community service doctors felt that they could
not rely on the advice of their nearest referral centre. These doctors preferred to phone their academic teaching hospital consultants for help, even if their teaching hospital was far away.

Some doctors received no senior supervision:

“The community is gaining but we are suffering: we expected to gain more, or have more input”.

“I am not learning anything new here: my clinical skills are stagnating”.

“At least we have each other”.

Community service doctors did not use email or the Internet as a source of information. Most preferred to ask one another or a senior colleague in the first instance.

**Learning**

Most community service doctors reported that they had learned to make independent decisions for the first time. Most learning was in the area of gaining confidence and insight into themselves as practitioners, as opposed to formal learning of clinical skills from supervisors. Where supervision was available, new skills were learnt.

“I have not learnt anything new medically, but I have gained an enormous amount of confidence”.

A minority found themselves in a situation where they felt under-utilised.

The location of community service doctors’ internship was a significant factor in determining their expectations and level of skills. Those who had completed their internships in academic hospitals were at a distinct disadvantage in rural hospitals, whereas those who had been interns at regional hospitals had confidence and felt that they could contribute appropriately.

Formal post-graduate education was an issue of great contention when the notion of post-graduate vocational training was first mooted. JUDASA felt that the clinical supervision available in most rural situations would be insufficient to justify the year as training. JUDASA accepted that the primary goal of community service was to meet a need. However, in the process of policy formation, the issue of how doctors would require the necessary clinical skills to cope in a rural hospital was overlooked. The attitude of a number of community service doctors has therefore become one of “we are here to serve but not to learn”. This has meant that they have missed the learning opportunities presented to them through their clinical experiences in any context, through lack of guiding supervision by more experienced clinicians. As one community service doctor said, “I am not sure of some things and there is no-one to help me learn from these experiences”.

A disturbing finding in a few hospitals in the Northern Province was the fact that despite the great need, community service doctors were not doing Caesarean sections, resulting in unnecessary overloading of the referral hospitals. Lack of a clear definition of the role of community service doctors, and their relationship to the other doctors in the hospital, all of whom are foreign-qualified, was cited as the reason in one hospital. In another, it was due to the lack of management capacity to open the theatre.

One community service doctor, alone in an Eastern Cape hospital with 8 Cuban colleagues, chose to make the most of the year’s experience: “This is a life experience which I’m not in a hurry to repeat. But at least I’ve learnt how to do a Caesar – in Spanish!”
Community service

Box 1: A Woman Doctor’s story

A young woman, who completed her internship in a tertiary hospital around Durban, decided to choose a hospital that was in the township, not far from a big town and she got her first choice. She is now based in a large regional hospital.

She only had positive things to say about her community service experience. She enjoys working in this hospital that is neither big nor small. She feels she is getting all the exposure she needs. “You get the feeling that you are not an intern anymore but yet still have people at your door when you need help”.

“It’s been excellent on my side, a perfect inversion”. She felt that this exposure has given her an opportunity to know how much she knows. She thinks that she is in a better position compared to her colleagues who left internship for private sector or specialization. Talking to her one got a sense that she was feeling a little bit guilty about opposing this policy that has worked out more for her benefit.

She feels she has got all the support she needs from the seniors in the hospital. She said she has got very few contacts with the seniors but they are there when she needs them.

After 6 months in the wards, she is now working as an anaesthetist and hoping to write a sub-diploma in anaesthesia at the end of her community service year. She said that she has always wanted to specialise in anaesthesia and was planning to do that immediately after her internship. She is grateful for this exposure because it would have been premature for her to specialise then. Now she has gained experience from other departments like paediatrics and obstetrics which have “complimented my future plans”.

Attitudes and coping skills

The realisation of many community service doctors that they are actually making a difference is a huge motivation for them. This is particularly so for those who visit outlying clinics, some which have never been visited by a doctor. Patients and staff at the clinics appreciated their visits, and this made rural placements worthwhile, in spite of all the difficulties and disadvantages.

“Even the way that patients greet you (when visiting a clinic), makes you feel that it is worthwhile”.

“I am very glad that I came here (to a rural hospital). It is not what I expected but it is still a good experience”.

The development of self-confidence was a critical factor in maintaining a positive attitude to the year. In the context of taking progressively more responsibility for clinical decisions, community service doctors run the risk of emotional stress when things go wrong and they feel guilty. Here again, their internships prepared many of them:

“Our internships prepared us for this: we were hardened, emotionally, and just learned how to cope”.

On the other hand, a minority of community service doctors are experiencing insurmountable difficulties in isolated circumstances, and feel demoralised by the situation. Despite their initial enthusiasm and attempts to introduce positive changes, they have been drained by the experience, and now feel frustrated and powerless to make an impact on their situation.

“We have run out of ways of handling the frustrations of working out here”.

“It’s like hitting your head against a brick wall when you try to get something done here”.

241
“This year has completely disrupted my life, since all my connections are in Gauteng”.

Interestingly, the senior nurses who worked with these same doctors were full of praise for their work. “They really try and they work hard: I can say that they are 100%”

Box 2: A Rural Health Centre story

Two young male community service doctors end up against their choices, in a rural 32-bed district hospital with two Cuban doctors and a superintendent. This is a health centre that is currently being upgraded to a district hospital, seeing approximately 100 deliveries per month, and 4 000 outpatients per month. Of the latter, the 4 doctors see an average of 30 patients in the OPD per day; the PHC nurses screen the rest. The doctors also share the responsibility of the 4 departments namely the 8-bedded female and male sections, maternity and paediatrics (empty at the time of our visit).

The hospital also has two modern fully equipped operating theatres that had never been used since they were built in 1994. The reason given for not operating is because they do not have a ward for post-operative care. Yet there is an 8-bed ward that is used as a storeroom for pharmaceutical products, and there is a theatre-trained nurse working full time in this hospital. As a result, all patients needing Caesarean section are transferred to the large hospital 55km away.

These young men feel grossly under-utilised. They have gone through different emotions from anger and depression to accepting the situation. They were very unhappy with the situation. They had made suggestions on how to change the situation but there hasn’t been any response from the management. They cannot wait to finish their year and leave. What keeps them sane are the clinic visits, where at least they feel needed. Otherwise they feel that this year has been a total waste for them.

They feel that this hospital is not an ideal place for community service in its present state, but has got great potential that is not being realised. Lack of leadership has not helped the situation.

Secondary issues

Allocations: fairness and equity

The allocation process was widely felt to be grossly unfair. The allocations of community service doctors according to their five choices left a minority whose choices could not be accommodated. Those allocated to urban hospitals raised no objections to their placements, whereas those in isolated rural situations felt resentful of their colleagues in central hospitals who are able to proceed with specialities of their choice. Objectively, the allocations are indeed unfair to those who do not receive a placement in one of their first five sites of choice. The suggestion was made repeatedly that community service should only be offered in rural hospitals, not in urban hospitals at all. Alternatively, rotations of six months through one regional and one district hospital could be arranged regionally.

Allocations also did not seem to take account of the institutions’ actual need for doctors. Thus at one rural hospital, all medical officer posts were filled already, and additional community service posts were added to make a total of 14 doctors for 300 beds. By contrast, at a nearby hospital of a similar size, they were extremely short-staffed, and three community service doctors were supported by only two other medical officers. Information on the situation at each hospital was not available at the time that interns were requested to submit their choices, and many had no idea of their options, particularly outside their provinces. It was stated that married couples were not given preference in the allocation procedure, but this was not substantiated.
Conditions of service

Some community service doctors had major problems with their conditions of service. Accommodation and communication were identified as problems, but these were confined to individual hospitals. One hospital in the Eastern Cape has only one telephone line for the hospital, and it was only possible to phone during daylight hours. Generally some plans had been made with regard to accommodation, sometimes at the expense of other staff at rural hospitals. Some doctors had problems with obtaining official transport to visit clinics, while others were concerned about safety when travelling alone. This led to some refusing to visit certain clinics in one area because of the high risk of hijacking. A number of individuals reported specific problems concerning their salaries and transfers, but these were isolated cases.

Social factors

The support of a social network which is taken for granted in urban areas, becomes essential in isolated rural situations, (see “The story of three friends”) but is not always attainable.

“There is nothing else for us to do here after hours except speak to each other and watch TV”.

“Maintaining a relationship (with a girlfriend) while you are out here is impossible”.

It is certainly imperative that married couples are not split up. The distance from family and friends is something that most community service doctors had to come to terms with, but this kind of support is vital when there is a crisis, or when things go wrong.

Box 3: A Story of Three Friends

Three Stellenbosch University friends worked out that if they chose a remote hospital where no one else wanted to go, as their first choice for community service, the chances were that they would end up together. According to them, “It does not matter where you are working, what is important is who you are working with”. Sure enough, after their internships in regional hospitals, they ended up in one of the most remote hospitals in the Eastern Cape, staffed by 4 Cuban doctors and an Ugandan superintendent.

They share a house next to the hospital, and are together most of the time. They even help each other to do calls after hours. They are seen by hospital staff as “the young ones” who are “happy, free, liked by people, who make things easier for the hospital, who practice the Xhosa language, help nurses in history taking, do clinic visits and drive the vehicles themselves”. Nurses, administration staff and management had only good things to say about having these community service doctors.

In terms of support they rely on their previous experience and each other. They sometimes phone their medical school for advice and they have found the superintendent of the hospital very helpful. They felt that their internship at the medium/large hospitals exposed them to skills like performing Caesarean sections that they had to do when they got to this hospital. They also said that they have read more.

Amongst things that have made their life easier is the good leadership in the hospital, which ensures the maintenance of good interpersonal relations amongst staff. An effort has been made to upgrade facilities and equipment in the hospital and there are also excellent laboratory services on the hospital grounds.
The impact on the health system

In terms of impact, the smaller hospitals felt the impact of the community service doctors more than the bigger hospitals. In the smaller hospitals, the presence of community service doctors was more needed, more welcome and appreciated by the staff and community. This was not the case with the bigger hospitals where sometimes the hospital staff did not even know there were community service doctors at the hospital – they had thought that they were just new doctors. In the bigger hospitals, the impact was most noticed by management and other doctors. Most of the information below applied to smaller hospitals.

Stress relief for team members

The stress relief was experienced not only by doctors who were now doing fewer calls in the hospitals, but also by the nurses.

“All the work used to be just for nurses, ordinary nurses using (their) own experience to screen patients. Now there is (a) doctor in OPD all the time”.

Well staffed hospitals

In some hospitals, superintendents felt that for the first time they had a reasonable complement of medical staff. Posts that used to be difficult to fill were filled, and this made the running of the hospital easier.

Less crowding in the outpatients department

As a result of having more doctors available in the hospitals, some institutions had less crowded OPDs. Some hospitals attributed this to the impact of clinic visits by the community service doctors.

Fewer lodgers in the wards

“We used to have lodger patients crowding the wards, people who were stranded (and) had no transport to go home, but that is not the case anymore, there is always a doctor in OPD”.

Faster turnover of patients in the wards

Nurses felt that with the doctors around, patients were getting appropriate investigations, accurate diagnoses and correct treatment, leading to the patients healing faster and therefore leaving the hospital faster.
Outlying clinic visits

Institutions that had previously had difficulty in visiting outlying clinics were able to do regular clinic visits. Clinic visits were being done by community service doctors, either weekly, fortnightly or monthly.

“There are less patients coming to the hospital because of the doctors’ visits to the clinics”.

Development of skills

Other doctors have found having the “young ones” quite enriching in terms of being involved in discussions or responding to their questions. Training that had been impossible because of work pressure was now possible. Nurses also said that they were gaining from working with these newly trained doctors who had updated information to share with them.

Transfers to other hospitals

“They are very patient with patients, they investigate, they treat, they transfer to other hospitals”.

In some hospitals, there was an increase in the number of transfers because the doctors were doing more thorough investigations. In other situations there were fewer transfers because operations were performed in the smaller hospitals.

Communication

An important advantage of having more South African doctors working in public hospitals was easier communication with other hospital staff. This was appreciated even more after the experience of working with doctors from foreign countries like Cuba. Where doctors were able to speak local languages it was an additional bonus for patients and nurses who no longer had to interpret. African community service doctors were trusted by African patients because they understood cultural beliefs and rituals. This helped patients to comply with treatment.

Enthusiasm

“They are still very fresh and new, they bring a refreshing atmosphere”.

“They are always available”.

“…maybe it is because of their age, they are always willing to help, and they come with the smile”.

“These ‘young ones’ are happy, free, liked by people, they make things easier for the hospital, they practice the Xhosa language, help nurses in history taking, do clinic visits and drive the vehicles themselves, they are very nice to our patients”.

17: Community service
Conclusions

Community service for doctors in South Africa was conceived amid controversy, but has emerged as a symbol of the commitment of the health department and the medical establishment to equity in the health system. Unclear policy guidelines in this first year of implementation (not unexpected in the light of the pressure to start) lead to the highly variable community service placements. Only 259 (less than 25%) of the community service doctors are placed in rural hospitals (as designated by the rural allowance), while 55% are working in regional, tertiary and specialised hospitals. Thus, the aim “to distribute health personnel throughout the country in an equitable manner” has only been partially addressed by this policy so far.

Preliminary findings indicate that the aim of ensuring “improved provision of health services to all the citizens of our country” has probably been met. All the health facilities that received community service doctors reported positive impacts, except for one tertiary hospital that regarded them as a “nuisance”. The interpretation of the policy as meaning that community service doctors should work primarily in the community health services of districts, has resulted in many of them visiting outlying clinics regularly, with surprisingly beneficial results for the district health system as well as the community service doctors themselves.

The secondary aim of “providing our young professionals with an opportunity to develop skills, acquire knowledge, behaviour patterns and critical thinking that will help them in their professional development”, has been successfully met by some but not all of the community service placements. This depends on the level of supervision available, as well as the attitude with which the individual approached the year. In general, the response of community service doctors to the challenges and difficulties in public service hospitals around the country has been encouragingly positive, as they have found meaning in “making a difference” in their situations. In the words of one community service doctor placed in a rural hospital: “My perspective has totally changed from the Stellenbosch Afrikaans way of understanding things”

A minority found the environment demoralising, and felt resentful at the unfairness of the allocation process that placed them there. The exact proportion of negative and positive experiences will be determined in the quantitative survey planned for the end of 1999. This will also give an indication of the number of community service doctors who are prepared to remain in the public service in areas of need in the longer term.

It is important to remember that “health manpower planning is an integral part of comprehensive health planning and should not become an independent activity”, and that “planning, production and management of human resources must be brought into closer and more functional relationship with each other”. As we proceed to the next round of community service placements, it is imperative that the experiences and lessons of the first year of implementation are taken into account, and used as the basis of ongoing planning. Universities need to supply graduates with the appropriate knowledge, skills and attitudes, and provincial health departments need to manage their human resources in an equitable manner.

A comprehensive policy on human resources for medically under-served areas in South Africa is needed, of which obligatory community service for doctors is only a part. Judging by the initial feedback of this first year, and the willingness of all those involved, there is a solid basis from which to work.
Recommendations

Policy related recommendations

- The development of a comprehensive human resource policy for the distribution of medical personnel, and an explicit strategy for meeting medical needs in rural and under-served areas in the country are vital.
- The definition of a medically under-served district, or health personnel shortage area needs to be developed.
- A clear definition of community service, in order to ensure more standardisation and equity across the country should be developed.
- Clear guidelines that will serve as job descriptions will ensure that community service doctors are involved in areas of need in districts, and not just used as additional medical officers in hospitals which are already adequately staffed. These guidelines should be developed in relation to norms for services offered by district and regional hospitals.
- Clear criteria for health facilities that should be allocated must be defined. For example, health facilities should be able to sustain a ratio of senior doctors to community service doctors of not less than 1:1, for the purposes of adequate supervision. The criteria should also clarify the type of services rendered by the facility, so that the doctors can be fully utilised.
- Discussions should be held with stakeholders with respect to the suggestion of excluding the tertiary and central hospitals from receiving community service doctors. This would enable the scheme to address the original aim of maldistribution, and would be fairer to those who are currently allocated to peripheral hospitals who do not have access to specialist departments. Community service doctors with genuine reasons to stay in urban areas could be placed at regional hospitals rather than central hospitals.
- Preference for allocation to a large hospital could be given to community service applicants who are committed to serve for a further year in the public sector in an under-served area. Preference for registrar posts for specialist training could be given to those who have served their community service year and an additional year in an under-served area.
- Universities should work more closely with national policy makers to develop a medical curriculum that better prepares students to work in rural and under-served areas.

Conditions of service

- Accommodation: Rural hospitals with no alternative accommodation need to upgrade existing accommodation facilities, ensuring that places are available for married people or families. An official policy on accommodation is needed in some provinces.
- Salaries, transfers and rural allowances must be administered without delay.
- There must be a formal induction process for all community service doctors during their first week.

Supervision and Support

- A training component to community service must be acknowledged by all stakeholders. At a minimum this would amount to in-service training in order for community service doctors to fulfil their duties adequately in the institutions in which they are placed. Ideally this should form the framework for a more comprehensive plan of post-graduate vocational training.
The support, development and retention of senior medical staff are issues that need urgent attention if standards of care are to be maintained, particularly in rural hospitals. These include academic support, incentives and a career structure. The development of trainers for the envisaged post-graduate vocational training is also dependent on this level of worker.

A localised support system needs to be put in place, including regular meetings of community service doctors with seniors to discuss problems, in order to provide opportunities for mentoring. Undergraduate training and internship need to be reviewed in the light of the demands made on community service doctors.

**Allocation process**

- **Information:** More detailed information about each of the approved health facilities for community service needs to be made available. An effective way of doing this could be by means of a web page.
- **Choices:** Interns need adequate time to deliberate on their choice of health facility for the year of community service. At least a month should be given to accommodate this.
- **Family considerations:** The allocation process should double the effort in placing people with families. Although the policy prioritises married people, unmarried parents should also be accommodated.
- **Superintendents’ role:** The community service doctors suggested that the process of application should involve the hospital superintendent, who is well suited to select appropriate candidates according to the needs of the hospital.
- **Internship experience:** Community service doctors allocated to rural hospitals with no specialist support should ideally be chosen from the pool of interns who gain experience in the regional and smaller hospitals, rather than from those who complete their internships at central and academic hospitals.
- **Regional rotations:** Community service doctors should be rotated from the medium/large hospitals to small hospitals. Community service doctors should be released for in-service training courses in specific skills (e.g. anaesthetics, obstetrics) at regional or central hospitals, for short periods of time providing the needs of the hospital at which they are placed are not compromised.

**Management**

- **Leadership and management of the hospitals:** There is an urgent need to develop leadership and management skills in public hospitals. This is key to retaining doctors in the rural and remote areas, as well as strengthening the quality of service delivery.
- **Provincial Co-ordinators:** There is a need for a provincial officer who will take responsibility for all issues related to community service.

**Retention of community service doctors in the public sector**

Most of the doctors who were keen to remain in the public sector were uncertain about their future prospects because of frozen posts in the public service. Many of the community service doctors who were in the remote or most peripheral areas expressed a preference to work in the medium/large hospitals where there is a possibility to learn, develop or specialise. A plan is needed on the part of the government to enable this, such as a number of “buffer” posts.
Chapter 18

Traditional Healers

There is an entrenched historical bias towards Western/allopathic health care that has a long history. The government of the new dispensation has committed itself to the involvement of traditional healers in official health care services. This includes the several types of traditional health care practitioners who can be broadly categorised as diviners, herbalists, faith healers and traditional birth attendants. These practitioners are separated by the methods that they use to diagnose and treat their patients. They also employ a number of different traditional formularies.

The process of registering traditional healers and of establishing a statutory council is complicated by the size of the potential membership. There are an estimated 150 000 to 200 000 traditional healers in South Africa but the number who are bona fide, in that they abide by a strict ethical code, is unknown. There is therefore still no single regulatory body. Traditional healers are presently licensed by about 100 organisations in terms of the Companies Act. During May and June 1997 public hearings were conducted into the legitimisation of traditional healers. This resulted in a proposal for the creation of an Interim Co-ordinating Committee (ICC) whose job it would be to establish a statutory Council for Traditional Healers. This process was due to have been completed by the end of 1999.

This chapter motivates that it is very important that traditional healers be brought into the health resource pool. The role of traditional healers in peoples’ primary health care should not be under-estimated. They attend to basic needs that are met at the community level. There is an expressed willingness of Western practitioners to work together with traditional healers although their partnership is still very much in its infancy.

The chapter concludes that there has been excellent progress towards the incorporation of traditional healers into the health system but that there is still a very long road ahead. It is felt that recognition of traditional healers is long overdue but that it must be accompanied by institutionalisation of standardised training.
Introduction

One aspect of the apartheid health care legacy was a bias towards Western/allopathic health care. The year 1994 heralded a new era in health care delivery when the Government accepted the National Health Plan (NHP). One very important aspect of the new dispensation in health care was the commitment to involve traditional healing in the official health care service. According to this point of view, consumers would henceforth be allowed to choose whom to consult for their health care, and legislation was to be changed to facilitate the controlled use of traditional practitioners.

Today, five years later, it seems that the Government is indeed committed to carrying out the intention originally stipulated in the NHP and entrenched in subsequent legislation. To this end the current restraining legislation (the Health Act 1977), will be repealed in the near future, while the processes of registering healers and of instituting a statutory council for this category of health care workers are underway.

This part of the chapter provides an overview of the human resources and the services offered in the traditional medical sector, describes the regulation of this sector and the current transformation that is taking place, and goes on to describe the role of traditional healers in the district health system.

The African traditional medical sector

Traditional healers are established health care workers within their communities. It has been estimated that between 60 and 80% of the South African population currently use the traditional medical sector as their first contact for advice and/or treatment of health concerns. Their treatment is holistic, dealing with the physical as well as the psychosocial aspects of disease.

Types of African traditional medical practitioners

The traditional medical practitioner or traditional healer is defined as “[S]omeone who is recognised by the community in which he lives as competent to provide health care by using vegetable, animal and mineral substances and certain other methods based on the social, cultural and religious backgrounds as well as the prevailing knowledge, attitudes and beliefs regarding physical, mental and social well-being and the causation of disease and disability in the community”. Traditional healers do not all perform the same functions, nor do they all fall into the same category. Although diviners are known by different names in the different SA cultures (e.g. amagqira in Xhosa, ngaka in Northern Sotho, seloili in Southern Sotho and mungome in Venda and Tsonga) most South Africans generally refer them to as sangomas (from the Zulu word izangoma).

Each of them has their own field of expertise. Even the techniques employed differ considerably. They have their own methods of diagnosis and their own, particular medicine. Africans may choose between two main categories of indigenous healers, i.e. diviners and herbalists. Today, however, the distinction between these two types of healers is no longer all that clear, mostly as a result of the overlapping of roles. The distinction is thus made for analytical reasons. A third type of healer category is of more recent origin, namely the prophet or faith healer that divines and heals within the framework of the African Independent Churches. Apart from these three categories, the Interim Co-ordinating Committee of Traditional Medical Practitioners in South Africa (ICC) has proposed the following additional categories of traditional healers to be included in the proposed legislation, namely traditional surgeons (ingcibi), and traditional midwives/birth attendants (ababelithisi).
Diviners

Diviners are the most important intermediaries between humans and the supernatural. Unlike herbalists, no one can become a diviner by personal choice. The ancestors call them (more usually a woman) and they regard themselves as servants of the ancestors. Diviners concentrate on diagnosing the unexplainable. They analyse the causes of specific events and interpret the messages of the ancestors. They use divination objects and they explain the unknown by means of their particular mediumistic powers. Their vocation is mainly that of divination, but they often also provide the medication for the specific case they have diagnosed.8

Herbalists

Herbalists are ordinary people who have acquired an extensive knowledge of magical technique and who do not, typically, possess occult powers.7 They are expected to diagnose and prescribe medicines for everyday ailments and illnesses, to prevent and to alleviate misfortune or evil, to provide protection against witchcraft and misfortune, and to bring prosperity and happiness. In the healing practices of herbalists, empirical knowledge plays an important role, as they are able to diagnose certain illnesses with certainty and to prescribe healing herbs for those illnesses. In general, magical techniques also have a decisive role to play, because virtually all medicines can contain ingredients that are endowed with magical powers. The medicine often carries a strong symbolic meaning, for example, Tswana herbalists often use the skin of a water iguana or crocodile, that symbolises coolness, to “cool off” the patient.8

Prophets/faith healers

In their diagnosis and treatment of a patient, prophets/faith healers use either prayer, candlelight or water. Sometimes, upon cure, a patient automatically becomes a member of the church to which the faith healer who cured him/her belongs.9

Traditional birth attendants

Traditional birth attendants (TBAs) often serve the communities located in isolated and remote areas where they are consulted as a matter of necessity due to the unavailability of Western health care services. However, they also render their services in urban/semi-urban communities, which despite their exposure to Western health care services may still prefer TBAs. Although information on the status of TBAs in South Africa is not readily available, they are part and parcel of the very large human resource component in the traditional sector, and it can be safely deduced that this category of health provider continues to play an important role.10

Traditional health care practice

The treatment used by traditional healers in general and diviners in particular, varies greatly and depends on the healer’s own knowledge and skills, as well as the nature of the patient’s illness. Satisfactory healing involves not merely the recovery from bodily symptoms, but the social and psychological re-integration of the patient into his/her community.7
**Diagnosis**

Traditional diagnosis is a system that is both an art and a method of seeking to discover the origins of the disease and determining what it is. The diagnostic process not only seeks answers to the question of how the disease originated (immediate causes), but who or what caused the disease (efficient cause), and why it has affected this particular person at this point in time (ultimate cause).8,11

Diagnosis comprises a combination of information, namely observation, patient self-diagnosis and divination. Observation involves noting physical symptoms, while patient self-diagnosis entails reporting by patients of their symptoms. If deemed necessary, the impressions of other family members regarding the patient’s illness may also be obtained. Three methods of divination include the casting of divination objects, mediumistic ability (clairvoyance/telepathy) or dreams and visions.

**Treatment**

Traditional medical practitioners treat all age groups and all problems, using and administering medicines that are readily available and affordable. Their treatment is comprehensive and has curative, protective and preventive elements, and can be either natural or ritual, or both, depending on the cause of the disease. It includes among others, ritual sacrifice to appease the ancestors, ritual and magical strengthening of people and possessions, steaming, purification (e.g. ritual washing, or the use of emetics and purgatives), sniffing of substances, cuts (African mode of injection), wearing charms, and piercing (African acupuncture).9,11

The scope of traditional healing is reflected in the *South African traditional healers’ primary health care handbook*.11 The traditional healer deals with the following categories of conditions:

- Conditions of the respiratory system: e.g. colds and flu; hay fever; pneumonia; asthma; bronchitis; emphysema; tuberculosis.
- Conditions of the gastro-intestinal system: e.g. diarrhoea; dysentery; constipation; heartburn, indigestion; ulcers; haemorrhoids; worms.
- Conditions of the cardiovascular system: e.g. angina; high blood pressure; palpitations.
- Conditions of the central nervous system: e.g. headache; migraine; stroke (traditional treatment is given after discharge from hospital).
- Conditions of the skin and hair: e.g. acne; eczema; boils; insect bites and stings; ringworm; scabies.
- Conditions of the blood: e.g. anaemia; blood cleansing (routinely given following treatment to help cleanse the body of the original cause of the disease).
- Conditions of the urogenital system: e.g. sexually transmitted diseases; cystitis; menstrual pain; vaginitis.
- Conditions of the eyes: e.g. “pink eye”.
- Conditions of the musculoskeletal system: e.g. arthritis; backache; muscular pain; gout; sprains and strains; rheumatism.
- Other conditions such as cancer; HIV/AIDS (some cultural beliefs state that there is no such thing as HIV/AIDS or it is sometimes confused with lugola – a culture-bound syndrome that mimics HIV/AIDS); fever; pain; alcoholism.

Traditional healers also deal with traditional ailments. These culture-bound syndromes usually do not respond to western medicine and must be treated by traditional healers (Zulu: *ukufa kwabantu*). There are five such culture-bound syndromes: spirit possession, sorcery, ancestral wrath (*esinyanya*), neglect of cultural rites or practices (*amaseko*), and defilement.8
Traditional medical remedies

Traditional medicine formulas are prepared from various natural substances (animal, mineral and vegetable). Traditional healers have extensive knowledge on the use of plants and herbs for medicinal and nutritional purposes. Some drugs are used as placebos, others for sympathetic magic, but many have definite medicinal value.\textsuperscript{10,12}

Regulation of African traditional health care

It is estimated that there are between 150 000 and 200 000 traditional healers in this country,\textsuperscript{3} with the healer: population ratio estimated at 1:200.\textsuperscript{13} This apparently favourable ratio could, however, be deceptive, if the type and quality of care in the traditional sector is not taken into account.\textsuperscript{4} In the current economic climate and amid the concomitant unemployment, there is a marked increase in the ranks of traditional healers, among whom there are, unfortunately, quite a number of charlatans. It is calculated that of the 80 000 persons practising traditional healing in Gauteng, only about 10\% are \textit{bona fide} healers, i.e. healers who abide by the strict ethical code of this vocation.\textsuperscript{14} The effect of these charlatans is illustrated by the finding that of the patients with poisonous intoxication admitted to a hospital near Pretoria, 15\% were ascribed to traditional “medicines”.\textsuperscript{15}

As yet, a single governing body does not regulate all these traditional healers. They are organised and “licensed” by approximately 100 organisations (whose membership is a closely guarded secret) that are officially registered under the Companies Act and not as health providers. Although their members subscribe to a certain code of ethics, these associations do not have the mechanisms to enforce this code, thus leaving the door wide open for quacks and charlatans.\textsuperscript{3,4}

Progress towards legitimisation

The South African Government took the initiative for legitimising African traditional medicine during November 1995, when the National Health Minister and the provincial MECs for Health called upon provincial governments to conduct public hearings on the viability of traditional health care. These hearings, subsequently held during May and June 1997, resulted in a report at the end of that year, compiled by the National Council of Provinces and presented to the National Assembly’s Portfolio Committee on Health. According to the report all the provinces were in favour of a statutory council for traditional healers consisting of local representatives rather than persons appointed by the MECs for Health. Other recommendations made were that traditional medical practices should be standardised; that healers must be registered; and that they must be recognised by and have access to medical aid schemes.\textsuperscript{a}

Subsequently, during February 1998, the Portfolio Committee conducted public hearings on the issues that were raised by the report of the National Council of Provinces, namely a council for traditional healers, their training, ethics and a code of conduct. Numerous national role-players submitted proposals, e.g. the National Health Committee of the ANC, several traditional healers’ associations, the Inkatha Freedom Party, NEHAWU, the National Progressive Primary Health Care Network (NPPHCN) and Doctors for Life. Except for the latter, all the parties were in favour of the incorporation of traditional healers into the formal health care system.

\textsuperscript{a} Portfolio Committee on Health. 24 June 1998. Personal communication.
In the months that followed, the Portfolio Committee compiled a report on the future status of African traditional health care which was presented to the Minister of Health in July 1998. It was envisaged that legislation would be passed in 1999. The main recommendations contained in the report were that traditional healers be legally recognised, and that they should be registered within three years. In the meantime an Interim Co-ordinating Committee (ICC), nominated by the provinces has been established to look into a Statutory Council for Traditional Healers.

The ICC has proposed a Council consisting of 34 members, constituted as follows: two traditional healers from each province, one legal representative (not a healer), one representative from the Department of Health, one community member for each province (not a healer), one representative each from any of the other councils for medical and allied professions, and three from the current ICC. They have also set in motion a process whereby the provinces are conducting elections for the provincial structures. These will then make nominations for the Interim Traditional Medical Practitioners’ Council to be inaugurated in November 1999. It is envisaged that the Interim Statutory Council will pave the way for a fully-fledged Council within three years. The whole process is being executed in close collaboration with the Department of Health.

At this point it needs to be mentioned that this process constitutes a major breakthrough. In the past, disunity in the ranks of traditional healers was entrenched to such an extent that all previous attempts to unite the various traditional healers’ associations into a single governing body for purposes of registration – and thus control of the profession – failed dismally.

Because of the delays in official recognition of traditional health care, several private sector companies have recognised the need for involving the traditional sector, because of the preferences of their employees. For instance, Medscheme, South Africa’s largest medical aid administrator, has introduced limited traditional healer benefits, while Eskom has since 1994 allowed employees to claim a limited number of visits to traditional healers on the company’s medical plan. Another example is the Medical and Burial Savings Scheme that has screened and recognised more than 40 healers that clients may consult should they so wish. The Chamber of Mines and the National Union of Mineworkers have also allowed a panel of traditional healers at mines and have granted their employees three days’ leave to consult such healers.

The role of African traditional healers in primary health care

The role of healers in the district health system

The new health care system in this country is based on the primary health care (PHC) approach. The district health system (DHS) is the essence of the PHC approach. It has been argued that the interface of traditional and modern health care systems could most likely come about within PHC and the DHS. People’s basic health needs are met at the district level where the community can participate in the planning and provision of services. With the support of the formal health system, indigenous practitioners can become important allies in organising efforts to improve the health of the community. Given this structure of the National Health Service at the district level, the most feasible point of entry for traditional healers is the Community Health Committee. However, this category of health care provider has, as yet, not been incorporated into the DHS in any real sense.

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b Portfolio Committee on Health. 25 February 1999. Personal communication.
c Dlamini N. Traditional Medical Practitioners’ Association, Soweto. 22 September 1999. Personal communication.
This state of affairs cannot be attributed to official opposition from the Western medical sector, as the Medical Association of South Africa as early as June 1995 formulated guidelines for co-operation between modern and African traditional medical practitioners, especially in the case of referrals. However, it seems that referral is still only a one-way procedure: from the traditional sector to the Western sector.¹⁶

The fact that traditional healers have not really been incorporated into the DHS is also not attributable to a lack of acceptance by the public health service sector. For several years now provincial Departments of Health have been actively involved in providing traditional healers and TBAs with PHC training, among others in respect of HIV/AIDS/STDs and TB. However, since the inception of the DHS, traditional healers’ involvement with the clinics in respect of service delivery has not improved, despite the fact that patients are not discouraged from consulting the traditional sector. On an institutional level, despite endeavours by provincial departments to involve the traditional healer section, the contact has been minimal. For instance, in the Free State they are represented in the District Facilitating Committee, but it seems that their involvement is often not sustained, despite repeated invitations.¹⁶ When confronted, one response from traditional healers was that while some of them have been involved with clinics, others are not in favour of collaboration, at least not until the Statutory Council has been established in order that they can conduct discussions on an equal footing.¹⁸

**Initiatives outside the public health sector**

Because it is recognised that traditional healers are part of the available human resources, there have been quite a number of non-governmental initiatives to involve traditional medical practitioners. One such an initiative is the Traditional Medicines Programme (TRAMED). During 1997 the Medical Research Council, the department of Pharmacology at the University of Cape Town, the school of Pharmacy at the University of the Western Cape and several traditional healers, entered into a collaboration agreement. TRAMED liaises at the national level with traditional healers, companies and researchers to obtain medical and botanical information on plants with healing properties, with a view to setting safety standards for herbal remedies. It has also compiled a comprehensive manual on primary health care.¹⁸,¹⁹

Another example is USAID’s AIDSCAP project. Over the past few years this organisation has funded several training programmes in respect of HIV/AIDS/STDs for traditional healers in South Africa and it has come to the conclusion that these healers are a vital force in the fight against HIV/AIDS/STDs. There is a dramatic multiplier effect when this training reaches those traditional healers who regularly teach initiates.²⁰

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¹⁶ Free State Department of Health. 21 September 1999. Personal communication.
Conclusions

In a sense much more has transpired in view of the traditional medical sector in the past five years than in the rest of this century. The Government has made good its promise to incorporate this sector into the national health system and they have set the necessary procedures in motion. Despite this major breakthrough, very little has changed on the ground. Because traditional healers as yet have no statutory position, Government does not financially support their services.

A note of caution also needs to be sounded: there is still a long, difficult road ahead. The complexities involved in implementing a policy on traditional health care are elaborate and multifaceted. The first problem relates to the implementation of government policy. Thus a policy calling for involvement of traditional medical practitioners may be adopted on paper, but unless persons with conviction and clout remain in a position to see the policy through, and see to the actual changes in budgetary, personnel, and time allocations at the central and regional levels, little will change on the ground. In addition, the testing and certifying of traditional remedies, as well as the licensing and monitoring of traditional healers could prove to be costly and difficult to implement. The most important constraint could prove to be a lack of funds to monitor registered traditional healers, to measure their knowledge and to evaluate any modification in their practices according to desired standards.

Admittedly, recognition of traditional health care is long overdue. But, when it does come, it must be characterised by the institutionalisation of more standardised training of traditional healers, and the authority and mechanisms to oust quacks and charlatans who tarnish the image of this kind of health care. Only then could it contribute to a multifaceted model of health care in line with the varied needs of the diverse peoples of this country. The fact remains that, should there be any further delay in legalising these healers, a rich source of health care will remain largely untapped.
Occupational health services have developed in a fragmented manner and lag behind international developments. There is, however, a renewed effort to attend to the deficiencies in occupational health. This chapter describes the demographic profile of the South African workforce of about 14 million people, including a synopsis of the current dominant employment sectors. An overview is provided of the spectrum of occupational diseases and injuries in the country.

Health and safety legislation is shared between three departments, Health, Labour, and Minerals and Energy. In respect of the health sector, government policies and recent developments are contained in a section in the White Paper on the Transformation of the Health System. This policy states that employers are responsible for providing funding for occupational health services of their employees. Provincial administrations will also be required to establish occupational health capacity in terms of the White Paper. The need for effective interdepartmental co-ordination is recognised in the White Paper as is the need to upgrade and harmonise occupational health legislation with the ILO Conventions.

This chapter urges that there is a need for the link with the hospital infrastructure to be redefined and strengthened.

Within the private industrial sector there are two professional associations that concern themselves with occupational health. The South African Society of Occupational Medicine rejects the proposal for the creation of a Health and Safety Agency (HSA) for the regulation of health and safety. The association proposes that the district health authorities assume this function. There is also no consensus on whether the State should regulate the provision of occupational health services. At present it is only the large companies that are likely to provide services to their workers. Occupational health services are therefore concentrated in the urban areas. This chapter contains some discussion on the services that are being provided in occupational health services of industry.

There are plans to develop the structures to co-ordinate occupational health and safety at provincial level. Presently occupational health services at this level are still under-developed. At the same time there is a need for improved intersectoral collaboration.

The chapter ends with the conclusion that the status of occupational health in South Africa is at a cross-roads. Some recommendations are made as to how to manage the next steps.
Introduction

Occupational health services in South Africa are poorly developed and lag behind developments internationally. This is a result of the legacy of fragmented, racist and conservative legislative provisions that have attempted to address the occupational health needs of workers in this country. Recent developments indicate a renewed emphasis on occupational health with a major overhaul in the laws and policies governing health and safety. There is also a renewed emphasis in the Department of Health to ensure adequate provision of occupational health services. In this chapter, we describe the demographic and occupational health status of the South African workforce and the level of occupational health service provision. We also attempt to evaluate progress in the development of occupational health capacity in the public sector with specific focus on the provinces.

Occupational health services in this country have developed in diverse settings. These include the need for health services in remote settings (such as rural and mining industry); inherently dangerous work (mining); the need to reduce absenteeism and thereby increase productivity; certain legal requirements for medical surveillance of workers (notably miners, but also drivers, mariners, radiation and lead workers); the need to screen potential workers for life assurance and pension risk; and in more recent years in response to pressure from trade unions and the new political dispensation.1,2,3

Demographic profile of the South African workforce

The patterns of occupational health service delivery in South Africa are determined by employment patterns, the nature of industrial activity and the hazards associated with these activities. The gender and socio-economic profile of the workforce and their health needs also play a role. A thorough review of the working population for the period up to 1994/95 is described elsewhere.2 Recent figures from the National Census (Statistics South Africa database, 1996) indicate that 14 million of the adult working population are economically active (EAP) (Table 1). In most provinces, men form a slightly greater proportion of the EAP (55%) except for the Northern Cape where men and women are equally distributed. The rate of males absent from their households (a reflection of migration patterns) has been the highest in the Eastern Cape, Northern Province and KwaZulu-Natal (Human Sciences Research Council Population statistics database, 1991). A proportion of the unemployed male population in these provinces are ex-workers who have been disabled from an injury or disease sustained while working on the mines located in other provinces.
Industrial activity in South Africa is highly concentrated in certain provinces. The provinces which employ a large proportion of the national EAP are Gauteng (26%), KwaZulu-Natal (19%), Western Cape (12%) and Eastern Cape (11%) (Table 1). Gauteng (97%) and the Western Cape (88%) have a predominantly urbanised workforce (Table 2), whereas the EAP in the Northern Province is predominantly rural (83%). Increasing urbanisation of the EAP is noticeable in the Eastern Cape, Mpumalanga and KwaZulu-Natal. While most of the EAP is in the formal sector (76%), an increasing number of the EAP are beginning to work in the informal sector (1994: 14.7%; 1997: 24.2%).

Table 1: Demographic profile of economically active population in South Africa

<table>
<thead>
<tr>
<th>Province</th>
<th>Male No (%) (Thousands)</th>
<th>Female No (%) (Thousands)</th>
<th>Total EAP (Thousands)</th>
<th>EAP as a % of Total EAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>792 (51%)</td>
<td>765 (49%)</td>
<td>1 557</td>
<td>11</td>
</tr>
<tr>
<td>Free State</td>
<td>570 (56%)</td>
<td>448 (44%)</td>
<td>1 018</td>
<td>7</td>
</tr>
<tr>
<td>Gauteng</td>
<td>2 056 (56%)</td>
<td>1 590 (44%)</td>
<td>3 646</td>
<td>26</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>1 412 (54%)</td>
<td>1 216 (46%)</td>
<td>2 628</td>
<td>19</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>531 (57%)</td>
<td>395 (43%)</td>
<td>926</td>
<td>7</td>
</tr>
<tr>
<td>Northern Province</td>
<td>176 (57%)</td>
<td>131 (43%)</td>
<td>307</td>
<td>2</td>
</tr>
<tr>
<td>North West</td>
<td>669 (56%)</td>
<td>519 (44%)</td>
<td>1 188</td>
<td>8</td>
</tr>
<tr>
<td>Western Cape</td>
<td>7 683 (55%)</td>
<td>6 364 (45%)</td>
<td>14 047</td>
<td>100</td>
</tr>
</tbody>
</table>


Note: Economically active population (EAP): person ≥ 15 years old who is employed (formal and informal sector) or unemployed (person wants to work and is seeking work)

Table 2: Geographical distribution of urbanised economically active population in South Africa

<table>
<thead>
<tr>
<th>Province</th>
<th>1994 No (%) (Thousands)</th>
<th>1997 No (%) (Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>814 (46%)</td>
<td>865 (56%)</td>
</tr>
<tr>
<td>Free State</td>
<td>593 (62%)</td>
<td>681 (67%)</td>
</tr>
<tr>
<td>Gauteng</td>
<td>3 344 (96%)</td>
<td>3 535 (97%)</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>1 389 (51%)</td>
<td>1 555 (59%)</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>351 (37%)</td>
<td>440 (48%)</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>195 (70%)</td>
<td>205 (67%)</td>
</tr>
<tr>
<td>Northern Province</td>
<td>163 (13%)</td>
<td>186 (17%)</td>
</tr>
<tr>
<td>North West</td>
<td>485 (41%)</td>
<td>478 (40%)</td>
</tr>
<tr>
<td>Western Cape</td>
<td>1 450 (84%)</td>
<td>1 496 (88%)</td>
</tr>
<tr>
<td>South Africa</td>
<td>8 788 (61%)</td>
<td>9 441 (67%)</td>
</tr>
</tbody>
</table>


Notes: 1. Total EAP = 14 297 000
2. Total EAP = 14 047 000
The community, social and personal services sector continues to be the major employer of workers in the country as a whole (17%). These are mainly workers in the public sector including those in education and health. The two other major employment sectors nationally are manufacturing (12%) and wholesale and retail trade (12%).

Men and women participate almost equally in the community, social and personal services, manufacturing and wholesale/retail sectors. Men predominate in the mining and construction industry, many of the work-places being located outside the metropolitan areas. Women are commonly also employed in domestic services and agriculture. A considerable number of women in the agricultural sector are seasonal workers. While certain hazardous industries such as mining and agriculture may be on the decline, this is increasingly being replaced by the manufacturing sector with its associated hazards.

**Spectrum of occupational diseases and injuries among South African workers**

The nature of occupational health service provision is to a large extent determined by the profile of occupational injuries and diseases experienced in a particular province. Comprehensive and recent information in this area is lacking. Information was obtained from officially reported statistics by government departments, surveillance programmes for specific occupational disease groupings, and clinic attendance at major referral centres for occupational diseases. Furthermore, some industries are privately insured (e.g. mining) and other groups e.g. domestic workers are not covered by compensation legislation. The occupational diseases diagnosed at referral centres do not reflect the true incidence of occupational disease in various industries since they represent sentinel cases. Published statistics are also skewed by reporting bias and some figures are quite dated. Despite the limitations, these figures give some insight into the spectrum of occupational diseases encountered by occupational health services. Since no published information on the health of workers in the defence and police services was available to the authors, these occupational categories were not covered.

**Occupational injuries**

The pattern of occupational injuries reported is documented in the Compensation Commissioner’s annual report as required by the Compensation for Occupational Injuries and Diseases Act (COIDA), which replaced the previous Workmen’s Compensation Act.

A total of 242,424 occupational accidents were reported in 1993. This represented an accident rate of 33.4 accidents per 1,000 workers covered by the Compensation Fund. Figures for 1990 indicate that Gauteng (32%), Western Cape (21%) and KwaZulu-Natal (19%) reported a substantial proportion of the accidents. These provinces being the most industrialised accounted for more than 70% of all reported cases. More than 80% of injuries affected men and more than 80% of the cases reported were from urban areas.
Published statistics for 1990 showed that the average national accident frequency rate of accidents for all industries was 7.21 injuries/million person-hours worked and the severity rate was 1.11 days lost/1000 person-hours worked.\textsuperscript{7} Figures for 1994 indicate the proportional contribution to total injuries of various sectors in the country to be: manufacturing – non-metallic (29%), manufacturing – metallic (20%), transport (16%), service (13%), construction (9%), agriculture (6%), commerce/trade (6%) and mining (5%). The major sectors contributing to high fatality (severity) rates were transport (39%), agriculture (16%), construction (13%), service (11%), manufacturing – non-metallic (9%), manufacturing – metallic (6%) and commerce (4%).\textsuperscript{8} It must be noted that the portion of the mining sector that is privately insured was not included in these figures. These data do not reflect the actual levels experienced by this sector which has historically had one of the worst safety records in the world.\textsuperscript{9} Corrected data for 1995 indicate that the mining sector had the highest fatality rates, followed by transport, building and construction and agriculture.\textsuperscript{10}

An analysis of frequency of accidents reported for 1993, according to anatomical site, indicated that the most commonly reported part of the body affected was the fingers (24%), legs (15%) and trunk (12%). Injury to the fingers was also documented to be the major cause of permanent disablement (57% of all cases). This has major implications for the rehabilitation of workers in this country since a substantial proportion are manual workers.

**Occupational diseases**

The pattern of occupational diseases reported is documented in the Compensation Commissioner’s annual report – Department of Labour (as required by COIDA) and the Report of the Medical Bureau for Occupational Diseases (MBOD) – Department of Health (as required by the Occupational Disease in Mines and Works Act).

In 1990 occupational diseases constituted only 0.05% (128) of all compensation claims certified by the Compensation Commissioner in the Department of Labour.\textsuperscript{2} Pneumoconiosis (asbestosis and silicosis) comprised 77% of all claims certified. Official data on claim acceptances under COIDA have not been published for the past eight years. More recent figures of compensation claims submitted (not necessarily certified) to the Compensation Commissioner indicate that 5 679 claims for occupational diseases were reported (Table 3).\textsuperscript{a} The common occupational diseases outside the mining industry were noise-induced hearing loss (56%), major depression/traumatic stress (13%), dermatitis (12%), tuberculosis (5%), pneumoconioses (4%), and occupational asthma (3%).

\textsuperscript{a} Henry Flint, Compensation Statistics, Compensation Fund, Department of Labour. Personal communication.
Table 3: Most common occupational diseases reported to the Compensation Commissioner under Compensation for Occupational Injuries and Diseases Act (COIDA) in South Africa

<table>
<thead>
<tr>
<th>Disease</th>
<th>1996</th>
<th>1997</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing impairment - noise-induced</td>
<td>1 219</td>
<td>1 903</td>
<td>3 175</td>
</tr>
<tr>
<td>Dermatitis</td>
<td>305</td>
<td>388</td>
<td>678</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>205</td>
<td>231</td>
<td>306</td>
</tr>
<tr>
<td>&quot;Major depression&quot;/Post traumatic stress</td>
<td>192</td>
<td>605</td>
<td>734</td>
</tr>
<tr>
<td>Occupational asthma</td>
<td>141</td>
<td>184</td>
<td>180</td>
</tr>
<tr>
<td>Asbestosis</td>
<td>129</td>
<td>149</td>
<td>149</td>
</tr>
<tr>
<td>Silicosis</td>
<td>59</td>
<td>93</td>
<td>95</td>
</tr>
<tr>
<td>Pneumoconiosis</td>
<td>52</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Mesothelioma</td>
<td>52</td>
<td>54</td>
<td>65</td>
</tr>
<tr>
<td>Bronchopulmonary disease</td>
<td>37</td>
<td>58</td>
<td>5</td>
</tr>
<tr>
<td>Pleural thickening</td>
<td>29</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Fibrosis of the lung</td>
<td>14</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Byssinosis</td>
<td>16</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Over-straining of muscular tendinous insertions</td>
<td>8</td>
<td>78</td>
<td>32</td>
</tr>
<tr>
<td>Brucellosis</td>
<td>9</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Erosion of the oral or nasal cavity (nasal septum perforation)</td>
<td>4</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Chronic obstructive airways disease</td>
<td>0</td>
<td>9</td>
<td>29</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>0</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Hand-arm vibration syndrome (Raynaud’s phenomenon)</td>
<td>0</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Chemical bronchitis</td>
<td>0</td>
<td>3</td>
<td>70</td>
</tr>
<tr>
<td>Tendonitis</td>
<td>0</td>
<td>0</td>
<td>39</td>
</tr>
<tr>
<td>Bronchospasm</td>
<td>0</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>Total number of all cases reported</td>
<td>2 482</td>
<td>3 795</td>
<td>5 679</td>
</tr>
</tbody>
</table>

Note: Figures are for the period 1 January to 31 December. Actual compensation outcome unknown. Does not include cases reported in the mining sector.

Source: Department of Labour. Compensation Commissioner’s occupational disease database (personal communication, H Flint)

The most common occupational disease reported in the mining sector is occupational lung disease. The mining sector contributes more than 90% of the overall occupational lung disease burden experienced by all industries. For the 1996/97 period the number of certifications for occupational lung diseases was 8 261 which is very similar to figures reported in 1992 (Table 4). More than half of all cases certified by the MBOD were workers with pulmonary TB. Pneumoconiosis was the second most common diagnosis. Silicosis was by far the most common pneumoconiosis (74%) found on post-mortems of deceased persons. Most of the workers certified were employed in the gold and asbestos mining industries. A more recent study investigating the prevalence of lung diseases among Botswana migrant workers who had worked on South African mines revealed that between 26-31% of workers had radiological pneumoconiosis. Similar figures were found among ex-miners in the Libode district of the Eastern Cape where the prevalence of pneumoconiosis was between 22-36%. A growing number of ex-miners present themselves to TB clinics/hospitals and other health services in the Eastern Cape, Northern Province, Northern Cape and Mpumalanga for health care.
Table 4: Occupational diseases certified under the Occupational Disease in Mines and Works Act in South Africa

<table>
<thead>
<tr>
<th>Disease</th>
<th>Number of claims certified (%)</th>
<th>1992</th>
<th>1996-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuberculosis</td>
<td>5 220</td>
<td>4 159</td>
<td>(66%)</td>
</tr>
<tr>
<td>Pneumoconiosis</td>
<td>2 253</td>
<td>3 554</td>
<td>(43%)</td>
</tr>
<tr>
<td>Obstructive Airways Disease</td>
<td>429</td>
<td>343</td>
<td>(4%)</td>
</tr>
<tr>
<td>Obstructive Airways Disease and Pneumoconiosis</td>
<td>-</td>
<td>150</td>
<td>(2%)</td>
</tr>
<tr>
<td>Platinum salt sensitivity</td>
<td>28</td>
<td>44</td>
<td>(1%)</td>
</tr>
<tr>
<td>Progressive Systemic Sclerosis</td>
<td>27</td>
<td>10</td>
<td>(0.1%)</td>
</tr>
<tr>
<td>Progressive Systemic Sclerosis and Pneumoconiosis</td>
<td>-</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7 957</td>
<td>8 261</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

Sources: Department of Health. Report of the Medical Bureau for Occupational Diseases, 1992 (Graph 8)
Department of Health. Annual Report of the Medical Bureau for Occupational Diseases, 1996/97 (Tables 6, 7 & 9)

The most recent figures released by the Surveillance of Work-related and Occupational Respiratory Diseases in South Africa (SORDSA) programme indicate that a total of 3 526 cases were voluntarily reported by nurses and doctors over two years (October 1996-98). The largest proportion of occupational lung diseases was reported from Gauteng (74%), Western Cape (13%) and KwaZulu-Natal (7%). Pneumoconiosis comprised 62% of all cases, followed by pneumoconiosis with pulmonary tuberculosis (8%), occupational asthma (7%) and chronic obstructive airway disease with pneumoconiosis (7%). Although most cases were reported from Gauteng, a large proportion of the workers with pneumoconiosis, reside in the Northern Province. Furthermore, the highest annual incidence of occupational asthma is reported from the Western Cape (29.1 per million employed persons) and KwaZulu-Natal (23.4 per million employed persons). The mining industry was responsible for 68% of all cases, followed by the asbestos industry (6%), health care industry (4%) and paper and pulp industry (2%). The main causative agents identified included mineral dusts viz. silica and asbestos (81%); chemicals viz. sulphur dioxide, chlorine, isocyanates (7%); organic agents viz. Mycobacterium tuberculosis (5%); formulated agents viz. latex and welding flux (4%), and metals viz. platinum salts (2%).

The gender profile of patients attending most occupational health referral clinics in the industrialised provinces indicate that mainly men (75%) presented with work-related problems. The main hazards identified include mineral dusts (asbestos, silica, coal), vegetable dusts (grain, flour, wood, cotton, latex), gases and fumes (welding, smelting, metallurgy), metals (heavy metals, platinum), chemicals (isocyanates, solvents, plastics), noise, ergonomic stressors, unsafe machinery and psychosocial hazards (poor workplace organisation, shift–work). The common occupational diseases diagnosed were occupational lung diseases (occupational asthma, asbestosis, silicosis, tuberculosis), dermatitis (due to cement, rubber, oils, metals), heavy-metal and solvent toxicity, noise-induced hearing loss and musculoskeletal disability due to the late effects of trauma (affecting mainly the hands and back). Stressful work situations also resulted in increased levels of anxiety and depression being reported particularly by women workers who worked the “double shift”.

5
Occupational health service provision in South Africa

Policy and legislation

Health and safety legislation

No over-arching national health and safety policy or statutory requirements exist to stipulate the provision of occupational health services. Various laws however exist that have a direct bearing on the delivery of occupational health services by requiring medical surveillance and evaluation of the work environment. The most important of these are the Occupational Health and Safety Act (OHSA) of 1993 and its regulations on hazardous chemical substances and lead; and the Mine Health and Safety Act (MHSA) of 1996. These laws are enforced by the Department of Labour (excluding mines) and Department of Minerals and Energy (mines) respectively (see Table 5). The MHSA also has under its provisions a dedicated medical inspectorate to enforce the required occupational health standards. The South African Medicines and Medical Devices Regulatory Authority Act (1998) requires the occupational health nurse to complete an approved course in pharmacology in order to be licensed to practise. There is uncertainty as to whether the new Act will make it more onerous for occupational health nurses to practice primary clinical care in workplace-based occupational health services.

Table 5: Legislation pertaining to occupational health services in South Africa

<table>
<thead>
<tr>
<th>Act</th>
<th>Function</th>
<th>Enforcement Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Health &amp; Safety Act (OHSA), 1993</td>
<td>Ensures a healthy and safe environment in factories and offices</td>
<td>Dept. of Labour</td>
</tr>
<tr>
<td>Compensation for Occupational Injuries &amp; Diseases Act (COIDA), 1993</td>
<td>Provides for medical cover and compensation of occupational injuries or diseases in all workplaces</td>
<td>Dept. of Labour</td>
</tr>
<tr>
<td>Mine Health &amp; Safety Act (MHSA), in mines/quarries 1996</td>
<td>Ensures a healthy and safe environment</td>
<td>Dept. of Minerals &amp; Energy</td>
</tr>
<tr>
<td>Occupational Diseases in Mines &amp; Works Act (ODMWA), 1973</td>
<td>Provides for compensation of occupational lung diseases in mines and quarries</td>
<td>Dept. of Health</td>
</tr>
<tr>
<td>Medicines and Related Substances Act, 1965</td>
<td>Provides for an authorisation permit to be issued to a nurse dispense schedule 1-4 substances at workplace health services</td>
<td>Dept. of Health</td>
</tr>
</tbody>
</table>

Government policies

Rees and Davies first described the occupational health and safety policy initiatives (Report of the Committee on Occupational Health - 1996, Report of the Committee of Enquiry into a National Health and Safety Council in South Africa - 1997) and a framework emerging from the new political dispensation in the 1997 Health Review. Other more recent policy initiatives impacting on occupational health in the public sector are contained in the White Paper on the transformation of the health system. It outlines in greater detail the importance of developing occupational health services and associated human resources at all levels of the public health care system. It notes that employers are primarily responsible for providing and funding occupational health services. In the light of the poor level of occupational health service
provision at workplace level, it calls for an investigation into a specific requirement that all workplaces provide occupational health services. It however outlines a special role for the Health Department in providing services to historically neglected sectors such as small and medium-sized enterprises, the public sector, the informal sectors and the unemployed through the district health system. This pertains specifically to those districts where there is substantial industrial activity. These services at district level should be integrated with comprehensive service delivery. At a regional level, a secondary diagnostic and rehabilitative capacity for occupational health must be created at regional hospitals to serve as referral centres for both private (workplace) and public (district) primary level occupational health services. At provincial level, an occupational health unit with occupational medicine and hygiene expertise should be created.

The provincial health administrations are required to establish a sub-directorate for occupational health to develop an occupational health strategy (plan) with the involvement of major stakeholders. At national level, the Health Department has the responsibility to promote occupational health; to manage the National Centre for Occupational Health (NCOH); and to satisfy the statutory obligations under the Occupational Diseases in Mines and Works Act (ODMWA). This act provides for the provision of benefit (compensation) examinations for former mine workers. The Medical Bureau for Occupational Disease is responsible for improving access to historically under-served areas, by identifying and training key practitioners. It is unclear whether these practitioners are in the public or private sector and how their roles relate to regional diagnostic services or the envisaged provincial occupational health units.

The White Paper also calls for effective interdepartmental co-ordination and organisation of the various components of occupational health and safety by proposing a legislative framework to create a national health and safety agency with provincial components. This will provide a forum for policy-making and standard setting involving the major role players such as labour, business, State departments and occupational health and safety specialists. This is in line with the Department of Labour’s Committee of Inquiry into a National Health and Safety Council that also recommended the establishment of a statutory National Council to develop an integrated national occupational health and safety policy. This initiative will also form the basis for the harmonisation of South African occupational health and safety standards with standards of the International Labour Organisation (ILO) and the promotion of these standards for the entire Southern African region. A recent audit of Southern African Development Community (SADC) countries indicated that South Africa has not ratified any of the various ILO Conventions that pertain to occupational health and safety. Loewenson does however indicate that South African laws are in compliance with most of the provisions in the ILO Convention 155 (1981), the most central Convention governing health and safety, except for the right to refuse dangerous work (outside the mines). Notably, Article 5 of the Convention 161 (1985) deals specifically with the role and functions of occupational health services. To date no formal audit of South African workplaces in compliance with these standards has been conducted. There is a need therefore to ensure that a systematic process is set in place to upgrade occupational health and safety laws in order to harmonise them with major ILO Conventions.

Private sector policies

The two major professional associations that have a role in shaping occupational health service delivery are the South African Society of Occupational Medicine (SASOM) and the South African Society of Occupational Health Nurses (SASOHN). SASOM has also endorsed the formation of a fully integrated health and safety agency (health and safety executive), rationalisation of health and safety legislation into a single Act and enforced by a dedicated inspectorate. The health and safety agency should be funded by general taxation and should function only at national and district level. Both associations advocate the
promotion and development of workplace-based occupational health services to implement primary level general health care services. These services should be staffed by registered practitioners having an appropriate occupational health qualification. SASOM advocates that workplace health services should be nurse-based under supervision of a medical practitioner. Quality of care should be ensured by implementation of guidelines and protocols and by monitoring and audit of providers. SASOM advocates that health services at the workplace level should not be regulated by a health and safety agency but by district health authorities (DHA). It sees the DHA liaising more closely with workplace-based health services with regard to general health service delivery and completing health information statistics. SASOM is of the view that should a National Health Insurance (funded by a dedicated health tax) be instituted, employers who provide primary health care services should be given tax incentives.

No consensus exists as to whether the state should regulate the provision of occupational health services and what the nature of these services should be. Some researchers have suggested that the state regulate the provision of occupational health services, primary care health services could become more accessible and affordable to a large proportion of workers employed in the formal sector. Promotion and development of workplace-based occupational health services could therefore be used to implement comprehensive primary health care services. However, the findings of other researchers indicate that the workers' provider of choice is the private general practitioner and occupational health services should focus mainly on work-related problems. Workers' utilisation of workplace services was found to be restricted to minor complaints and obligatory occupational health examinations. The independence and objectivity of medical personnel are identified as crucial determinants of worker's perceptions and utilisation of employer-provided occupational health services. This raises another issue, that should the State regulate the provision of occupational health services, who then would employ occupational health personnel to run these services?

**Occupational health services in the private sector**

Various studies have shown that the provision of employer provided and funded workplace-based health services (outside the mines) ranges between 11 and 18%. In general, those companies employing a greater number of workers (>1 000) are more likely to provide a health service staffed by full-time health personnel. No recent data are available on the number of registered workplaces with occupational health services per province. Some indication of the level of occupational health service provision can be obtained from the list of permits (obtained from the National Department of Health) authorising sisters at workplaces to dispense medicines under a doctor's supervision. To date there were 1 321 clinics registered with the Health Ministry, 5% of which are located on the mines. The permits were issued mainly to occupational health services in the urban areas of the major economic provinces of Gauteng (38%), KwaZulu-Natal (25%) and the Western Cape (17%) (Table 6). These clinics, together with the network of mining industry hospitals, constitute the employer provided workplace-based occupational health services. Surveys of health service provision outside the metropolitan area in the Western Cape revealed that only 42.5% (n=68) of seafood processing workplaces along the West Coast and none of the randomly surveyed farms in the Stellenbosch area had any “formal” occupational health service. Occupational health services are concentrated in urban areas and in mines employing a large (>200) workforce.

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b Mike Baker (SASOM) and Louwna Pretorius (SASOHN). Personal communication.

c Johan Kruger, Pharmacy Council, Department of Health. Personal communication.
Table 6: Distribution of workplace-based health services authorised to dispense medication in South Africa

<table>
<thead>
<tr>
<th>Province</th>
<th>Number of workplaces with permits (%)</th>
<th>1995</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>67 (6.2%)</td>
<td>78 (5.9%)</td>
<td></td>
</tr>
<tr>
<td>Free State</td>
<td>42 (3.9%)</td>
<td>43 (3.3%)</td>
<td></td>
</tr>
<tr>
<td>Gauteng</td>
<td>440 (41.0%)</td>
<td>502 (38.0%)</td>
<td></td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>236 (22.0%)</td>
<td>336 (25.4%)</td>
<td></td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>-</td>
<td>33 (2.5%)</td>
<td></td>
</tr>
<tr>
<td>Northern Cape</td>
<td>14 (1.3%)</td>
<td>12 (0.9%)</td>
<td></td>
</tr>
<tr>
<td>Northern Province</td>
<td>47 (4.3%)</td>
<td>58 (4.4%)</td>
<td></td>
</tr>
<tr>
<td>North West</td>
<td>40 (3.7%)</td>
<td>39 (3.0%)</td>
<td></td>
</tr>
<tr>
<td>Western Cape</td>
<td>188 (17.5%)</td>
<td>220 (16.6%)</td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>1 074 (100%)</td>
<td>1 321 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Database of permits issued by the National Department of Health in August 1995 & July 1999 (personal communication, J Kruger)

Activities of occupational health services

Surveys done in 1980’s and again in the early 1990’s indicate that the pattern of occupational health service provision has not changed substantially.\(^{26-28}\) Occupational health services are mainly engaged in safety issues and general primary level care. This includes treatment for minor complaints and accidents, contraceptive services, and chronic illnesses e.g. TB and hypertension. Other activities include consultative services to management; health promotion services, some rehabilitation services; and administrative work. Nurses estimate that less than half (44%) of their time is spent on occupational health issues, the remaining time being spent on primary curative service delivery.\(^2\) Most of the doctors employed in these services have no formal qualification in occupational health and provide general medical care on a part-time basis.

Specialised health services

Aside from employer provided and funded occupational health services, a number of private occupational health agencies have recently sprung up to provide primary level occupational health services and laboratory services. There are also a number of private hospitals in the metropolitan areas staffed by private specialists providing in-patient care to workers injured at the workplace. Most public-sector hospitals act as a conduit for the referral of workers injured at work to be seen by private practitioners. Doctors at these hospitals are contracted to the Compensation Fund through the provincial hospital services. Injured workers presenting at public sector hospitals are in practice usually transferred to private hospitals for further care, especially where capacity in dealing with compensation claims is lacking in public sector hospitals. There is however uneven distribution of service provision between the metropolitan and rural areas, with poor infrastructure in the rural areas. Specific services for vocational rehabilitation have been an extremely neglected area of private sector activity, except for the well-equipped services provided by Rand Mutual hospital in Johannesburg and the Ernest Oppenheimer hospital in Welkom. This is probably a reflection of the lack of emphasis of this aspect by the Compensation Law (COIDA). Since these private providers are not adequately remunerated for such services, there is a poor link between orthopaedic surgeons involved with the acute management of injured workers and physiotherapists/occupational therapists who are involved in the rehabilitation of these workers.
**Occupational hygiene and safety services**

The Department of Labour is responsible for certifying privately employed occupational hygienists to conduct occupational hygiene assessments at workplaces (approved inspection authorities). There are also a number of safety practitioners and risk management organisations in the private sector that provide consultancy services to employers. The National Occupational Safety Association (NOSA) also provides support to employer activities eg. training of health and safety officers and conducting audits.

**Industry expenditure on occupational health services**

It is estimated that 6% of total expenditure on health care in the private sector can be attributed to industry. Total expenditure by industry on health care for the 1992/93 private sector financial year was estimated between R5.65 and R7 billion. Of this, contribution to medical schemes (mainly for “white collar” workers) constituted 81-85% of total expenditure; workplace-based health care (clinics and hospitals) 6-8% and contributions to the Workers Compensation Fund 8-10%. Total estimates for workplace-based health care facilities for 1992 were R473 million of which R150 million was spent on on-site clinics and the remainder on mine hospitals.

A recent pilot survey conducted by Jeebhay (July 1999, unpublished) among 20 SASOHN members indicated that the average annual per capita expenditure is between R300 - R500 for workers employed in large and medium-sized enterprises of the Western Cape. This figure is substantially lower than those for workers (mainly white collar workers) subscribing to medical aid (R1 667), medical benefit funds (R1 338) and industrial council schemes for blue collar workers (R689), and illustrates the vast disparities in funding for health care of white collar and blue collar workers.

**Occupational health services provided by the public sector**

Information on the provision occupational health services in the public sector was obtained through questionnaires completed by the programme managers of occupational health sub-directorates in the provincial health departments (Jacobs, July 1999, unpublished). The main objective of this exercise was to assess progress regarding the implementation of recommendations made in the previous review of occupational health published by the 1997 Health Review as well as the implementation strategies based on the occupational health principles contained in the Department of Health’s White Paper on the Transformation of the Health System in South Africa. The authors relied totally on the assessment of the respondents since it was not possible to validate the information through direct personal observations in the various provinces. The key findings are summarised in Table 8. It must be noted that while national structures such as the NCOH and MBOD play an important role in providing specialised support and referral services, the authors focused on the provinces to highlight issues of equity and service delivery.
**Table 7:** Indicators for development of public sector occupational health capacity in the various provinces of South Africa

<table>
<thead>
<tr>
<th>Indicator</th>
<th>EC</th>
<th>FS</th>
<th>KZN</th>
<th>GT</th>
<th>MP</th>
<th>NC</th>
<th>NP</th>
<th>NW</th>
<th>WC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated budget for occupational health</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Provincial health plan for occupational health</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Occupational health services for public patients</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>- regional/provincial level</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N/A</td>
<td>Y</td>
<td>N/A</td>
</tr>
<tr>
<td>- district level</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N/A</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Intersectoral collaboration</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Training of public sector staff in occupational health</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Health information system: provincial level</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>

Source: Questionnaire completed by Occupational Health sub-directorates at provincial level (July 1999)

Note: Mpumalanga does not have regions - occupational health services operate at district level
North West Province does not have health districts - occupational health services operate at regional level

Key: EC - Eastern Cape; FS - Free State; GT - Gauteng; KZN - KwaZulu-Natal; MP - Mpumalanga; NC - Northern Cape; NP - Northern Province; NW - North West Province; WC - Western Cape; Y - Yes; N - No; N/A - Not applicable

**Development of structures to co-ordinate occupational health and safety at provincial level**

Occupational health sub-directorates, usually located in programme development and support directorates of the provinces, exist in most provinces, demonstrating a positive trend towards developing occupational health capacity at provincial level. Most of the provinces except for KwaZulu-Natal have employed at least one full-time person dedicated towards promoting occupational health. There is interaction between the national chief directorate of occupational health and these structures. All provinces have developed occupational health strategies and formulated them into provincial health plans. The budget allocations for occupational health are however totally inadequate to achieve their programme objectives. Budgets for these departments tend to be used mainly to cover personnel costs and general management and administration. Some provinces are able to dedicate a proportion of the budget to programme support at the other levels (10-50%), service provision to members of the public (<30%), training of public sector personnel earmarked for occupational health service provision (3-40%), and research on occupational health service development (<10%). There is ongoing tension within the provinces on the extent to which staff in these structures should be involved in occupational health service delivery or purely provide vertical programme support.
Service delivery at provincial, regional and district levels

Occupational health services offered by public sector services appear to consist of a variety of elements, and approaches vary between provinces on how best to establish an occupational health unit in a province or region. Indications are that the lack of financial resources and appropriately qualified personnel has also impacted on the poor progress in this regard. There is still lack of clarity of the distinction between dedicated (stand-alone) occupational health services and integrated services (occupational health services delivered as part of comprehensive health services) and the most appropriate level at which they should be delivered. This is despite the explicit policy directives on the nature and role for such a unit contained in Department of Health documents. While all the provinces provide some form of occupational health service, none of them have fully functional occupational health units (with occupational medicine and hygiene expertise accompanied by compensation advice service) for public sector patients as defined in these documents. Dedicated diagnostic and rehabilitative capabilities have not been established at regional level. There is however evidence of sporadic occupational health activity at district level in some provinces, but this still remains underdeveloped.

There appear to be two main target groups for service provision viz. the employees of the Health Department (health care workers) and members of the public accessing the public sector services. The general trend in most provinces has been to concentrate on the former group (Figure 1). While the main function of the public sector-funded occupational health services is intended to provide services to underserved groups of workers in the community, previous strategies have promoted the provision of services to Health Department employees. This strategy was encouraged in the hope that the provincial administrations were more likely to fund such services (in order to comply with certain provisions in the Occupational Health and Safety Act), thereby injecting new funding and personnel to establish these services. A secondary spin-off would have meant that these services would have been made available for use by public patients. This situation needs to be monitored carefully since it is likely to lead to potentially inequitable allocation of public sector resources in the long-term.
While most provincial health departments and/or local authorities provide a general medical service to their employees, the occupational health component of these services is largely underdeveloped. The main foci of occupational health and safety programmes in the provinces have included education and training activities (nurses and environmental health officers), setting up health and safety committees at regional hospitals, workplace risk assessments and medical surveillance programmes for health workers exposed to infectious agents (TB, Hepatitis, HIV), health promotion and counselling activities, and management of compensation claims. Occupational health programmes for defence personnel are planned nationally through the Occupational Health and Safety Directorate of the South African National Defence Force. Services provided include pre-placement examinations, risk assessment programme (noise, chemicals, radiation, ergonomics), medical surveillance programmes (e.g. audiometry), and education and training. Primary clinical care, injury management and counselling services are provided by the “Medical Services” arm of the SANDF.  

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d Lt Colonel C J Engelbrecht, Occupational Health and Safety, National Office, SANDF Personal communication.
Specialist occupational medicine services for public sector patients have also developed in an ad hoc manner and are only present in Gauteng, Western Cape, and KwaZulu-Natal. The workers seen at these clinics are mainly referred by private workplace-based occupational health services and employers (33–36%), private hospitals and practitioners (10–43%), public sector health services (20%), occupational health clinics of NGO’s (12%) and through epidemiological surveys (13%). These occupational medicine clinics are located in the major tertiary hospitals and function mainly as specialist referral centres. Furthermore, the clinics in the provinces mainly rely on the support of specialists or medical officers with other responsibilities (e.g. community health and medicine departments) rather than having as their chief responsibility the development of occupational medicine as a specialist discipline.

In its efforts to increase the access of ex-miners to benefit examinations, the MBOD is in the process of decentralising benefit (compensation) examinations to the provinces. However it is unclear how these services will link with occupational medicine services or with future provincial level occupational health units. There is evidence to suggest that more workers are having benefit examinations since the number of cases considered by the certification committee has increased by 88% from 11 248 in the 1995/96 year to 21 169 for the 1996/97 year. However, no provincial-specific data were available to assess the extent to which this reflects increased coverage in historically under-served areas identified in the White Paper. The reason for this increase can be attributed to increased ascertainment of occupational diseases associated with increasing access of workers to benefit examinations and stricter medical surveillance required under the new Mine Health and Safety Act. The Department of Labour also has specific compensation advice offices staffed by clerks based at their regional offices who assist workers with submitting claims for compensation under COIDA. These offices also provide administrative support to the Compensation Commissioner’s office in the provinces. Most of these offices are located in the metropolitan areas only. The extent to which they are able to assist workers with lodging individual claims or obtaining the results of their compensation claims is questionable.

Occupational hygiene capacity has historically been a neglected area of service development. Provincial level hygienists needed to serve small enterprises and informal concerns are almost completely absent. Their training is now receiving some, though insufficient attention. There are however a number (approximately 2 000) of environmental health officers employed by local authorities and the provincial health departments to conduct public health inspections under the Health Act. It has been suggested that these environmental health officers could play an important role in support of the understaffed occupational health and safety inspectorate (in the Department of Labour) by providing advisory and information services and performing basic hazard evaluations. Only the Minister of Labour, empowered under the Occupational Health and Safety Act, is able to grant environmental health officers such powers through specific regulations. This delay is an indication of the lack of coherence of purpose between the departments of Health and Labour.

In general, there are no specific vocational rehabilitation services for workers injured at work in most provinces except for two rehabilitation centres in Durban and Benoni which are semi-private and receive financial support from the Compensation Fund. Occupational therapists, physiotherapists and speech therapists engaged in some rehabilitation of work-related disability are to be found in most of the provincially funded and regional hospitals. Specific vocational rehabilitation units are however only present in the major tertiary hospitals of the industrialised provinces. These are usually staffed by occupational therapists and physiotherapists engaged in the assessment of workers for vocational rehabilitation. These units however may not have a specific focus on occupational injuries.

There are labour-linked non-governmental organisations (NGOs) that have historically provided support and developed capacity among trade unions in dealing with health and safety issues. These include the Industrial Health Research Group (Cape Town), Industrial Health Unit (Durban), Industrial Health and
19: Occupational health services

Safety Education Project (East London) and the Industrial Aid Society (Johannesburg). Some of these NGOs pioneered the establishment of the first provincially based primary/secondary level occupational health clinics serving workers in the metropolitan areas of the Western Cape and KwaZulu-Natal. The IHRG has also conducted numerous audits of occupational health services and contributed substantially to research and policy development in this field. Recent changes in the policy of foreign donors as a result of the new political dispensation have threatened the long-term viability of the services provided by these NGOs, since they have until recently been totally reliant on foreign funding.

Occupational health services offered at the district level to members of the public vary widely. Disease recognition and referral as well as disability assessment and rehabilitation take place in an ad hoc fashion. Workers employed in the private sector who are injured at work tend to be referred to the private sector. In some provinces such as the Northern Cape and Mpumalanga, benefit exams for mineworkers are conducted at district level. At a district level there have been some initiatives to launch occupational health services in partnership with the private sector. One such case was the Alexandra Worker’s Health Outreach programme initiated in the early 1990’s in Gauteng. However, the long-term sustainability and success of this project is unknown.

Some of the obstacles identified by provinces in efforts to provide occupational health services include:

- sparsely distributed working populations in predominantly rural provinces with poor access to health care
- lack of support for occupational health service delivery at provincial and national health management level
- lack of financial resources, especially in the context of ongoing rationalisation and downscaling of public sector health services in provinces such as the Western Cape and Gauteng
- lack of adequate enforcement of health and safety laws and absence of enabling legislation permitting environmental health officers to perform factory visits
- disparate approaches to occupational health service delivery due to districts being in various stages of development both within and between provinces
- lack of adequately trained personnel at district level to identify and refer occupational health problems
- service-overload of health personnel at district level resulting in insufficient time to perform basic occupational health functions e.g. taking detailed work and exposure histories, completing administrative work related to reporting of occupational diseases and filing of compensation claims, and conducting workplace visits.

Service development areas identified for further strengthening of public sector occupational health services include:

- formation of provincial occupational health units
- formation of multidisciplinary hazard evaluation teams
- establishing regional diagnostic and rehabilitation services
- development of well-equipped and dedicated hospital services to deal with injured workers requiring hospitalisation (since this may be an important source of revenue and cost-saving for the state)
- provision of specialised investigations (e.g. chest radiographs, lung function tests, audiometry, patch tests and skin prick tests) to under-served workplaces (at subsidised rates).
Intersectoral collaboration

There is evidence to suggest that intersectoral collaboration between various government departments and among various stakeholders is gaining ground in most provinces. Most of this activity between role-players appears to be at provincial level. This however needs to be viewed in the context of transformation and change that has not yet reached the district level. Collaboration between public sector health services and environmental health officers is being strengthened especially in the rural areas. Co-operation between the Department of Health (doctors, nurses and environmental health officers) and Labour (inspectors) has taken the form of joint participation in strategic planning committees, education and awareness programmes, specific programmes targeting farmworkers, mineworkers (asbestos) and small businesses, health risk assessments at workplaces following reports of occupational diseases, law enforcement, and technical information support. There is however ongoing tension as to the extent of this co-operation between officials since occupational health and safety is a national responsibility in the Department of Labour and a provincial function of the Department of Health.

There has also been co-operation between the tripartite stakeholders in occupational health and safety viz. state departments, trade unions and employers. Collaboration with trade unions has taken the form of joint planning of projects, information sharing, promotion of occupational health programmes among workers, lobbying employers on important health and safety issues, facilitation of benefit examinations, and assistance with compilation of compensation claims. Contact with employers has been limited to providing advice to employers regarding occupational health hazards and occupational health service provision requirements at workplaces in order to facilitate compliance with OHSA.

In the past five years some provincial health departments have had close working relationships with labour service NGOs. These have been mainly on issues of information sharing, research and policy development, and education and training programmes for public sector health personnel. The Industrial Health Research Group has been involved in a number of training programmes for the past three years in various provinces. These activities were aimed at developing capacity among health personnel at primary level health services to identify and manage occupational health problems. There has also been some collaboration with NOSA on training and audit activities in certain provinces.

Interaction with the private sector has been through established links with professional associations such as SASOM and SASOHN. Members of these associations have provided input into planning occupational health programmes and educational activities (e.g. compensation courses). The private sector is the main referral agent of patients to specialist occupational medicine clinics. In the recent pilot survey conducted by Jeebhay (July 1999, unpublished) among 20 SASOHN members in the Western Cape, nurses were more inclined to use specialised occupational health services (100%) in the academic hospitals than district levels health services (36%). The main reasons cited for use of public sector services was for diagnosis of occupational diseases (91%), rehabilitation services (55%), assistance with worker’s compensation applications, and advice (55%). Nurses were also more inclined to use specialised diagnostic services and investigations in the public sector since these services were not available in the private sector and some of the investigations were too expensive to be borne by employers. District health services were used mainly for workers (not covered by medical aid) with chronic general medical problems e.g. TB, hypertension, STDs. While the quality of occupational health services at tertiary level was generally rated positively (satisfactory to very good), services at primary level were rated negatively (satisfactory to poor to non-existent). Areas identified for co-operation with public sector health services include:

- the development of improved communication channels within the referral system
- ongoing liaison for treatment of patients with chronic general medical problems
- workplace inspections by district health teams
training programmes for community health centre staff to recognise and refer work-related diseases to workplaces
sharing of health information statistics on occupational injury and diseases
embarking on commonly identified priority programmes.

Some collaboration exists between the Department of Health, the National Centre for Occupational Health and tertiary educational institutions with regard to training of public sector personnel, placement of health professionals undergoing training in public sector occupational health services, research and technical support. Opportunities for multidisciplinary teaching is limited since the training of occupational medicine practitioners occurs at universities, while occupational health nurses and environmental health officers (occupational hygiene) occur mainly at technikons. More interaction needs to occur at this level so that educational institutions are more responsive to the training needs in the health and safety field. This will enable institutions to design more advanced training courses for specific occupational health and safety practitioners such as occupational medicine specialists, industrial hygienists, occupational health nurses and occupational safety practitioners. Furthermore, there is a dire need for occupational health to be inserted into the training of general medical practitioners and nurses so that occupational causes of ill-health become a routine part of every clinical examination. In this way more long-term capacity in occupational health can be developed.

Human resource development

Reports from the provinces suggest that capacity development of public sector health personnel in occupational health is a priority. All provinces have undertaken initiatives to promote training of staff belonging to most professional categories viz. doctors, nurses, environmental health officers and hygienists, who have been earmarked to develop future occupational health services in the public sector. Other health workers, mainly nurses, have been trained to fulfil their roles as health and safety representatives under OHSA. These training programmes have been subsidised by the Department of Health through funding received from the WHO. The impact of this investment in training has yet to be evaluated since the objectives remain unclear. While both objectives have desirable outcomes, the former activity is more directly related to delivery of services to the public, while the latter is aimed at empowering workers in exercising their health and safety rights. Preliminary findings in some provinces suggest that many of the staff have left the public sector health services, thereby jeopardising efforts towards improving service delivery. It would therefore be crucial that creative incentives be developed to retain staff within the public sector to make this a viable strategy.
Conclusions and Recommendations

The status of occupational health in South African workplaces is at a crossroads. Years of historical neglect have resulted in underdeveloped and poorly accessible occupational health services. Recent years have seen the emergence of more progressive occupational health and safety legislation to promote the health of workers. Whilst general consensus exists among most sectors on policies to transform the occupational health and safety dispensation in the country, the pace of transformation has been extremely slow.

The major recommendations identified to fast-track this process, thereby promoting occupational health service delivery within a more equitable framework include:

- Intersectoral collaboration at national level between the Departments of Health, Labour and Minerals and Energy to formulate a strategic plan to transform the occupational health and safety dispensation in the country
- Formation of a National Health and Safety Council and a single enforcement agency
- Rationalisation of the laws governing health and safety and compensation to cover all workers
- Ratification of the ILO Conventions relating to health and safety (155 and 161)
- Investigation into specific legislation for workplaces to provide and fund occupational health services
- Enabling legislation for environmental health officers to conduct workplace hazard evaluations
- Development of at least one occupational health unit per province (to be integrated with recognition centres and compensation advice offices and staffed by multidisciplinary hazard evaluation teams) before further district development is embarked upon
- Focus on occupational health service development to serve the needs of workers in the informal sector, small and medium-sized workplaces, ex-miners and the public at large
- National audit of workplace-based occupational health services to assess compliance with functions listed in ILO convention 161
- Define strategies to strengthen the capacity of workplace-based health services in dealing with work-related problems while at the same time providing workers with access to primary level health services
- Separation of strategic plans and funding allocations for services earmarked specifically for public sector workers (Provincial Health Department management function) and for the public at large (public health function)
- Investigate strategies for public/private mix to strengthen occupational health capacity especially at district level
- Evaluation of existing training programmes for developing capacity at district and provincial level to refine strategies for future human resource development in occupational health.
The world experiences “traditional” and “modern” environmental hazards. South Africa is on a path between the two different sets of hazards and therefore experiences health risks that emanate from both. This chapter explains the context in which the physical environment contributes to health challenges for the country. Some of the major challenges arise from the fact that almost a quarter of the South African population lives below the poverty line and the Gini co-efficient (measure of inequality) for South Africa is amongst the highest in the world. Together with rapid urbanisation come environmental hazards and health risks.

The chapter clarifies the emerging framework for environmental health services, both internationally and in terms of South African developments.

Environmental Health Officers (EHOs) form the backbone of the service that is provided. They are employed in local governments and by the State. This cadre of workers has been dominated by white males in the past. Training for EHOs is undergoing very fundamental changes. The focus is moving from law enforcement to community participation and development.

Institutional arrangements for environmental health are mostly within the health sector but owing to the diversity of the training, EHOs are sought after in several sectors. This has led to some fragmentation and duplication of services. The role of the Environmental Health Officer is still a matter on which consensus has to be built.

This all adds up to a complex environment, full of challenges with the key workers going through significant changes to their profession. The need for change has been recognised (and many initiatives have been undertaken to define the new paradigm) but there is still a long way to go.
Introduction

Environmental health, in broad terms, is concerned with factors in the environment associated with health, well-being and disease, including physical, chemical and biological conditions. In today’s world, efforts to ensure or maintain high levels of environmental health status, in addition to traditional concerns, need to take account of the broad development agenda, as well as a number of often complex processes or phenomena. For example, the quality of the environment (and consequently of health) in a particular setting or country may be influenced by levels of poverty and inequity, the rate of urbanisation, consumption and production patterns, the stage of economic development and the level of technical and scientific development.\(^1\)

In general, environmental threats may be separated into “traditional” and “modern” hazards, associated largely with under-development and unsustainable development respectively. Developing countries tend to experience predominantly the former, and developed countries the latter. Countries such as South Africa may be described as being on a path between traditional and modern environmental health problems, and therefore experience risks to health emanating from both scenarios.\(^1\) On an international level, there has also been concern during recent years about global environmental problems, for example ozone depletion and climate change, with some of the most serious impacts being predicted for developing countries.\(^2\)

Environmental hazards and health concerns in South Africa

A number of factors prevailing in South Africa predispose the country to extensive environmental degradation, and associated consequences for the health of the population. For example, an estimated 24% of the population lives below the international poverty line.\(^3\) Furthermore, inequity is well known to be associated with environmental degradation and ill health. During 1993, the South African Gini co-efficient for income distribution (a measure of inequality) was 62, amongst the highest in the world. At this time, 65% of the national income was being received by the wealthiest quintile of the population.\(^3\)

A process of rapid urbanisation underway in South Africa, particularly since the 1980s, and a failure to meet the associated demand for housing and basic infrastructure in urban centres, have led to the formation of sprawling informal and squatter settlements on the outskirts of the majority of South African cities and towns. Amongst the primary environmental health concerns occurring in these settings are a lack of access to sufficient quantities of safe water, sanitation facilities and waste services, unsafe food preparation facilities, indoor air pollution associated with the use of bio-mass and fossil fuels for cooking and space heating, and the prevalence of disease vectors such as rodents and insects. The shortage of housing has also given rise to instances of extreme overcrowding in formal inner city areas, where over-use has led to the breakdown of basic environmental health services, and has been associated with broader processes of inner city degradation.\(^4\) Table 1 gives statistics by province, in relation to housing quality and access to basic environmental health services in South Africa. As can be seen, large proportions of the population remain without access to basic environmental health requirements.
Table 1: Housing quality and access to basic environmental health services in South Africa

<table>
<thead>
<tr>
<th>Province</th>
<th>% informal,</th>
<th>% households using wood, coal or animal dung for cooking</th>
<th>% households without toilet facilities</th>
<th>% households with outdoor toilet</th>
<th>% households with indoor tap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>56.7</td>
<td>43.4</td>
<td>48.7</td>
<td>29.1</td>
<td>75.3</td>
</tr>
<tr>
<td>Free State</td>
<td>41.6</td>
<td>17.8</td>
<td>35.2</td>
<td>8.8</td>
<td>59.4</td>
</tr>
<tr>
<td>Gauteng</td>
<td>36.3</td>
<td>5.1</td>
<td>15.6</td>
<td>2.5</td>
<td>32.3</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>50.0</td>
<td>32.5</td>
<td>39.1</td>
<td>15.2</td>
<td>60.2</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>38.9</td>
<td>43.9</td>
<td>31.8</td>
<td>8.7</td>
<td>62.7</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>23.1</td>
<td>19.9</td>
<td>35.4</td>
<td>10.7</td>
<td>50.0</td>
</tr>
<tr>
<td>Northern Province</td>
<td>41.0</td>
<td>65.9</td>
<td>65.9</td>
<td>21.2</td>
<td>82.2</td>
</tr>
<tr>
<td>North West</td>
<td>35.5</td>
<td>24.3</td>
<td>41.8</td>
<td>6.4</td>
<td>69.4</td>
</tr>
<tr>
<td>Western Cape</td>
<td>22.7</td>
<td>4.5</td>
<td>8.7</td>
<td>5.4</td>
<td>23.6</td>
</tr>
</tbody>
</table>


At the city level, resource constraints, and a failure to implement required maintenance programmes, have led to extensive breakdown of bulk infrastructure such as sewer systems, leading to extensive environmental contamination, and risks to health.6

“Modern” environmental health hazards, related mainly to inappropriate or unsustainable development, may include pollution of surface and ground water from industry, urban air pollution from motor vehicles, hazardous waste, food contamination, exposure to chemicals such as pesticides, lead and asbestos, as well as radiation in the environment. In Johannesburg, for example, a predominantly road-based transport system and an expanding, ageing vehicle fleet, may be contributing to escalating levels of nitrogen dioxide and ozone in ambient air during recent years.7 Also, in contrast to countries such as the USA, Canada, Guatemala, Brazil and Sweden, where lead in petrol is not permitted, leaded petrol, at a maximum concentration of 0.4g/litre, constitutes around 88% of the petrol market share in South Africa.3 Epidemiological studies conducted in inner city Cape Town and Johannesburg have indicated that certain groups of South African children may be suffering from elevated blood lead burdens.8,9

**Inequity in exposure to environmental hazards**

The apartheid system, including aspects such as the influx control legislation, the Group Areas Act, and education and labour preference policies, has engineered the differentiation by race, of exposure to environmental hazards in South Africa. For example, the location of black people in townships and informal housing settings predisposed this group to a wide range of environmental health threats, such as ambient and indoor air pollution, noise, crowding, and insufficient supplies of safe water. Table 2 gives the proportion of people, by former population groups, who live in informal or squatter settlements.
Table 2: Proportion of people (by population group) living in informal or squatter settlements

<table>
<thead>
<tr>
<th>Africans</th>
<th>Coloured</th>
<th>Indians</th>
<th>Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.50%</td>
<td>4.20%</td>
<td>0.40%</td>
<td>0.06%</td>
</tr>
</tbody>
</table>


Multiple burdens of environmental health risk

A disregard for safety procedures, as well as unsustainable development decisions, have increased the likelihood of hazardous environmental exposures in and around workplace settings. The location of informal (squatter) settlements on, or in close proximity to, hazardous or industrial sites, as well as the burgeoning of the informal occupational sector, translates to a multiple burden of potentially hazardous environmental exposures to certain communities.

Priority health concerns

Largely preventable conditions of ill health such as diarrhoeal diseases and acute respiratory infections, are the most important health concerns in South Africa today, being responsible for the major portion of early childhood deaths. Table 3 gives statistics on selected environment-associated health outcomes amongst young South African children.

Table 3: Selected environment-associated health outcomes among young children in South Africa

<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>61.2</td>
<td>12.7</td>
<td>20.4</td>
<td>8.1</td>
</tr>
<tr>
<td>Free State</td>
<td>36.8</td>
<td>9.1</td>
<td>34.5</td>
<td>10.9</td>
</tr>
<tr>
<td>Gauteng</td>
<td>36.3</td>
<td>9.4</td>
<td>10.7</td>
<td>6.6</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>52.1</td>
<td>17.8</td>
<td>14.7</td>
<td>9.3</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>47.3</td>
<td>16.2</td>
<td>23.1</td>
<td>10.6</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>41.8</td>
<td>10.4</td>
<td>29.0</td>
<td>13.8</td>
</tr>
<tr>
<td>Northern Province</td>
<td>37.2</td>
<td>14.6</td>
<td>15.3</td>
<td>9.3</td>
</tr>
<tr>
<td>North West</td>
<td>36.8</td>
<td>12.2</td>
<td>29.3</td>
<td>12.3</td>
</tr>
<tr>
<td>Western Cape</td>
<td>8.4</td>
<td>9.9</td>
<td>14.9</td>
<td>9.3</td>
</tr>
<tr>
<td>South Africa</td>
<td>45.0</td>
<td>13.2</td>
<td>20.8</td>
<td>9.4</td>
</tr>
</tbody>
</table>

Given the evidence of the deteriorating state of the environment globally and locally, as well as the complexity and scale of environmental health challenges in South Africa, it is clear that if challenges are to be met, a re-orientation is required in approaches and methodologies adopted within the environmental health sector.

The emerging framework for environmental health services

The international level

On an international level, increasing awareness of the deteriorating state of the environment, as well as of the inextricable links between the environment, development and health, has led to unprecedented levels of attention being devoted throughout the world to public health and environmental health management approaches. In this regard, the role, scope and framework of the environmental health sector have been under debate for several decades. The ongoing development, on an international level, of a conceptual framework for environmental health is reflected in recent public health “milestones”, as indicated in Box 1. New approaches to environmental health focus on environment and health in sustainable development, primary prevention through intersectoral action, environmental health promotion, community participation and community development. Many of these aspects now form fundamental pillars of the recently revised “Health-For-All” strategy.11

Box 1: Public health milestones in the emerging framework for environmental health – international level

- Health for All (currently being revised) (WHO)
- Ottawa Charter for Health Promotion
- European Charter on Environment and Health
- Sundsvall Declaration on Supportive Environments for Health
- The Healthy Cities Project (WHO)
- Agenda 21

New approaches to environmental health have stimulated the development of emerging environmental health tools and methodologies, and strengthened a focus on others, including for example national environment and health action planning, state of environment and health reporting, environment and health indicators,12 environmental health impact assessment, environmental epidemiology, and risk assessment, with implications for the training of environmental health professionals.

South Africa

Within South Africa, past approaches to environmental health related in practice mainly to inspections, monitoring and control, to ensure that legal and other specifications were met, often in response to public complaints. In the context of the scale and spectrum of environmental health concerns facing South Africa today, this approach is largely reactive, labour-intensive and costly. Emerging legislation implies a shift from
reactive approaches towards comprehensive, integrated, preventive management of the environment for health, for example air quality management as opposed to air pollution control. This shift suggests intervention by the environmental health sector at the early planning stage of development, and continuous environmental surveillance and evaluation across disciplines. Box 2 gives examples of legislation providing the overall framework for action in the environmental health sector, as well as examples of recent/emerging South African legislation which encapsulates modern approaches to management of the environment for population health and well-being.

**Box 2: Selected existing and emerging South African policy and legislation influencing environmental health services**

- Atmospheric Pollution Prevention Act, No 45 of 1965
- Foodstuffs, Cosmetics and Disinfectants Act, No 54 of 1972
- Hazardous Substances Act, No 15 of 1973
- Health Act, No 63 of 1977
- Environment Conservation Act, No 73 of 1989
- Tobacco Products Control Act, No 83 of 1993
- Occupational Health and Safety Act, No 85 of 1993
- The Constitution of the Republic of South Africa Act, No 200 of 1993
- The Reconstruction and Development Program
- The Draft National Environmental Health Policy
- National Water Act, No 36 of 1998
- Water Services Act, No 108 of 1997
- National Environmental Management Act, No 107 of 1998

In the further development of environmental health approaches appropriate for the South African context, there is a need to consider initiatives at both the international and national levels.

**Environmental health in practice**

Environmental Health Officers (EHOs) form the backbone of environmental health services in South Africa, providing services across the length and breadth of the country. With their training related to the environmental health aspects of a broad cross-section of development sectors, and a focus on intersectoral liaison, community participation, and health promotion, EHOs are well placed to meaningfully participate in new approaches to environment and health management. The current scope of practice of EHOs is given in Box 3.
Box 3: Aspects of the scope of practice of Environmental Health Officers

- Water supplies
- Waste water treatment
- Waste management
- Vector control
- Prevention and control of land pollution
- Food hygiene and safety
- Air quality management
- Environmental radiation hazards
- Occupational health and safety
- Environmental noise management
- Accommodation establishments
- Environmental impact assessments
- Port health
- Accident prevention
- Environmental health aspects of public recreation and tourism
- Environmental health measures associated with epidemics, emergencies, disasters and migrations of populations
- Establishment of an effective environmental health surveillance and information system
- Research

Evaluation of the performance of the environmental health sector in relation to the key health challenges occurring in South Africa is difficult, in light of the absence of relevant and appropriate indicator systems. A process of selection of new environment and health indicators is currently underway, and ought to take account of the need to identify performance indicators, as well as the need for environment and health linkage analysis, in the context of priority environmental health concerns.

Capacity and inequity in environmental health service provision

As can be seen in Table 4, there is little doubt that there is a shortage of EHOs country-wide, in relation to the nationally accepted ideal EHO: population ratio of 1:10 000. Furthermore, there is evidence that available EHOs are inequitably distributed in relation to prevailing environmental health challenges. For example, as can be seen from Tables 3 and 4, amongst the lowest levels of coverage by EHOs in relation to population occur in the North West, Northern Province and Eastern Cape provinces, where amongst the most pressing environmental health challenges also occur.

---

a Pule 1999. Personal communication.
### Table 4: Distribution of Environmental Health Officers, 1999

<table>
<thead>
<tr>
<th>Province</th>
<th>EHO: population ratio</th>
<th>Ideal No EHO</th>
<th>Existing No EHO</th>
<th>Shortfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>1: 29 205</td>
<td>666</td>
<td>228</td>
<td>438</td>
</tr>
<tr>
<td>Free State</td>
<td>1: 21 375</td>
<td>271</td>
<td>127</td>
<td>144</td>
</tr>
<tr>
<td>Gauteng</td>
<td>1: 17 624</td>
<td>781</td>
<td>443</td>
<td>338</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>1: 27 044</td>
<td>892</td>
<td>330</td>
<td>562</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>1: 21 607</td>
<td>300</td>
<td>139</td>
<td>161</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>1: 14 479</td>
<td>88</td>
<td>60</td>
<td>27</td>
</tr>
<tr>
<td>Northern Province</td>
<td>1: 30 326</td>
<td>534</td>
<td>176</td>
<td>358</td>
</tr>
<tr>
<td>North West</td>
<td>1: 31 244</td>
<td>356</td>
<td>114</td>
<td>242</td>
</tr>
<tr>
<td>Western Cape</td>
<td>1: 11 428</td>
<td>417</td>
<td>365</td>
<td>52</td>
</tr>
<tr>
<td>South Africa</td>
<td>1: 21 719</td>
<td>4 305</td>
<td>1 982</td>
<td>2 323</td>
</tr>
</tbody>
</table>

Source: Adapted from information from Directorate of Environmental Health, South Africa (number of EHOs in the public sector as at end 1999, ratios calculated using mid-1999 census data from Statistics SA)

Case studies of selected local authorities indicate a need also to address inequity in relation to human resource appointments in environmental health, which in the past was largely the preserve of white males. As can be seen in Figure 1, which gives a gender-differentiated breakdown of the length of service amongst EHOs employed in Johannesburg during 1997, women were previously under-represented within the environmental health workforce. At the time of the study, 79% of EHOs were male. Similarly, in Bloemfontein, only 3 of 21 EHOs currently appointed are women.

### Figure 1: Length of service amongst EHOs in relation to gender

![Length of service amongst EHOs in relation to gender](image)

*Source: Cruywagen G, unpublished data.*
In light of recent paradigm shifts and emerging environmental health methodologies, there is a need to build capacity in environmental health if the sector’s potential to contribute meaningfully to environment, health and development is to be realised. For example, there is a need for continued revision of environmental health curricula at national training institutions, as well as an urgent need for the provision of in-service re-training programmes at national, provincial and local levels. New emphases should, in addition to law enforcement, focus on the principles and processes of environment and health in sustainable development, environmental health promotion, community participation and development, and the spectrum of emerging environmental health tools and methodologies. A landmark project is currently underway within the Hillbrow Community Partnership for Health Personnel Education (HCPHPE), which is examining the experiential component of training for student EHOs at the Technikon Witwatersrand (see Box 4).

Debate is also needed within the environmental health profession in relation to the incorporation of additional expertise to provide essential skills to meet current and expected future challenges. Similarly, there is a need to accelerate the development of education and training programmes at South African technikons, universities and schools of public health, towards, for example, specialist masters and doctoral degrees in various aspects of environmental health, and associated environmental health tools and methodologies.

**Box 4: A case study in the re-orientation of experiential training for Environmental Health Officers in South Africa: the Hillbrow Community Partnership for Health Personnel Education**

The Hillbrow Community Partnership for Health Personnel Education (HCPHPE) is a community-services-academic partnership of the community of Hillbrow, the Eastern Metropolitan Local Council and the Technikon Witwatersrand/University of the Witwatersrand. The overall goal of the HCPHPE is to explore ways in which education programmes for health workers may be re-orientated to promote capacity to address public health problems in key settings, for example informal settlements and inner city areas.

One of the foci of the Environmental Health Programme (EHP) of the HCPHPE is the re-orientation of the experiential (practical) training component of the National Diploma in Public Health (NDPH) offered to student environmental health officers (EHOs) at the Technikon Witwatersrand. Current experiential components of the NDPH are strongly based on observation, or “shadowing” of local EHOs, often in the absence of a structured programme designed to develop essential skills and introduce students to the range of environmental health challenges they are likely to face on the ground. The new experiential training programme developed by the EHP is based on the concepts and principles contained in the Ottawa Charter for Health Promotion and the Healthy Cities Project of the World Health Organisation. The three-year experiential training initiative follows the design of the NDPH and is separated into three phases. During Phase One, students undertake a research or community consultation project. During Phase Two, the results of the research project are used to design an environmental health intervention or promotion programme, which is subsequently evaluated during Phase Three.

Whilst formal evaluation of the pilot phase is yet to be undertaken, informally students have expressed a high degree of satisfaction with the initiative, as have the community and service providers. The pilot phase is being monitored by local and international stakeholders, with a view to broader application. The information generated during the research phase is now being widely distributed to policy- and decision-makers in the local Hillbrow setting.
Institutional arrangements for environmental health

Environmental health services are provided through a three-tiered system in South Africa. At the national level the Directorate: Environmental Health is located within the Chief Directorate of Environmental and Occupational Health. Institutional arrangements for EHOs at the provincial and local levels are varied, but are traditionally aligned with health departments.

Given the versatile, cross-sectoral training of environmental health officers, it is not surprising that their expertise has been seen to be relevant to, and sought after by, numerous sectors. Thus, during recent times, roles for EHOs have been proposed within waste management, primary health care, the district health system, environmental management, planning and occupational health. These developments have already led to a degree of fragmentation and a lack of role definition and clarity within the environmental health sector. To avoid further fragmentation, as well as the duplication of functions, it is essential that within the environmental health sector, the debate on the emerging role of EHOs is energised, and directed towards a rapid consensus.

Amongst the key factors to bear in mind when deciding on the role of EHOs within South Africa, is the call internationally for a focus on primary prevention, the need for intersectoral action, and for attention to environment and health in sustainable development. Within South Africa, there is a need to take cognisance of the scale and complexity of environmental health concerns, and the forces that drive them, especially in larger urban centres where a requirement for specialised approaches to urban air, water and land pollution and waste management, for example, is likely. Important also is a recognition that the spectrum of environmental health functions does not distinctly relate to a single sector such as health or planning, for example, but rather embraces areas within a number of sectors. Thus there may not be a single model for environmental health institutional arrangements, within the district health system for example, which may be applicable across the country. Rather, there may be a need to consider the development of several models to meet the local needs in various settings. Regardless however, of the specific institutional arrangements for environmental health within particular settings, what is important is that due consideration be given to the need to protect the health of the South African population through the primary prevention of environmental threats to health, and through an increased emphasis on the environment and health in trans-sectoral planning and sustainable development. Whatever the ultimate outcome of the ongoing debate on appropriate institutional arrangements for environmental health, it is clear that wide-ranging training programmes for EHOs will be critical.

Environmental health budgets are decided within the context of existing financial decision-making mechanisms at national, provincial and local levels of government. A series of recent telephonic interviews with randomly selected provincial and local environmental health departments pointed to dwindling financial and other resources. Many environmental health departments and individual EHOs have however demonstrated considerable innovation to counteract shrinking budgets, through the adoption of alternative strategies, the formation of strategic partnerships, seeking the participation of communities and key sectors in environmental health initiatives, and identifying and competing for resources from a range of local and international sources. In this regard, mechanisms for national co-ordination and the sharing of information and experiences in this and other countries could prove beneficial.
Mount Frere is typical of many rural health districts, where the lack of fresh water supply, poor sanitation facilities, and sub-optimal hygiene practices combine to give rise to high levels of diarrhoea and other water borne diseases. Furthermore, even where there has been an improvement in the water supply or funding for building of sanitary facilities, there has not been, in many communities, a concomitant improvement in the health of the community.

Mount Frere is a very poor health district. One of their most valuable resources was the presence of a team of environmental health officers (EHOs). At the end of 1998, reasons for the lack of health improvements associated with water and sanitation projects were examined by the team. Through the use of participatory exercises it was recognised that a major problem was the limited degree of local community participation in these projects. Local people had very little say in the planning, implementation and management of projects. Even hygiene education was in the form of talks given by EHOs. This approach reflected their training as inspectors, and was not in keeping with new approaches to public health or the needs of the new district health system.

Determined to change their approach, the EHO team became interested in the PHAST methodologies introduced by the Public Health Programme at UWC and the Mvula Trust. PHAST stands for Participatory Hygiene and Sanitation Transformation. PHAST utilises visual materials which allow people to explore water supply and environmental sanitation issues in a creative, learner-centered way. It has been effective at integrating meaningful health components into water sector-based projects, increasing community participation in the analysis, design and implementation of water and environmental initiatives, and enhancing the potential for project sustainability in the long term.

Examples of the type of tools that have been developed include:

*Story with a gap:* The audience is asked to draw the present situation, followed by an ideal future scenario and then requested to draw the steps required to move from the first to the last picture.

*Contamination routes:* The participants are shown drawings of a person defaecating in the open and a picture of a mouth. They are asked how the faeces gets from the ground to the mouth in their community.

*Sanitation ladder:* Sanitation options are drawn on different cards and the participants are asked to put them in order of preference for their community. A discussion is then facilitated about the advantages and disadvantages of each of the choices for their setting.

The Mt Frere team has been adapting this tool for a rural South African setting and using it to engage local communities. The success of the programme has been reflected also in the change of attitude amongst EHOs. “We now recognise the importance of listening to local people and negotiating change. The PHAST tool allow us to do this more effectively” states Thembisa, the chief EHO in the district.

This change in attitude and approach has led to three communities reviving a “failed” water project and another community preparing to test an innovative new sanitation system. The EHOs are now an important part of the dynamic district health team in Mount Frere.
Conclusions

There is little doubt that the environmental health challenges facing South Africa are wide-ranging, and in certain instances, have reached crisis proportions. There is also little doubt that the environmental health sector and environmental health officers are well placed to play a significant role in addressing prevailing environment and health concerns in South Africa, and ensuring that current and future development (in relation to both living and industrial environments) is sustainable and enhances public health. In order to achieve this, a paradigm shift is required in which the role of development – either under-development or unsustainable development – is recognised, and a pro-active, integrated approach to cross-sectoral liaison, planning and action is adopted in the interests of primary disease prevention. There is also a need to move further towards a national consensus on the role of EHOs and the environmental health sector broadly, in this regard.

In many respects, the need for change has been recognised, and a number of initiatives are already underway or planned. Amongst the key requirements are, for example, the preparation of a National Environment and Health Action Plan\textsuperscript{14} (NEHAP), the identification of relevant environmental and health indicators,\textsuperscript{11} the development of appropriate environmental health research, surveillance and information systems, the re-orientation of curricula, and the provision of in-service training programmes in relation to emerging environmental health approaches, concepts and methodologies. Environmental health strategies and action plans for specific settings need to encourage systematic analyses of local problems and needs (for example, as reflected in the Agenda 21/Healthy Cities frameworks), cross-sectoral planning and action, innovation, and the participation of communities. In the context of South Africa, environmental health paradigms and strategies need to take account of the over-arching roles of poverty and inequity on the state of the environment and health.
The Ottawa international conference in 1986 laid a foundation for health promotion and identified five action areas: providing safe or supportive environments, developing healthy public policy, developing personal skills, community action and reorienting the health service. This chapter elaborates on these and recognises the lack of consensus as to whether health promotion specialists are a necessity to attend to this set of actions.

The chapter deals mainly with government although non-government organisations are important role-players. It describes the organisation of health promotion management in the national and provincial departments and indicates that health districts will play a more important role in the future.

South African health promotion policy will be popularised through Health Promotion Forums and a Health Promotion Foundation. The policy and actions are to be built on four approaches each of which is described in the chapter: a) policy, advocacy and healthy environments b) the settings approach c) education and information and d) community participation and reorienting health services.

There is confusion about who is to be trained and who should do the training. The debates include differences about whether the training should be for public health specialists at a Masters level or for diplomates at technikons.

The chapter concludes that health promotion is weak, poorly documented, unco-ordinated and lacking in capacity. It is proposed that an audit be conducted to establish the status quo and to set norms for the future and that training be addressed as a matter of urgency.
Introduction

For many people health promotion is a new term - something strongly linked to communication, education and preventive health. Although the Alma Ata declaration of 1978 is well known, the subsequent international conference in Ottawa in 1986 which laid a foundation for health promotion is still largely unheard of.

What is not commonly understood is that forming the backdrop to this conference in Ottawa were developments in primary health care which marginalised the preventive and promotive aspects of health care. Instead primary health care was in danger of becoming primary care as many countries worldwide focused on providing a comprehensive clinic system. Significantly the Ottawa charter identified five action areas for health promotion. These are:

1. Providing safe or supportive environments
2. Developing healthy public policy
3. Developing personal skills
4. Community action
5. Re-orienting the health service.

Perhaps the most important outcome of the Ottawa Charter was the challenge to the prevailing approach to preventive health. Up until this time health education had predominated. In developing countries where resources and training were limited, health education was often didactic, culturally inappropriate, victim blaming and most importantly unsuccessful within its own terms. Education programmes were shown to have a limited impact on changing behaviour.

Subsequent to the Ottawa Charter the World Health Organisation developed the settings approach to health promotion. This approach focuses on the “setting” or place where people are at work or play. Key settings are healthy cities, healthy schools, healthy hospitals and healthy workplaces. In developing countries other settings are healthy villages and market places. The advantages of the settings approach are argued to be its emphasis on the environment rather than personal behaviour, the shift away from disease-focused vertical programmes, a better framework to develop community participation and a needs driven approach. The latest international conference in Jakarta in 1997 strongly endorsed this approach. The Jakarta Declaration on Health Promotion into the 21st Century states that there is now clear evidence that:

- “Comprehensive approaches to health development are the most effective. Those which use combinations of the five strategies (action areas in the Ottawa Charter) are more effective than single track approaches.
- Settings offer practical opportunities for the implementation of comprehensive strategies. These include mega-cities, islands, cities, municipalities and local communities, markets, schools, workplaces and health care facilities.
- Participation is essential to sustain efforts. People have to be at the centre of health promotion action and decision making processes for these to be effective.
- Health learning fosters participation. Access to education and information is essential to achieving effective participation and the empowerment of people and communities.

These strategies are core elements of health promotion and are relevant for all countries.”

Worldwide, whilst there is agreement that health promotion is an important function within health services, there is no clear consensus about who are the health promoters and whether health promotion specialists are a necessity in the health service. Given the fact that health promotion is a broad philosophy requiring diverse skills, it may be unrealistic to think that any one specialisation could be responsible for implementing health promotion. If health promotion is to be successful it is essential that it is co-ordinated
Health promotion in South Africa

Health promotion infrastructure in government: The National Directorate

The present staff complement of the National Directorate of Health Promotion is eleven with three vacant posts. The directorate is organised into two sub-directorates, one of “Public Policy and Health Promotion Settings” and the other “Co-ordination with Stakeholders and Media Liaison” (see Table 1).

<table>
<thead>
<tr>
<th>Sub-Directorate: Public Policy and Health Promotion Settings</th>
<th>Sub-Directorate: Co-ordination with Stakeholders and Media Liaison</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Deputy Director</td>
<td>2. Deputy Director</td>
</tr>
<tr>
<td>1.1 Assistant Director (monitoring and evaluation of programmes and projects)</td>
<td>2.1 Assistant Director (community development, networking, advocacy and lobbying)</td>
</tr>
<tr>
<td>1.2 Senior Community Liaison Officer (Health Promoting Pre-Schools and Tertiary Institutions)</td>
<td>2.2 Chief professional nurse (health education and information, radio, TV and print)</td>
</tr>
<tr>
<td>1.3 Chief Community Liaison Officer (re-orientation of health services)</td>
<td>2.3 Communication Officer (communication strategies, campaign publications and media liaison)</td>
</tr>
<tr>
<td>1.4 Liaison Officer (work places and private sector)</td>
<td></td>
</tr>
</tbody>
</table>

It is envisaged that this Directorate will not grow substantially in numbers, but will rather try and attract specialist staff with generic health promotion skills. For the future it is thought that one of their major functions will be strengthening policy as a means of enabling a healthy environment. This is not, however, reflected in their five-year plan. The five major objectives for the directorate in the next five years are summarised in Table 2 below. What is most noteworthy about these plans is their focus on the environment and health promotion settings. The National Directorate of Health Promotion is unable to release any budget details.
Table 2: A summary of the National Directorate of Health Promotion's 5-year plan

<table>
<thead>
<tr>
<th>Strategic Plan</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>To create and sustain work environments which will support</td>
<td>Health promoting work environments in industry and farm settings</td>
</tr>
<tr>
<td>and sustain positive health outcomes through policies and</td>
<td></td>
</tr>
<tr>
<td>programmes</td>
<td></td>
</tr>
<tr>
<td>To consolidate and expand the current knowledge base and</td>
<td>Service providers competent in developing, evaluating and managing</td>
</tr>
<tr>
<td>practice relating to health promotion in health service</td>
<td>health promotion programmes in community and service settings</td>
</tr>
<tr>
<td>settings</td>
<td></td>
</tr>
<tr>
<td>To establish a Health Promotion Foundation</td>
<td>Co-ordination of health promotion activities by NGOs, CBOs and</td>
</tr>
<tr>
<td></td>
<td>government, funding of sports and recreational activities and health</td>
</tr>
<tr>
<td></td>
<td>promotion research</td>
</tr>
<tr>
<td>To expand and institutionalise Health Promoting School</td>
<td>Healthy school populations and increased health</td>
</tr>
<tr>
<td>initiatives</td>
<td>awareness of the communities they serve</td>
</tr>
<tr>
<td>To increase community involvement in health promoting</td>
<td>Communities active in influencing and lobbying</td>
</tr>
<tr>
<td>initiatives</td>
<td>for health promotion and disease prevention and basic human rights</td>
</tr>
</tbody>
</table>

**Provincial Structures**

The provision made for health promotion in the provinces varies substantially. Gauteng has by far the largest department with seven professional staff and more than 300 health advisors. In other provinces, health promotion is part of other functions, for example, AIDS and STDs in the North West and district health services development in the Free State. Usually the complement of health promotion staff includes some graduate staff with nursing or other professional backgrounds and field staff who have a minimum of Std. 10. The number of graduate staff is generally extremely low. Table 3 gives an indication of health promotion capacity and programmes in the provinces.
<table>
<thead>
<tr>
<th>Province</th>
<th>No of dedicated graduate staff</th>
<th>No of dedicated non graduate staff</th>
<th>Operating budget - current financial year</th>
<th>Two current major programmes</th>
<th>Provincial forum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>1 in the Provincial Office</td>
<td>68 health educators in the districts</td>
<td>No dedicated provincial budget</td>
<td>Health promoting schools</td>
<td>In the process of establishing a forum</td>
</tr>
<tr>
<td>Free State</td>
<td>1</td>
<td>Nil</td>
<td>R336 000</td>
<td>Health promoting schools</td>
<td>By Oct 1999</td>
</tr>
<tr>
<td>Gauteng</td>
<td>13 including staff in the provincial office and in the districts. At the time of the review there were 12 unfilled posts for graduates</td>
<td>300</td>
<td>Approx. R2.5 million</td>
<td>Lifeskills and sanitation in schools Food hygiene for street traders</td>
<td>Yes</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>5</td>
<td>3</td>
<td>R2 million</td>
<td>Health promoting schools</td>
<td>In the process of establishing a forum</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>16 (including staff in the provincial office and in the districts)</td>
<td>128 in the districts</td>
<td>R857 000 No specific budgets in the districts</td>
<td>Health promoting schools</td>
<td>No, instead there is a health promoting schools forum</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>5</td>
<td>None</td>
<td>No dedicated budget, but through other budgets can spend approx. R200 000</td>
<td>Children under 2 years Nutrition in schools</td>
<td>Yes</td>
</tr>
<tr>
<td>Northern Province</td>
<td>No dedicated staff</td>
<td>None</td>
<td>R336 000</td>
<td>AIDS, TB and communicable diseases Maternal and child health</td>
<td>Yes</td>
</tr>
<tr>
<td>North West</td>
<td>4 (part of STD and HIV/AIDS directorate)</td>
<td>84 deployed in 18 districts as STD/AIDS and health promotion co-ordinators</td>
<td>Provincial budget for STD/AIDS and health promotion is R1 million District budget is between R100 000 – R400 000</td>
<td>District level programmes only relating to HIV/AIDS Sex workers and migrant labourers Care and support</td>
<td>Committee discussing whether to set up a health promotion forum</td>
</tr>
<tr>
<td>Western Cape</td>
<td>2</td>
<td>170 deployed in local authorities</td>
<td>Nil in province R150 000 total at local level for all regions</td>
<td>Health promoting schools</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note: This Table is not an exhaustive list of all health promotion activities in the provinces.

There are some serious constraints for health promotion when it forms part of other functions. For example, when it is located inside or alongside communication then the long-term process-oriented work of health promotion can be lost next to the urgency of communication and public relations. In the Free State, health promotion was recently moved away from corporate communication to district health service development.
Although the generic skills of both health promotion and HIV/AIDS work are the same, in South Africa, unlike many other parts of the world, HIV/AIDS has not developed as part of health promotion. Instead, where health promotion is found with HIV/AIDS then the latter is dominant. Health promotion has a tiny budget in comparison with HIV/AIDS. This separation prevents the insights of health promotion being applied to HIV/AIDS and vice versa.

Provincial budgets are varied. In the Western Cape they report having had no budget for health promotion in the last financial year. In comparison, the Gauteng Health Promotion and Communication Directorate (the largest provincial health promotion department) describe their budget as “diminishing”. It is presently approximately R5 million of which R2.5 million is for health promotion.

**District structures**

In all provinces there is strong commitment where possible to health promotion action in the districts. Field staff are commonly deployed in districts or regions. In general it is probably fair to surmise that there is very little money available for health promotion activity at the local level through the primary health care service.

**Box 1: Case Study - Central Witwatersrand, Gauteng**

The old style family planning advisors now called health advisors are integrated into the health promotion service. All advisors have had in-house training to expose them to aspects of health promotion practice. In some regions of Gauteng, health advisors have been successfully placed as outreach workers at the district level. In other regions health advisors largely work in clinics and supplement the work of clinic staff. In Central Witwatersrand a model health promotion structure has been developed to ensure functional integration between the province and local authority, intersectoral collaboration, community participation, joint planning and the efficient management and evaluation of health promotion activities.

The most important level in this structure is the district health promotion planning team. The team is made up of representatives from community nursing, representatives from district health programmes such as nutrition and mental health, clinic staff, community members, environmental health officers, doctors, local councillors, teachers, health promotion staff and any other interested parties. The decisions of this planning team are put into action by health promotion support teams. These teams are made up of health advisors and a liaison officer. The functions of the district health promotion planning team are:

- to determine the needs of the community
- joint planning of health promotion activities
- evaluation of health promotion activities
- to report to the local municipality through the appropriate committee
- to report to the district management team.

Where a district has capacity it is foreseen that one district could have a number of health promotion planning teams. These teams could then jointly establish a district health promotion forum to help with co-ordination and to maximise resources.
Health promotion policy

At the time of writing the national health promotion policy is only in draft form. This is also true for other provincial policy documents in Gauteng and KwaZulu-Natal. All these policy documents are written primarily for the health department and aim to:

1. Put health promotion on the map
2. Promote the approach described in the Ottawa Charter
3. Promote the settings approach for South Africa especially Healthy Schools
4. To identify the scope of activity for health promotion
5. To outline the functions at provincial, regional and district levels.

Health promotion forums and the Health Promotion Foundation

There are several important initiatives happening that are set to strengthen health promotion in South Africa. The first are the health promotion forums being established at national and provincial levels. Many people working in health promotion both inside and outside government feel that they do so in isolation of others. These forums aim to help network, provide visibility, strengthen training opportunities and promote advocacy work.

Some of the work of the forums has been highly successful and has helped bring people together from both inside and outside government. Although it is felt that these forums should in the long term operate independently of government, government input is currently essential to sustain the initiative. All the existing forums are far from institutionalised. The National Health Promotion Forum has no funding and is organised by an interim committee. The Gauteng Health Promotion Directorate feels that the Gauteng forum would collapse without its continued support.
The establishment of a Health Promotion Foundation is part of the strategic plan for the National Directorate of Health Promotion. The primary purpose of the Foundation is to provide expertise in research, training and standards of practice for health promotion. The model for the Foundation comes largely from the Australian experience of health promotion, where such a Foundation is able to provide leadership and cutting edge methodologies. One mechanism of financing such a Foundation is thought to be dedicated tobacco taxes as is the case in Victoria in Australia.

In other countries the establishment of a foundation or comparable body seems to have been effective in strengthening health promotion. This may be in part because the bureaucracy associated with governmental departments does not hamper activities. What is not clear in the South African National Health Promotion Directorate’s commitment to the establishment of a Foundation is how it views its own role.

However, what both the forums and the Foundation recognise is the need to generate more debate about issues in health promotion.

**Approaches to health promotion in South Africa**

There are 4 major approaches to health promotion adopted in South Africa. The approaches are:

- policy, advocacy and healthy environments
- the settings approach
- education and information
- re-orienting health services and community participation.

The following is a description of the type of activities happening under each approach. It is not an exhaustive list of all health promotion work in South Africa.

**Policy, advocacy and healthy environments**

Writing healthy public policy is regarded as a cornerstone of good health promotion practice. This is because it can prescribe the environment in which people make healthy choices. In fact one of the easiest definitions of health promotion is making “healthy choices easier choices”. Healthy public policy can protect people’s health by setting minimum standards and setting regulatory measures in place.

Advocacy is the process used to overcome the major structural barriers to public health. These barriers are usually legislative, policy or regulative measures that hinder the practice of good health. Sometimes the barriers are physical barriers such as a lack of water or adequate sanitation.

South Africa is having enormous success at the policy level. Its smoking legislation puts it at the forefront of tobacco control worldwide. Other policy developments for women’s health are exemplary. The coalition formed between Soul City and The National Network on Violence Against Women to promote the new Domestic Violence Act is an outstanding example of media advocacy.

Other policy developments in other departments of government are doing much to improve health. The Department of Water Affairs and Forestry are increasingly using health criteria to set minimum standards for the delivery of basic sanitation. Health and hygiene outputs are a compulsory requirement of the new Water Services Act.

What is interesting about these and other developments is that they are happening largely without the specific input of any health promotion directorate. Although the tobacco control legislation has been a project of the National Directorate of Health Promotion, the expertise and advocacy work has been
The National Directorate of Health Promotion believes the settings approach to be crucial. Nationally, there is a wish to move away from vertical health topics and health services. In their summarised five-year plan submitted to government, two of their five strategic objectives are about healthy environments. These are:

- “To create and sustain work environments which will support and sustain positive health outcomes through policies and programmes”
- “To expand and institutionalise Health Promoting School initiatives”.

Although a programme of health promoting workplaces has yet to be initiated by the department, the development of provincial structures for the Health Promoting Schools Project is considered by the National Directorate to be one of their greatest successes. The Western Cape is thought to have gone furthest with a strong provincial network and work on the ground including early childhood development, the rights of children and addressing malnutrition through vegetable gardens. In Gauteng, Health Promoting Schools as a specific programme is underdeveloped, but some specific initiatives such as the Gauteng Integrated Schools Sanitation Improvement Programme (GISSIP), run as joint initiatives between the Departments of Education, Health and Public Works, and the Lifeskills Project are advanced and well organised programmes. In KwaZulu-Natal it is thought that one health promoting school should be piloted per health district. To facilitate this a short course is being held to train one health promoting school facilitator per district. This is a joint venture between the Health Promotion Department, The Valley Trust and the Medical Research Council. Other provinces also report that the Health Promoting Schools Programme is one of their major programmes (see Table 3). Most of these programmes are only in the start up phase. However these developments do point to the influence that the National Directorate has on the work undertaken by provinces.

Despite the clear interest in this programme there is some anecdotal evidence already that this approach may be time consuming to implement and difficult to sustain with its emphasis on process and inter-sectoral collaboration. In KwaZulu-Natal it took six months to establish one interdepartmental committee in Umbumbulo district. In Johannesburg, the Healthy Cities project collapsed when the municipality was re-organised.

Education and information

Education and information have historically been the focus of health promotion activity. In particular, awareness days and weeks have often been used to promote information around specific issues, for example, World AIDS Day, World Environment Day and Breast-feeding Week. Other directorates in the Department of Health have continued with this information work, whilst interestingly the National Health Promotion Directorate is not currently responsible for one major information and education campaign.

However developments in the field of communication have resulted in vast improvements in the design of educational messages, the use of appropriate media and the application of research. The multimedia NGO health promotion project, Soul City, which combines television drama, radio, print media and the development of adult education materials is estimated to reach 60% of the Black population. Now in the development phase for the sixth television series and about to pilot a new children’s series specifically
aimed at eight to twelve year olds, the project has been shown to have an impact on the knowledge and
behaviour of South Africans.

Social marketing skills are increasingly being successfully applied to national campaigns. Examples of
this are the “Arrive Alive” campaign, the “Slap it on” campaign of the Paraffin Safety Association of South
Africa and the marketing of Lovers Plus condoms.

In general there has been an explosion in print media production. Large numbers of posters and
pamphlets have been produced. More significantly, adult education materials have been produced. Soul
City has a mother and child educational package, a nutrition education package, a water and sanitation
manual and a package on violence against women. Gauteng Health Promotion Directorate has produced
a comprehensive pollution prevention package, materials about school sanitation and a food hygiene education
programme for street food traders. The Mvula Trust has initiated a programme of water and sanitation
education called PHAST (Participatory Hygiene and Sanitation Transformation). All of the education
programmes largely use facilitated flip charts or pictures and group work. In practice they are mainly
implemented through cascade training by master trainers.

Re-orienting health services and community participation

The Jakarta Declaration quoted at the beginning of this chapter emphasises the importance of
community participation for health promotion. Generally the settings approach to health promotion helps
to foster this. Gauteng, in its draft policy, states very clearly that “Health promotion is intrinsic to the
professional practice of all health workers and is not the exclusive preserve of health promotion specialists”,
therefore by default recognising that health promotion should be happening within the mainstream health
service as well.

In terms of the core package of primary health care services, health promotion is considered a
community service. This implies that health promotion should involve outreach work into health districts.
Given the pressures on nurses to become the new primary health care practitioners with diagnosis and
dispensing skills, the space for outreach community work in their busy schedules is unlikely.

The Soul City “Health Worker of the Year” competition has shown that some innovative health
promotion projects are happening at a local level despite the constraints. This work has included advocacy,
education and home-based initiatives in a wide range of health concerns from TB to asbestosis, and
disability to child abuse.

In contrast to the nursing profession, the professional scope of environmental health officers is moving
much closer to health promotion outcomes. A fundamental reform of their scope of practice, legislation
and the curricula at technikons will push a reformed environmental health service into health development,
health promotion and environmental management and away from the old model of inspection. Should the
service fully manage this transition then it will be delivering on water and sanitation, pollution, tobacco
control and food safety.

Support for the development of health promotion

All key informants for this chapter talk about a capacity gap in health promotion. This gap is primarily
about having inadequate training opportunities. However it is also felt that there is an inadequate research
base for health promotion planning and that the application of research to health promotion is badly lacking. The resources to fund health promotion activities and staff are considered too little.

Training

Currently there is enormous confusion about who needs to be trained and at what level. Some people feel that health promotion is a highly specialised discipline that should be driven by public health specialists with a Masters level qualification. Others feel the technikons should offer a national diploma. Alternatively, others wish to acknowledge the contributions of people trained in other disciplines such as social science to health promotion. Lastly there is a strong sense that health promotion teaching to all health workers in their basic and post qualification training should be strengthened. Currently there are few initiatives at any of these levels.

Until recently only the Thusano School of Public Health and the University of the Western Cape were offering short courses in health promotion. Subsequently the University of the North has started a one-year residential diploma programme, UNITRA offers a BSc programme and there is a one week health promotion component to the Masters in Public Health offered at the University of the Witwatersrand. The Institute of Urban Primary Health Care in Johannesburg has completed one six-week programme for a group of health advisors in Gauteng. Nursing, medical school and technikon programmes are beginning to incorporate health promotion teaching into their curriculum. However, it is not known how widespread this is.

Despite this, training initiatives are felt to be happening too slowly, are too few and are badly resourced. There are no programmes to orientate lecturers to health promotion. There aren’t any academic centres for health promotion training or academic posts dedicated to health promotion that could help provide standards and teaching resources.

Research

Many people who work as health promoters lack research skills and therefore formative and evaluative studies are rarely done. There is no incentive or culture of writing up health promotion projects so a lot of what has been achieved or learnt goes undocumented. Apart from the Medical Research Council in Cape Town there are no other academic centres for health promotion research. Qualitative and participatory research skills essential to good health promotion practice are in general undervalued in the health service and subsequently are not effectively introduced to health workers during their basic training.

Resources

Very different sums of money are spent on health promotion projects. Soul City estimates that one series including the television, radio and print media, costs in the region of R20 million. In government there is no real sense of what sums of money need to be spent to make an impact for health promotion. The biggest sums of money, such as those for Soul City, are coming from donors and private sector sponsorship. At the local level there is very little funding for health promotion activity and staff.
Conclusions

Perhaps what is most outstanding regarding health promotion in South Africa is the lack of formal documentation about what is happening. There is no comprehensive review of resources, infrastructures and programmes in the country. The policy documents are still only in draft form and the national policy could not be made available for this Review.

Generally health promotion services are found to be weak in the provinces and there are very few working models of district health promotion practice. Given the present limited capacity at the provincial and district level it is unlikely that enough additional health promotion staff could ever be employed to provide a more robust service. Norms and standards in health promotion cannot be about how many health promotion staff are needed per 100 000 population. Instead, alternative models of service delivery need to be developed especially at the district level.

The second conclusion concerns the National Directorate’s role and responsibility to ensure the development of all approaches to health promotion in South Africa. What is not clear from the strategic goals and stated intentions of the National Directorate is who in South Africa has responsibility for the total picture of health promotion practice in this country. The National Directorate has clearly indicated their preference for the settings approach. The problem with the National Directorate being overly focused on one approach is that there is then no reference point for other groups and organisations contributing to other approaches, such as policy work and communication campaigns. The proposed Health Promotion Foundation could fulfil this co-ordinating role, but again if this is the intention it is not overtly stated anywhere.

The third conclusion is about the capacity gap. Although the capacity gap was earlier described in this chapter as including training, research and resources, it is the lack of training that dominates as a primary concern. It is only through appropriate training that research and debate about health promotion in South Africa can be fostered for the long term. There is an urgent need for an intervention to enhance training opportunities in health promotion. The two levels of training that are probably most urgently needed are firstly for undergraduate health workers (especially environmental health officers to help fast track the shift in environmental health), and secondly for post graduate specialist studies open to a wide range of graduates who are contributing or wanting to contribute to health promotion practice in this country.

Recommendations

1. That a national audit of all health promotion resources be conducted to give recommendations about the development of health promotion infrastructure in the public sector and possible models of health promotion delivery at the district level.

2. In the absence of any other national health promotion structure such as the proposed Health Promotion Foundation, that the National Directorate makes one of its primary functions to be ensuring the development of all approaches to health promotion countrywide.

3. That health promotion training be addressed as an urgent priority, the two major priorities being:
   - Health promotion training for undergraduate health workers in particular in environmental health
   - Post-graduate health promotion studies for people from a wide range of disciplines and sectors.
The prevalence of HIV infection in antenatal clinic attendees has risen from 1% in 1990 to 23% in 1998. South Africa's epidemic is one of the fastest growing epidemics in the world with an estimated 3.6 million people already infected. The prevalence is different in each province with KwaZulu-Natal the highest at 26.9%, the Northern Province at 8.2% the lowest. However the annual rate of increase rose to 40.2% between 1997 and 1998 in the Northern Province. Details of the levels of infection and projections are given in the chapter.

The impact of HIV infection will be a decrease in life expectancy from 60 to 40 years within the next 10 years and a rise in infant mortality from 50 to 60 per 1,000 live births. Orphaned children, congestion of hospital beds and economic pressures from ill workers are all among the challenges that lie ahead in the near future.

The high prevalence and poor treatment of sexually transmitted diseases (STDs) will exacerbate the problem, as will the relatively poor knowledge of AIDS and poor behaviour modification. The response has centred around three objectives. The first is the prevention of transmission through information, education and communication (IEC), school life skills programmes and barrier methods, the improvement of STD management and control, the prevention of transmission through blood transfusions and other blood products, and the protection of the rights of people with HIV/AIDS.

The second objective is the reduction of personal and social impact through counselling, care and support, welfare services and economic projects. And the third objective is to mobilise and unify resources. This includes the improvement of intersectoral co-ordination, the establishment and promotion of partnerships against AIDS and the enhancement of the national and provincial AIDS programmes.

The chapter concludes that this is a catastrophic epidemic and that the window of opportunity to intervene has passed. Besides renewed efforts to contain the spread of the disease, interventions will have to deal with the impact of disease.
Introduction

Estimates by the Joint United Nations Programme on HIV/AIDS (UNAIDS) indicate that the epidemic of HIV in South Africa is one of the fastest growing in the world. Unless a cure is found or therapy to prolong life is made available, the majority of the 3.6 million South Africans already infected with HIV will die within the next ten years. If there is no success with interventions to reduce the spread of HIV, an additional 550,000 persons will become infected each year. This will have a major impact on all aspects of life in South Africa.

The failure of the programmatic response to change unsafe behaviour in developing countries has led to the “expanded response” to HIV prevention. This has moved HIV/AIDS from the health domain to one that is intimately tied with development and human rights.

The programmatic response fails to take account of the social context that influences behaviour. Many South Africans have little control over their lives and circumstances. Thus, messages to promote safe behaviour are often inappropriate and ineffective.

There are three critical principles of the expanded response:

- Action needs to be broad-based and multi-/intersectoral to address the social context
- HIV/AIDS must be factored into development planning
- Individuals and communities affected or threatened by the epidemic must be involved in the planning and implementation of the response.

These principles highlight the need for action at the local level where communities can develop their responses to the epidemic within the broader context of their own health and development.

The NACOSA national plan is used as the framework within which to review activities around HIV/AIDS. Three approaches have been used to gather information for this Review:

- A review of the literature on HIV/AIDS in South Africa
- A review of all available documentation on HIV/AIDS
- A questionnaire survey of the nine provincial AIDS co-ordinators, followed by a telephonic enquiry in some cases. With the exception of the Northern Province, all provincial co-ordinators responded.
**The extent of the HIV/AIDS epidemic**

The HIV prevalence determined in pregnant women attending antenatal services in the public sector is a good indicator of the progress of the HIV epidemic in the general population. Figure 1 shows the progression of the epidemic in South Africa since the inception of this annual survey in 1990. Prevalence has increased from less than 1% in 1990 to almost 23% in 1998.

![Figure 1: HIV prevalence in antenatal clinic attendees, 1990 to 1998](image)

Table 1 compares the findings of the ninth national antenatal HIV survey conducted in 1998 with those of 1997.

**Table 1: HIV prevalence among antenatal attendees by province, 1997 and 1998**

<table>
<thead>
<tr>
<th>Province</th>
<th>Est HIV+ 1997</th>
<th>Est HIV+ 1998</th>
<th>Rate of increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape (EC)</td>
<td>12.6</td>
<td>15.9</td>
<td>26.2</td>
</tr>
<tr>
<td>Free State (FS)</td>
<td>20.0</td>
<td>22.8</td>
<td>14.0</td>
</tr>
<tr>
<td>Gauteng (GT)</td>
<td>17.1</td>
<td>22.5</td>
<td>31.6</td>
</tr>
<tr>
<td>KwaZulu-Natal (KZN)</td>
<td>26.9</td>
<td>32.5</td>
<td>20.8</td>
</tr>
<tr>
<td>Mpumalanga (MP)</td>
<td>22.6</td>
<td>30.0</td>
<td>32.8</td>
</tr>
<tr>
<td>Northern Cape (NC)</td>
<td>8.6</td>
<td>9.9</td>
<td>15.1</td>
</tr>
<tr>
<td>Northern Province (NP)</td>
<td>8.2</td>
<td>11.5</td>
<td>40.2</td>
</tr>
<tr>
<td>North West (NW)</td>
<td>18.1</td>
<td>21.3</td>
<td>17.7</td>
</tr>
<tr>
<td>Western Cape (WC)</td>
<td>6.3</td>
<td>5.2</td>
<td>0</td>
</tr>
<tr>
<td>South Africa</td>
<td>17.0</td>
<td>22.8</td>
<td>33.8</td>
</tr>
</tbody>
</table>
The table shows that:

- The national HIV prevalence of women attending antenatal clinics in 1998 was almost 23%. This represents an increase of 34% on 1997 figures.
- Prevalence in the provinces continued to rise. Figures for the Western Cape should be regarded with caution and may represent inadequate data collection.

## Levels of infection among young women

Table 2 shows HIV prevalence by age group among women attending antenatal clinics for the two years 1997 and 1998.

### Table 2: HIV prevalence by age group: antenatal clinic attendees, 1997 and 1998

<table>
<thead>
<tr>
<th>Age group</th>
<th>Est HIV+ 1997</th>
<th>Est HIV+ 1998</th>
<th>Rate of increase %</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20</td>
<td>12.7</td>
<td>21.0</td>
<td>65.4</td>
</tr>
<tr>
<td>20 – 24</td>
<td>19.7</td>
<td>26.1</td>
<td>32.5</td>
</tr>
<tr>
<td>25 – 29</td>
<td>18.2</td>
<td>26.9</td>
<td>47.8</td>
</tr>
<tr>
<td>30 – 32</td>
<td>14.5</td>
<td>19.1</td>
<td>31.7</td>
</tr>
<tr>
<td>35 – 39</td>
<td>9.5</td>
<td>13.4</td>
<td>41.1</td>
</tr>
<tr>
<td>40 – 44</td>
<td>7.5</td>
<td>10.5</td>
<td>40.0</td>
</tr>
<tr>
<td>45 – 49</td>
<td>8.8</td>
<td>10.2</td>
<td>16.0</td>
</tr>
</tbody>
</table>

The table shows that:

- HIV prevalence among pregnant women continues to rise, with those aged 20 to 29 having the highest rates
- Prevalence among pregnant women under 20 years of age has risen by 65%.

The rapid increase of HIV infection in teenage women is a serious cause for concern.

## Levels of infection among the general population

It is estimated that:

- Approximately 3.6 million South Africans were living with HIV at the end of 1998, compared to 2.7 million in 1997
- One in eight adults (15 to 49 years of age) is infected with HIV, or between 12 and 14%
- Current estimates suggest that over 1 500 South Africans are infected with HIV each day or 550 000 per annum.
**Projections into the 21st Century**

Based on modelling of the data without effective interventions:
- National adult infection levels will be at 5 million by 2002
- 250,000 South Africans will die of AIDS each year by 2002
- 500,000 South Africans will die of AIDS each year by 2008.

**Impact of HIV/AIDS**

It is estimated that:
- Average life expectancy will fall from 60 years to 40 years between 1998 and 2008
- Infant mortality will rise from 50 per 1,000 to over 60 per 1,000 in the same period

The epidemic will result in a large number of orphaned children. By 2005 a million children under the age of 15 years will have lost their mothers to AIDS. The number of AIDS orphans will increase to 2 million by the year 2010.

The impact of the AIDS epidemic will be most evident in the health sector. In Gauteng it has been estimated that adult hospital bed needs will increase from 2,000 in 1998 to over 10,000 in 2010, a 600% increase over the next ten years, unless more efficient ways of caring for people with HIV are implemented. There is no doubt that HIV will consume a large proportion of future health budgets. The impact on the health sector has already been experienced at a number of the major hospitals in South Africa, including Chris Hani Baragwanath in Soweto and Red Cross Hospital in Cape Town, where 35% and 20% of children admitted are HIV positive respectively. Approximately 20 to 25% of adult admissions in Gauteng are HIV related. In addition to the health sector the impact of HIV will be most marked in the educational and welfare sectors while it will have a significant impact on the economy, development and poverty.

**Levels of infection with other sexually transmitted diseases**

The interaction between HIV and the other sexually transmitted diseases (STDs) has been known for a number of years. The presence of an STD in HIV negative partners increases their susceptibility to HIV during sexual intercourse with an HIV positive partner, while an HIV positive partner is more infective when s/he has an STD.

As part of the Demographic and Health Survey undertaken by the Department of Health in 1998, men were asked about the symptoms of an STD. Twelve percent of men over 15 years of age reported having the symptoms of a discharge and/or an ulcer during the previous 3 months. Prevalence was highest in the 15 to 44 year old age group although prevalence for all age categories was over 10%. This prevalence is very high considering that not all symptoms of STDs were included, that the prevalence in women is generally higher than that in men, and that the data show that prevalence of asymptomatic STD infections is high.
Knowledge of AIDS and behavioural surveillance

Information from the 1998 South African Demographic and Health Survey shows that 97% of women between 15 and 49 years of age have heard of AIDS. However, their knowledge of ways to avoid AIDS was limited with up to 10% of women stating that staying with one partner and using a condom during sexual intercourse would not protect them against AIDS. Twenty one percent still believed that transmission could take place by sharing public toilets while 38% felt HIV could be spread by mosquitoes.

In terms of sexual behaviour only 3% of women reported having two or more sexual partners in the previous 12 months. Of all sexually active women interviewed, 22% had used a condom previously, while only 8% used a condom during the last act of sexual intercourse.

Prevention of transmission of HIV

The prevention of sexual transmission

In South Africa, as with most other countries, a programmatic response dominates HIV prevention efforts. The programmatic response derives from the World Health Organisation’s (WHO) three-part individual risk-reduction strategy:

- Correct and appropriate information/education
- Health and social support services (such as counselling, testing, STD management and condom distribution)
- Non-discrimination towards people living with HIV/AIDS.

This response to the epidemic is based on the assumption that risk behaviour must be minimised in the individual rather than at the community or social level. The critical point about this approach is that all three elements have to be accessible to individuals in order for them to sustain positive behaviour change. The provision of information and education is of little benefit if appropriate or accessible support services are not available to facilitate behaviour change.

Information/education and counselling (IEC)

The National STD/HIV/AIDS Review (HIV Review) conducted in 1997 highlighted the need to improve the quality of printed media used in HIV prevention, and to co-ordinate its distribution. A great deal of work has been done in this area. In particular, the establishment of the Beyond Awareness Campaign has resulted in greater accessibility to printed media that provides correct information and tools for action.

- At a national level, the Directorate: HIV/AIDS & STDs has seen a dramatic increase in demand and currently the AIDS Action Office of the Beyond Awareness Campaign receives requests for approximately 1 million items each month
- Appropriate counselling remains a very important aspect of prevention, particularly pre- and post-test counselling. The AIDS Training and Information Centres (ATICs) continue to train large numbers of counsellors
- The Lay Counsellor Programme, established by the HIV/AIDS Directorate and devolved to the provinces, is progressing. Counsellors in clinics and hospitals have become indispensable members of the team. Work has begun on developing counselling policy, minimum standards and uniform training
During 1998 the AIDS Help-line received over 200 000 calls of which 60 000 received direct assistance. The HIV/AIDS Directorate has provided additional training and support for Help-line trainers. There are plans to improve the quality of this service and to monitor the service more closely.

**Life skills programmes in schools**

Given the rapid increase in HIV infection amongst the youth, life skills education in schools is a priority. The National Life Skills Project Committee was established in 1995.

- By the end of 1998, two teachers in every secondary school throughout the country had been trained in life skills education
- The focus has now shifted to primary schools, with pilot training of teachers in the Free State, Gauteng, North West and the Northern Province
- The Department of Education is taking greater responsibility for the programme, although it is still heavily supported by Health
- Most activities occur in “pockets” and are not generalised to the whole province and the implementation of the programme is slow in rural areas
- Competing priorities such as Curriculum 2005 have made implementation of the programme difficult in some areas
- Conservative elements in certain schools have delayed implementation. The question of condom promotion and availability in schools continues to be a controversial issue
- There are concerns that teachers are not ideally placed to conduct life skills education and that it should be implemented through a peer-based approach.

**Barrier methods**

Access to, and utilisation of, condoms is a critical factor in controlling the spread of HIV.

- There has been a rapid increase in the demand for condoms from 1.2 million per month in 1995 to 15 million per month in early 1999
- In 1998, the government purchased 160 million condoms, up from 140 million in 1997. New quality specifications including the batch testing of all condoms, in line with WHO guidelines, have been implemented to ensure that only good quality condoms are distributed
- Most distribution sites report an adequate supply although some delays have been experienced
- The unfortunate incident of stapled condoms highlights the need for clear condom policy and guidelines for distribution as a matter of urgency.

The single biggest challenge remains persuading individuals to use condoms consistently. The survey conducted in 1998 suggests that adolescents and adults have still not internalised the risks of unprotected sexual intercourse. While gender programmes have been very good at persuading women to use condoms, their successes have been considerably limited by the attitude of men towards condom use.
Sexually transmitted disease (STD) management and control

STD management and control is the most advanced of all the HIV prevention strategies.

- Extensive training in control has taken place in all provinces to implement policy guidelines
- All provinces surveyed reflected very few problems with service delivery. In Gauteng, for example, over 80% of 300 clinics are delivering on policy
- This is not the case with private medical practitioners. Studies show that the quality of care in the private sector and in the work place is poor (see chapter 7). During 1998 the National AIDS Directorate began a programme to engage with the private sector to improve the quality of care. Considerable work is still needed to bring them in line with national policy.

A “best practice” model for STD control is the Lesedi Project, where the presumptive treatment of STDs in sex workers has led to a significant decrease in STDs among miners who work in the area. The project estimates that the intervention has reduced HIV infections by 46%. Further, it estimates that the project has saved R 2.34 million in medical costs at a total project cost of R 268 000.4

The prevention of transmission through blood

Since the mid-1980s the supply of blood products in South Africa has been safe. However, the rapid escalation of the epidemic is placing pressure on blood transfusion services (BTS) to keep them safe. This has resulted in a controversial decision by the BTS in KwaZulu-Natal not to collect blood in areas where there is a high prevalence of HIV.

There is very little data on intravenous drug use in South Africa and this may pose an immediate problem in terms of HIV infection. The rapid rise in drug use suggests that it should be taken seriously in HIV prevention.

Mother to child transmission

Between 25 and 35% of babies born to HIV positive mothers are infected. A short course of AZT to pregnant mothers shortly before birth and to the babies after birth reduces transmission by up to 50%. In the light of this, the decision of government to deny prospective mother access to AZT on the grounds that it is too expensive and difficult to implement is controversial. The Western Cape has continued with a pilot project to investigate the feasibility of this intervention. Similar studies are being carried out at the Chris Hani Baragwanath hospital in Gauteng where a recent study showed that providing AZT to pregnant mothers is marginally cost-effective.

Protection of the rights of people with HIV/AIDS

Field experience has shown that fear of discrimination leads those most likely to be infected to avoid participating in prevention programmes.

A number of laws that protect the rights of people living with HIV/AIDS were enacted and promulgated during 1998/99. The Employment Equity Act (Act 55 of 1998) eliminates unfair discrimination in any employment policy or practice. The Act lists 20 grounds on which no person may discriminate unfairly against an employee. HIV is explicitly listed as a ground of non-discrimination. Section 7(2) of the Act prohibits testing of an employee to determine that employee’s HIV status for employment access and/or
benefits. The Medical Schemes Act prohibits discrimination on the grounds of pregnancy, disability and state of health. This means that no medical aid may exclude HIV/AIDS or any other medical condition from cover. The Act requires that medical schemes provide at least a minimum benefit for every condition. This minimum cannot be lower than provision for the same condition in the public sector.

Following an incident when an HIV positive scholar was denied access to a public school, the Ministry of Education has published government policy on HIV/AIDS for learners and educators in public schools and training institutions. The right to education and employment by learners, students and teachers with HIV or AIDS is encoded in the policy while unfair discrimination is prohibited. Life skills education including HIV/AIDS and sexuality education is regarded as a compulsory aspect of education.

Despite this progress in legal and policy formulation around human rights, there is still discrimination and abuse of the human rights of persons infected with and affected by HIV/AIDS. This is evidenced by the murder of Gugu Dlamini in KwaZulu-Natal in December 1998 after she disclosed her HIV-status on a public platform. Many other forms of discrimination take place, with limited access available to poorer individuals to challenge these practices.

Reducing the personal and social impact of HIV infection

The provision of counselling, care and support

With regard to care and treatment of persons infected with HIV, a number of guidelines have been completed at a national level. These include:

- HIV/AIDS adult care
- HIV/AIDS paediatric care
- HIV/AIDS home care and palliative care
- HIV and tuberculosis
- Management of occupationally acquired HIV exposure.

The challenge is to provide guidance on how to implement them at the local level.

There is considerable work being done at the local level by non-governmental organisations (NGOs) and community-based organisations (CBOs), often in conjunction with government structures. Approaches range from institutionalised care to home-based interventions for terminally ill patients. Numerous projects provide useful models for action. For example, in the Western Cape, where resources are more readily available in state structures, the Red Cross Home-based Care Project has co-ordinated links between patients and local clinics and hospitals, while at the same time providing home-based care where necessary. In contrast, in a community with an overburdened government health structure, such as Umlazi, the Umlazi Community Home-based Care Project cares for terminally ill patients in their homes. The Umlazi project incorporates a strong partnership between the Prince Mshiyeni hospital (that provides management and supplies), the community of Umlazi (who supply the care-givers) and the AIDS Foundation (who provide technical and limited financial resources).

The debate around access to appropriate treatment is gaining momentum with the establishment of the Treatment Action Campaign in the latter part of 1998. This is part of broader global mobilisation for access to appropriate treatment in developing countries.
The most controversial issue is the current move by government to make AIDS a notifiable disease. On the one hand it is to be anonymous and to be used for tracking and planning purposes only; on the other, it is to inform care givers who tend to people with AIDS. From a monitoring point of view, such information will be grossly inaccurate as persons with HIV will be reluctant to divulge their status until there is a climate of non-discrimination and acceptance. In addition the practical implications of implementing the policy were not sufficiently thought through when the policy was drafted.

**The provision of social welfare services**

Two issues are particularly important at a local level:
- The intensification of poverty as a result of AIDS-related mortality and morbidity
- The problem of how to cope with the increasing numbers of orphans.

Numerous self-help projects have been established (e.g. Positive Cleaners in Johannesburg and the vegetable garden projects in Nduma in northern KwaZulu-Natal) but many of them suffer from inappropriate activities and limited management. This threatens their sustainability. As with care and support, good models exist. However, they are not documented to inform the establishment of similar projects elsewhere in the country.

The Pietermaritzburg-based Thandanani project is attempting to form rural community committees to place orphans in the care of families. In Durban, an initiative of the AIDS Foundation draws together home-based care projects, hospitals and the Child and Family Welfare Societies in a child fostering programme without creating new expensive structures.

A strong lead is required from the Department for Welfare and Population Development in the care and support of those in need of assistance.

**The reduction of the macro socio-economic consequences of HIV/AIDS**

As the epidemic advances, there is increasing evidence that in certain sectors the epidemic will have severe consequences.

**What has been found to work?**

Some issues that have been found to be the key to successful interventions include:
- There is a greater willingness to accept community responsibility to care for people infected with or affected by HIV/AIDS in communities that have dealt with fear and discrimination
- Retired nurses and women’s groups from religious institutions provide an excellent resource base for sustainable home-based care programmes
- Interventions that keep orphans within communities have been found to be far more sustainable than institutionalised care
- The outreach programmes of rural hospitals provide useful links between formal health structures and the community for providing continuity of care and support. Good models of this are to be found in northern KwaZulu-Natal (e.g. the Mosveld and Manguzi hospitals)
Other countries with large-scale epidemics have shown that the combination of prevention and care within a single programme ensures a holistic and cost-effective approach to the epidemic.

**Mobilisation and unification of national, provincial, local and international resources**

**Mobilisation of commitment, support and resources**

**Intersectoral strategies and co-ordination**

Intersectoral strategies and co-ordination are essential components in mobilising commitment, support and resources. South Africa has not mobilised on a scale sufficient to create a critical mass of action in the face of the epidemic. There are however a number of encouraging developments at a national level:

- The Inter-Departmental Committee on HIV/AIDS, established in 1997, has shown significant progress in policy development and training of management personnel in HIV/AIDS. For example, the Department of Agriculture has developed policies that reach down to the local level. The strong involvement of a departmental representative in the AIDS Action Committee in Ingwavuma is but one manifestation of this commitment. In another example, the Department of Transport has trained its head office staff in HIV/AIDS and has established a strong mechanism for co-ordination amongst role players closely aligned to its work.

- The establishment of the Inter-Ministerial Committee (IMC) at the end of 1997 created a platform for ministries to strategise and mobilise collectively.

Early in 1998, the IMC developed the Government AIDS Action Plan for South Africa (GAAP) to mobilise South Africans in controlling the epidemic. This plan is intended to address two critical weaknesses hindering the expanded response to the epidemic: the lack of political commitment and limited intersectoral collaboration.

The plan provides a strategic framework that is adaptable to different regions, communities and circumstances. Planning will happen on a sectoral basis with consolidation of plans to be discussed at annual National AIDS Summits.

The GAAP proposes a three-phased action plan:

- Phase 1 (1998): Mass mobilisation against AIDS
- Phase 2 (1999): Mass action
- Phase 3 (2000): Rolling mass action

The Deputy President launched the plan in October 1998 and called on all South Africans to join in a “Partnership against AIDS”. Sectoral pledges were made (e.g. from business, trade unions and youth). This launch has been followed by the mass mobilisation phase of the plan, using key calendar dates and activities to promote partnership building. For example, on World AIDS Day (1 December 1998) all cabinet ministers were highly visible around the country pledging their support for the AIDS effort.

One of the key roles of the Beyond Awareness Campaign in the AIDS Action Plan is to provide the tools for action that any programme to combat AIDS can make use of. Items such as the red ribbon, guidelines on developing programmes, pamphlets and posters are readily obtainable from a central AIDS Action office. In addition the promotion of the red ribbon has achieved much success in increasing the profile of the programme to combat the epidemic in South Africa.
The promotion of community involvement

Ten national NGOs are supported directly by the National HIV/AIDS Directorate while provincial and local NGOs/CBOs are supported with funds allocated by this Directorate to the provincial level. With the exception of Gauteng, NGOs/CBOs receive little or no funding from provincial government sources.

The important role of NGOs/CBOs is well documented. They are often more strategically placed than government to engage with the community. A national capacity building programme was piloted early in 1999 to develop capacity within the NGO/CBO sector to manage programmes.

Strengthening national, provincial and local capacities to respond to HIV/AIDS

The role of national and provincial AIDS programmes

The role of national and provincial AIDS programmes is to co-ordinate the implementation of the response. Specifically, they must provide overall leadership, guidance and co-ordination of HIV/AIDS partners and activities in planning, implementing, managing and evaluating the response. This is an extremely difficult task. The difficulties of these programmes include:

- The low status of AIDS programmes in many provinces and the subsequent absence of a visible presence at a district level
- The lack of human resources within programmes. In some provinces there is only one person responsible for HIV/AIDS. In others, there is a heavy reliance on seconded staff. This reflects a lack of true commitment to control the epidemic
- AIDS programmes, both nationally and provincially, engaging in implementation at the expense of co-ordination and management
- The inability of programmes to advise politicians on appropriate policy
- The lack of planning for local implementation despite this being the thrust of national health and development policy
- Provincial co-ordinators often lacking management skills.

The AIDS programme in Gauteng stands out in contrast to all the other provincial programmes. Political commitment in Gauteng started with an impact assessment of the HIV/AIDS epidemic on Gauteng as a province and on the government as an employer. This study was carried out under the auspices of an inter-departmental committee. It was a very effective way to begin the process of gaining political commitment. Through this process, the AIDS programme in Gauteng became an inter-departmental initiative, with Health as the lead ministry. The benefits to the programme have been significant. It reports directly to the cabinet and derives its budget from an allocation from each ministry. This is the reason for the budget of R40 million in 1998. Despite its many challenges, the programme is structured and resourced in such a way that it can provide strategic leadership to the HIV/AIDS effort in the province. In large measure, this has been made possible by political commitment that is translated into a strong resource base for provincial action.
Programme monitoring, evaluation and research

There are few measures that monitor the impact of programmes and interventions. Indicators used generally relate to input or output such as numbers of condoms distributed, teachers trained in life skills education, and numbers of HIV/AIDS events held. The prevalence of HIV will only begin to decline some time after interventions are successful and thus intermediate indicators such as the prevalence of high risk behaviour and of STDs in the general population and in sub-populations with high- and low-risk behaviour are required.

Strengthening international efforts in the Southern African region

South Africa, as the most developed SADC country in terms of resources, has been tasked with the co-ordination of the HIV/AIDS task team within the SADC health unit. This is an enormous task considering the high prevalence of HIV in the region.

Conclusions and Recommendations

A number of recommendations are made:

- The first is to translate political commitment into strong national and provincial AIDS programmes. Capacity should be built at these levels. Given the resources and necessary management training, these programmes will be able to provide the leadership and strategic direction to the response. This has been demonstrated in Gauteng.

- The second is to harness the skills and expertise within civil society through the establishment of intersectoral management committees to work alongside government AIDS programmes. Not only will this provide an added dimension to strategic thinking, but it will also broaden the response from a government response to a country response.

- The third is to learn from what has worked. The epidemic has reached the stage where large numbers of people now have symptomatic HIV infection. Care, treatment and support have become important issues. South Africa can usefully build a solid base for action by drawing on what is known to work and develop its strategies accordingly. The development of South African “Best Practice” publications would be a useful starting point.

It is clear that South Africa is facing a catastrophic epidemic. The window of opportunity to prevent a large-scale epidemic has passed. The country now has to contend with the social and economic effects of large numbers of HIV infected and affected people. The control of this epidemic will only be achieved through sustained action in a well managed programme that is based on interventions that have been shown to work and in a programme in which all South Africans can participate.
Although significant progress has been made in implementation of a national TB Control Programme, there is little evidence that these efforts have altered the profile of the TB epidemic in South Africa. A reported incidence of 254 cases per 100,000 for the period 1996 - 1998 combined with low cure rates, indicate that the epidemic is still out of control. Rising levels of HIV infection and multi-drug resistant TB (MDR TB) represent additional threats to TB control efforts.

Clear policy guidelines and the necessary resources for diagnosis and management of people with TB are in place. Ongoing advocacy and improved management systems at provincial and district level are required if political commitment to TB control is to be translated into improvements in both the service delivered to individuals and the overall performance of the programme.
**Introduction**

Despite the availability of effective and affordable treatment, the number of South Africans dying from tuberculosis continues to increase (see Table 1). Although the long term solution lies in improving socio-economic conditions and reducing HIV infection rates, experience in several low and middle income countries, such as Peru and Vietnam, suggests that well-functioning TB control programmes can reduce both the morbidity and mortality associated with TB.

The Directly Observed Treatment, short-course (DOTS) strategy was formulated by the World Health Assembly in 1991 and adopted by the South African National TB Control Programme in June 1996. The strategy focuses on ensuring that infectious (smear positive) TB patients are cured on the first attempt. The five elements of the strategy are:

1. Government commitment to a national TB control programme as a specific health system activity, integrated into comprehensive primary care, and supported technically at national level.
2. Passive case detection by means of a patient-friendly and clinically efficient service based primarily on smear microscopy. People with symptoms indicative of TB who attend primary health care (PHC) facilities or seek treatment from health practitioners should be identified and investigated appropriately.
3. Standardised, directly observed, short-course treatment, prioritising sputum smear positive (or infectious) patients.
   
   Directly observed treatment involves each TB patient having a treatment supporter or supervisor who observes the patient swallowing his or her treatment on a daily basis for at least the first two months of treatment. “Short-course” refers to a treatment of six to eight months’ duration which is shorter than previous regimes which required treatment for nine to eighteen months.
4. Standardised treatment in the correct combination and dosage. A reliable supply of necessary TB drugs in all PHC facilities is therefore essential.
5. Effective monitoring using standardised registers, quarterly reporting and clear definitions and treatment outcomes.

Although ensuring cure of new, smear-positive patients remains the priority, the importance of effective standardised management of multi-drug resistant TB (MDR TB) has been recognised.

Generally the term “DOTS supporters” is used to refer to a system of treatment supporters (usually community members).

The technology and resources for effective TB control exist, but need to be translated into improvements in treatment outcomes for people diagnosed with the condition. The World Health Organisation no longer regards TB as a medical problem, but as a management problem with advocacy and improvements in overall management as the key strategies required to address the problem. “Like many public health interventions, TB control depends on simple and largely standardised procedures, and the managerial capacity to implement them on a large scale, to be truly effective”.1
**Important TB indicators**

**Incidence:**

The number of newly diagnosed cases of TB per 100 000 people.

**Cure rate:**

The percentage of patients who are shown to have been cured at the end of treatment.

**Interruption rate:**

The percentage of patients who fail to complete the full course of treatment. Such patients may continue to spread TB in their communities and are at risk of developing and spreading multi-drug resistant TB.

**Smear conversion rate:**

The number of patients who have converted from being smear positive to smear negative after three months of treatment expressed as a percentage of the total number of smear positive cases. The smear conversion rate is available within a shorter time period than the cure rate and is regarded as the best indicator of a TB control programme’s current performance.

**Bacteriological coverage:**

The national TB guidelines stress the use of sputum examination or microscopy rather than chest X-rays in the diagnosis of pulmonary TB. This allows for identification and prioritisation of infectious patients. The sputum of all patients diagnosed as having pulmonary TB should be examined bacteriologically i.e. the bacteriological coverage should be 100%.

**Sputum turnaround time:**

This measures the percentage of sputum test results which are available from the laboratory within 48 hours of the tests having been done. It is also often expressed as the number of days after which the majority of results are available.
**Figures and trends**

**Case-finding indicators**

The number of reported cases of pulmonary TB (PTB), for the period 1996 to 1998 as supplied by the Department of Health Systems Research and Epidemiology as of September 1999, is shown in Table 1.

A number of points should be borne in mind when interpreting the figures.

- The figures are collated from the information collected in TB registers at facility level. Although all facilities which manage TB patients should maintain an up-to-date TB register, this is not always the case.
- Figures are collated at facility, then district, then provincial and finally at national level. Inefficiencies in this system result in delays in availability of figures. The figures for 1998 can thus be presumed to be an underestimate with some reports still outstanding (the fall in reporting rates from provinces with a high number of cases such as the Western Cape and Gauteng being of particular significance).
- The reporting rate measures the number of reports received at national level as a percentage of the total number of facilities in the province. Unfortunately some reports are collated before being forwarded to the national office resulting in a falsely low reporting rate.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Eastern Cape</td>
<td>22 669 (64%)</td>
<td>24 253 (58%)</td>
<td>26 405 (80%)</td>
</tr>
<tr>
<td>Free State</td>
<td>8 884 (45%)</td>
<td>8 726 (99%)</td>
<td>9 084 (95%)</td>
</tr>
<tr>
<td>Gauteng</td>
<td>15 362 (73%)</td>
<td>23 646 (66%)</td>
<td>22 089 (44%)</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>10 235 (88%)</td>
<td>14 128 (97%)</td>
<td>10 820 (75%)</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>2 447 (35%)</td>
<td>3 174 (78%)</td>
<td>3 462 (64%)</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>1 960 (67%)</td>
<td>4 431 (69%)</td>
<td>2 690 (54%)</td>
</tr>
<tr>
<td>Northern Province</td>
<td>4 023 (33%)</td>
<td>4 738 (93%)</td>
<td>4 833 (89%)</td>
</tr>
<tr>
<td>North West</td>
<td>5 411 (90%)</td>
<td>6 288 (93%)</td>
<td>9 328 (96%)</td>
</tr>
<tr>
<td>Western Cape</td>
<td>19 637 (90%)</td>
<td>18 702 (90%)</td>
<td>21 305 (73%)</td>
</tr>
<tr>
<td>South Africa</td>
<td>90 628 (64%)</td>
<td>108 086 (69%)</td>
<td>110 016 (71%)</td>
</tr>
</tbody>
</table>

Although it is difficult to separate real increases in the number of cases from improvements in the reporting system itself, the figures suggest that the number of cases of PTB is increasing at a rate well in excess of population growth.

It is encouraging to note that reporting rates have increased from 64% in 1996 to 71% in 1998. Large increases in reporting rates (such as the Free State’s jump from 45% in 1996 to 99% in 1997) in the face of constant numbers of cases most likely reflects a process whereby the number of reporting units were revised and updated.
The incidence of reported cases of PTB is shown in Figure 1. These were calculated using the average cases for the period 1996–1998 as the numerator and the population figures from the 1996 Census as the denominator. A reported annual incidence of 254 per 100,000 people is unacceptably high for a country such as South Africa – it is at least ten to twenty times higher than that reported in developed countries.

The enormous variation within South Africa is difficult to explain. The province with the highest incidence, the Western Cape, reports an incidence five times higher than that reported in the Northern Province, which has the lowest reported incidence. Whilst the Western, Northern and Eastern Cape provinces are recognised as having a high burden of TB, KwaZulu-Natal, the Northern Province and Mpumalanga all report incidences well below the national average. The contribution of under-diagnosis and under-reporting of tuberculosis in these three historically under-resourced provinces is not known.

**Bacteriological coverage**

Ensuring that pulmonary TB is diagnosed by microscopy rather than chest x-ray is a major thrust of the National TB Control Programme. It can be regarded as a proxy indicator for the extent to which the national treatment guidelines are being implemented.

Progress has been made in improving the bacteriological coverage which has risen from 81% in 1996 to 88% in 1998. Coverage in some provinces such as the Free State, Northern Cape, KwaZulu-Natal and Gauteng remains less than 80%. 

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**Figure 1: Average annual incidence of PTB (cases per 100 000 people) for period 1996 - 1998**

<table>
<thead>
<tr>
<th>Province</th>
<th>Incidence (per 100 000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>388</td>
</tr>
<tr>
<td>Free State</td>
<td>338</td>
</tr>
<tr>
<td>Gauteng</td>
<td>242</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>160</td>
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<tr>
<td>Mpumalanga</td>
<td>108</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>360</td>
</tr>
<tr>
<td>Northern Province</td>
<td>92</td>
</tr>
<tr>
<td>North West</td>
<td>209</td>
</tr>
<tr>
<td>Western Cape</td>
<td>388</td>
</tr>
<tr>
<td>South Africa</td>
<td>254</td>
</tr>
</tbody>
</table>
Treatment outcome indicators

Cure of new smear positive cases of PTB remains the priority of TB programmes in the developing world. In order to impact on the TB epidemic, at least 85% of these infectious patients must be cured. Programmes which fail to achieve such cure rates are at risk of exacerbating rather than controlling the spread of TB, due to the fact that patients who are not cured remain infectious for longer periods of time and can spread the disease to others.

Treatment outcomes are shown in Figures 3 and 4. Cured patients are those who are shown to be smear negative at the end of six months’ treatment. This is the gold standard for proving successful treatment. “Treatment completed” refers to patients who finish their treatment, but are not shown to have been cured. However the majority of these patients can be assumed to have been cured.
It is of grave concern that only 57% of new smear positive patients are reported to be cured (a further 16% complete treatment).
**Multi-drug resistant TB**

TB which is no longer susceptible to treatment with standard TB drugs (specifically INH and Rifampicin) is termed multi-drug resistant or MDR TB. It usually develops in patients who have been inadequately treated for TB – most commonly as a result of interruption of treatment. This form of MDR TB is referred to as “acquired” or “secondary” MDR TB. Contacts of such patients can be infected *de novo* with the resistant form – so-called “primary” MDR TB.

Accurate figures for MDR TB are currently not available but surveys in three provinces (Western Cape, Mpumalanga and Gauteng) indicate a rate of 1% in new MDR TB cases, 4% in retreatment cases. This translates to at least 2 000 newly active cases of MDR TB in South Africa each year. MDR TB is extremely expensive to treat - R25 000 to R30 000 per patient for the drugs alone as opposed to less than R200 for a new patient with ordinary TB. Such patients generally also require to be hospitalised for long periods of time (usually between six and eighteen months), adding significantly to the cost of their treatment.

Cure rates are generally below 50% even in the best circumstances. At least 30% of cases are fatal within two years: the remainder become chronically infected with TB and continue to be infectious, posing a threat to communities.

Ensuring that all patients who are diagnosed with TB complete their treatment is the best way to prevent both primary and secondary MDR TB.

**HIV and TB**

It is estimated that 40 - 50% of people with TB in South Africa are co-infected with HIV. One third of people with HIV are expected to contract TB before they die.

**Why are the figures increasing?**

The World Health Organisation attributes the global increase in TB to four factors, all of which are found to some degree in South Africa.²

**Socio-economic conditions**

Although anyone can get TB, the vast majority of sufferers are poor. Despite some gains, many South Africans still live in overcrowded conditions conducive to the spread of TB.

Long term control of TB will depend on improving the living conditions of all South Africans.

**The HIV epidemic**

The HIV epidemic is contributing greatly to the deteriorating TB situation in an increasing number of developing countries, particularly in Africa and Asia. In the absence of HIV infection, the risk of someone developing TB is relatively low (probably 10% during a lifetime). But for individuals co-infected with HIV, the reactivation risk ranges from 5–10 % per year. In addition, HIV infection increases the risk of rapid progression from primary infection to disease. It therefore increases the TB incidence rate, especially in young and middle-aged adults, and causes sharp increases in TB case-fatality rates in the absence of effective case management.
**Ineffective TB control programmes**

Although TB control programmes can be effective in controlling the TB epidemic, poorly conceptualised and managed TB control programmes contribute to an increase in the burden of disease by increasing the pool of chronic infectious cases. From a public health perspective, programmes which fail to cure 80% of sputum-positive (infectious) patients will do more harm than good.

TB control efforts in South Africa have historically been patchy, with well-resourced but poorly managed programmes in some areas with other, usually Bantustan areas, being neglected. Non-standardisation of treatment and reporting systems was a feature of this system.

**Demographic changes**

The population of South Africa, like most developing countries, is young with a large percentage of children and young adults. Given that many adolescents and young adults were infected with TB during childhood, an increasing number of cases is emerging in this pool even though the rate at which disease occurs is stable.

**The National TB Control Programme (NTCP)**

The National TB Control Programme is committed to improving TB control through implementing the DOTS strategy. Establishment of well-functioning Demonstration and Training Districts (DTDs) is viewed as the key strategy in implementing this vision.

In 1996, the review of the TB Control Programme undertaken by the World Health Organisation and the Department of Health in 1996 made the following recommendations:

1. Declare the seriousness of TB in South Africa
2. Strengthen the management of TB at all levels
3. Implement the DOTS strategy in order to ensure an 85% cure rate
4. Invest adequate resources in training and TB management
5. Ensure adequate microscopy services
6. Ensure accountability through the use of the TB register to monitor patients until they are cured.

The recommendations were accepted. Progress in achieving these recommendations is documented below.

**Progress to date**

**Advocacy and government commitment**

Advocacy has been a key component of TB control efforts. In 1996, the then Minister of Health, Dr Zuma announced that tuberculosis would be regarded as a national priority. During interviews undertaken early in 1999 for the HST publication Update, the majority of provincial MECs for health identified TB as a provincial priority. TB control has been placed on the agenda at national, provincial and district level.
**Strengthen the management of TB at all levels**

The National TB Programme operates as a sub-directorate of the Communicable Disease Control Directorate. Provincial TB co-ordinators have been appointed in all nine provinces and district level TB (or Communicable Disease) co-ordinators have been appointed in most provinces. Lines of accountability and communication have not always been clearly defined.

**Implement the DOTS strategy in order to ensure an 85% cure rate**

**Demonstration and Training Districts**

In order to ensure effective implementation of the DOTS strategy and in line with World Health Organisation policy, the NTCP started the process of establishing Demonstration and Training Districts (DTDs) in January 1997.

The districts aim to turn the idea of the DOTS strategy into practical reality, to form the basis from which the control programme can be launched in all districts and to test the feasibility of implementing all aspects of the strategy within the existing health system. Once districts have achieved high cure rates, they can be used as training sites for staff from other districts.

The process has been hampered in some provinces by the lack of progress in establishing districts and in some provinces DTDs consist of a number of clinics as opposed to an entire district. The goal is to cover all districts in the country by the year 2001.

The figures for DTDs for the fourth quarter of 1998 are shown below. During 1999, the number of DTDs increased significantly although results are not yet available.

Table 2: Number of Demonstration and Training districts per province and number achieving 85% smear conversion rate

<table>
<thead>
<tr>
<th>Province</th>
<th>No of districts</th>
<th>No of DTDs</th>
<th>No achieving 85% smear conversion rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>21</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Free State</td>
<td>14</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Gauteng</td>
<td>25</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>25</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>16</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Northern Province</td>
<td>25</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>North West</td>
<td>18</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Western Cape</td>
<td>25</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>175</strong></td>
<td><strong>63</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>
Implementing Directly-Observed Therapy

Implementation of Directly Observed Therapy with a system of treatment supporters is regarded as a key strategy in achieving acceptable cure rates.

Every patient should have a treatment supporter or supervisor who observes the patient taking his or her treatment on a daily basis. This is particularly important during the first two months which constitute the intensive phase of treatment. Treatment supporters can be health workers, managers or employers, co-workers, peer educators, teachers, shopkeepers, or any responsible person. Family members can be used but this can be difficult particularly if the patient is the head of the household.

A number of districts have successfully implemented systems for ensuring that TB patients are supervised or supported by community members. Non-governmental organisations such as SANTA and TADSA have been particularly involved in the training and support of treatment supporters.

Invest adequate resources in training and TB management

National Guidelines

The practical guidelines, published in 1996, provide practitioners at primary level with a set of practical guidelines for the diagnosis and treatment of TB using standardised treatment regimens.4

The guidelines have been accepted and implemented in all provinces (with the exception of KwaZulu-Natal which has its own set of guidelines). Most health workers find the guidelines useful, although in some areas resistance to their use, particularly by doctors in the private sector, remains a problem.

Training

A standardised training manual has been developed and more than 5 000 health workers have been trained in the DOTS strategy. The training is yet to be incorporated into undergraduate nursing or medical training programmes. This places a heavy training load on TB programmes as all new staff require training and orientation.

Drugs

Despite the availability of adequate supplies of TB drugs in the country as a whole, problems with distribution persist. The availability of TB drugs at a sample of clinics is illustrated in the graph below.5 In the survey it was not recorded whether the clinic did not offer a TB service (indicating poor access to TB services) or whether the drugs were out-of-stock (indicating poor drug management systems).

Introduction of combined preparations has cut down on the number of tablets which a patient must swallow and simplified ordering and stock control procedures at district level. Myrin plus which is currently being introduced will further simplify the treatment regimes.
**Expansion of laboratory services**

Sputum turnaround time (TAT) is regarded as a key performance indicator in Demonstration and Training sites with a target of 48 hours having been set for these districts.

Achieving this target has required expansion of laboratory services, but has also necessitated that districts review the availability of transport and systems for communication with the laboratory services. Attention to these systems has resulted in reduction of sputum turnaround times in both rural and urban areas. Many rural areas have managed to reduce TATs from an average of 7 – 14 days to an average of three to four and in some cases two days.

**Implementation of a Monitoring System**

The Reporting and Monitoring System based on the TB register provides information about both the epidemiology of TB and performance of the TB control programme. It is a powerful tool which can be used to evaluate and improve TB services at national, provincial and district level. The system has been introduced and is beginning to provide accurate information about the TB epidemic.
MDR TB

Unlike ordinary TB, MDR TB should be only be managed by people with particular expertise in the field. In the past, MDR TB has been managed in a haphazard and unregulated manner. This in part explains the lack of information regarding the epidemiology and outcome of the condition.

Standardised treatment guidelines for MDR TB have been now been developed. In order to manage MDR TB in an effective and efficient manner, one or two MDR clinics per province have been identified and are in the process of being established. Centralisation of MDR TB services will allow for improved monitoring of treatment.

Constraints

At present, the main obstacle to effective TB control in South Africa is the lack of functional districts. The basic tools for TB control including clear guidelines and systems for monitoring are available, as are the necessary resources. The present challenge facing the health services is to translate these resources into improvements in service delivery at district and facility level.

A number of districts, often in under-resourced areas of the country, have demonstrated that TB control programmes can be improved through regular review of TB indicators linked to identification and tackling of obstacles to service delivery in a systematic way.

However, a number of issues will need to be addressed if all districts are to be empowered to develop and sustain effective programmes.

Organisation and management of TB services

There are structural problems implicit in a system where delivery depends on geographic units (districts and to some extent provinces), but where key service delivery issues are packaged as vertical programmes at national, provincial and sometimes district level. TB control is one of many services which districts are required to deliver as part of an integrated and comprehensive package of services. Although models for delivery of TB services have been developed in some districts, in many others the respective roles of the various levels as well as lines of accountability and communication still need to be clarified.

Restructuring of the national Department of Health with the establishment of a District Task Team will hopefully go some way to addressing this issue at a national level. At the same time a number of constraints at district level will need to be addressed.
# Constraints at district level

## Management Capacity

As outlined above, lines of accountability for TB control are not always clear. Effective TB control depends on provincial and district programme managers integrating inputs from a number of sources. Provincial and district programme managers have not necessarily been equipped with the skills needed to plan, implement and monitor all the components of a TB control programme and to ensure that it receives attention in the face of multiple demands and initiatives.

## Poor management systems

The quality of TB services can be regarded as a useful proxy indicator or “tracer” of the quality of services in general. The basic components of a well-functioning health service such as trained personnel, good drug and transport management systems and access to laboratory services must be in place for a TB control programme to function effectively. Unfortunately many districts are still struggling to develop these systems and to ensure that the basic resources for service provision are in place.

In some districts, the implementation of “DOTS” has been seen as a quick fix. Community members have been trained as treatment supporters, but little attention has been paid to ensuring that these treatment supporters are part of a broader system or that other essential components are in place.

## Lack of focus on content of health services

District development has tended to focus on structural issues such as restructuring and reorganisation of service provision and on establishing district management structures and systems at the expense of the content and quality of service provision. For example, whilst the frequency of supervision of PHC facilities has increased in many areas, the quality of the supervision is generally recognised as often being poor. It is to be hoped that this situation will change in the future and that as districts develop over time, more emphasis will be placed on the content of service delivery.

## Under-utilisation of recording and reporting systems

TB registers have been introduced in almost all facilities and information is now routinely collected and collated at all levels. However, lack of capacity and of an overall “information culture” means that the information is not used optimally to manage and improve TB programmes at national and provincial level.
Case study: TB control in the Lower Orange District of the Northern Cape

The Lower Orange is the largest of the six health regions or districts of the Northern Cape province. It covers an area of 91,450 km² (almost the same size as KwaZulu-Natal) but has a population of only 165,000 people and a population density of approximately 1.8 people per km².

For the past two years, the Lower Orange district management team has aimed to improve TB Control. Once TB had been identified as a major health problem, a situation analysis was undertaken looking at the incidence and distribution of the disease in the district and the organisation and management of TB services. Health workers’ impressions that TB was a major problem were confirmed – the incidence of TB was found to be extremely high and the cure rate low. Emphasis was placed on identifying obstacles to the provision of a high quality service. A TB Task Team was established with the brief of developing, implementing and monitoring a plan for control of TB in the district.

The TB plan addressed six areas, namely:

- Organisation and management of TB services
- Improvements in the technical aspects of care
- Training and support of staff
- Monitoring and evaluation of services
- Community awareness and involvement, including introduction of a system of community-based treatment supporters
- Improving facilities for patients admitted to the TB Unit

During the course of 1998, the newly-appointed TB co-ordinator ensured that one nurse in each facility took overall responsibility for management of TB in that facility, that all PHC staff were trained and that all facilities were visited regularly for support and supervision. The national guidelines were implemented in all facilities and communication with the laboratory services improved. Late in the year a system of treatment supporters was introduced. PHC nurses and other health promoters were included in the training to ensure that the treatment supporters were integrated into and operated within the TB programme.

The rewards of this approach are readily apparent. Reduction in over-diagnosis of TB has resulted in a lower case-load. Smear conversion rates for new patients for the district as a whole have risen from a low of 20% in late 1997 to 81% for the first quarter of 1999.

The Lower Orange demonstrates that TB Control can be significantly improved if problems are addressed in a systematic way within the context of a functional district.
Conclusions

The TB incidence in South Africa is extremely high and there are few signs to suggest that it is decreasing. Although cure rates for new smear positive patients have risen slightly over the past few years, they remain unacceptably low. Such low cure rates contribute towards the increasing number of cases of MDR TB.

Progress has been made in the implementation of the National TB Control Programme. However, increased efforts are required at all levels of the health service to ensure that TB control remains a priority issue and that the necessary capacity and systems to translate this into improvements in service delivery are developed.

Recommendations

Although it is recognised that sustained decreases in the incidence of TB can only be achieved through improvement in socio-economic conditions, these recommendations concentrate on practical strategies which aim to improve the effectiveness of TB control programmes. Limiting the extent of the HIV/AIDS epidemic will also impact positively on the TB control programme.

Ongoing advocacy and political commitment

Advocacy is crucial if the high levels of commitment to TB control are to be maintained and translated into tangible improvements.

Improved management at district level

A number of Demonstration and Training sites have demonstrated that district TB programmes can achieve cure rates of 80% and more. Provincial and district control programmes should focus on building management capacity, improving management systems and providing a service which is both technically sound and patient-centred.

Improved systems for monitoring and evaluation

Regular review of TB statistics provides an opportunity not only to monitor and improve the performance of a TB control programme, but also to develop a culture of evaluation and planning within the health services. Improved use of the available data should be regarded as a key strategy in improving services.

Linking AIDS and TB programmes

The close links between HIV/AIDS and TB necessitate that the two programmes are co-ordinated and work closely together. This will only work effectively at district level if there is close co-operation between the two programmes at provincial and national levels. Four TB/HIV pilot sites have been established and lessons learnt from these sites need to be shared with and implemented in other districts.
An estimated 70 000 South Africans are killed due to trauma every year with a further 3.5 million seeking health care as a result of trauma. The hazards that produce injuries are mostly essential resources to humans. The complexity of trauma interventions result in extremely high costs and at the same time the economy loses millions of Rands in lost earnings and productivity.

This chapter describes the epidemiology of injury. Almost half of all deaths due to injury are as a result of homicide (47.1%). The rate has decreased from almost 70 per 100 000 population and stabilised at about 60 per 100 000, ten times higher than the USA. Unintentional injury is dominated by traffic accidents. More than 9 000 people are killed in traffic accidents each year and 33 000 seriously injured. The statistics obscure the fact that 39% of those killed are pedestrians! This figure has decreased from over 47% in 1987.

Substance abuse is implicated in 80% of trauma patients. More is known about alcohol than other drugs but all are now being monitored in a major surveillance initiative. This surveillance initiative is monitoring fatal injuries, non-fatal injuries and establishing longitudinal information at several sentinel sites.

Prevention initiatives are aimed at intentional injuries such as domestic violence and gunshot wounds. Unintentional injury preventive interventions include the “Arrive Alive Campaign”.

Trauma care and rehabilitation are struggling against limited budgets but there are some advances in the organisation and development of trauma services and training.

The chapter concludes that there is much room for improvement and that a concerted effort will be needed to bring the incidence of trauma down.
Introduction

People, guns and knives, motor cars and trucks, open fires, unsafe electrical connections and exposed heating elements, household chemicals and medications, manual and electrically powered tools, unguarded hazards like high buildings, deep pits and open bodies of water - these are just some of the more frequently encountered objects and features of the environment that interact with human activities to kill an estimated 70 000 South Africans each year, and lead a further 3.5 million to seek health care of some kind.

Unlike the pathogens which cause infectious and communicable diseases, many things that produce injuries are indispensable to the conduct of daily life, such as the interpersonal relationships that sustain self and other, the energy sources used for heating and lighting, the vehicles and roads used for transport, the medications used to cure illnesses, and the machinery and tools by which formal and informal industry and agriculture are practised. Ironically, the strongly held and widely spread belief that they are essential to protection from violence means firearms must also be included in this list, despite epidemiological research showing them to be more of a risk than a resource to their owners and the population as a whole.1,2

Because the hazards that produce injuries are at the same time essential human resources, the task of injury prevention and control is considerably more complex than the control of infectious and communicable diseases, which, in principle at least, can be eliminated by eradication of the pathogens or vaccination of the host. By contrast, and with the exception of some narrow interventions that yield wide safety gains (e.g. motor car air bags), injury prevention requires a more situation-oriented approach able to reduce risks without entirely removing the hazard; this is particularly true in regard to injuries due to interpersonal violence, occurring as it does for the most part between friends and intimates. Adding to this complexity is the extreme social and geographical variation that injuries manifest in terms of incidence rates and the distribution of risks, for this makes it difficult to generalise research findings and interventions from one situation to another. The relationship between substance abuse such as alcohol, dagga and mandrax and trauma is also a complex one requiring multifaceted prevention approaches.

While the complex causes of injuries demand complex solutions involving co-operation between many different sectors, almost all injuries of any significant severity must receive some form of medical treatment. This means that their epidemiological investigation and monitoring can to a major extent be achieved through health facilities as the common destination for all injury victims, irrespective of the cause. Motivation for hospitals and clinics to participate in such surveillance resides in the extremely high costs of providing care for trauma victims, and especially those who require intensive care, which for severe motor vehicle and gunshot injuries costs upwards of R10 000 per day.3 This limits access to such care to patients with medical aid and/or workmen’s compensation, and those very few indigent victims that gain access to the dwindling number of State intensive care beds.

Injuries cost the economy hundred of millions of Rands in lost earnings and reduced productivity. Consequently, violence and injury prevention should be an inter-departmental and multi-dimensional national priority between the departments of Health, Safety and Security, Sport and Recreation, Transport and others.
**Injury epidemiology in South Africa**

Lacking national level mortality data, the relative contribution of injuries to the overall burden of disease can only be guessed at. In 1994, injuries were the leading cause of death, and the 1996 Health Department status report projected a steady increase in the incidence of injuries. While the changing shape of the HIV/AIDS epidemic means that injuries may no longer be the leading cause of death, there is little reason to doubt that they remain among the top three causes of death, and a leading consumer of hospital days and health facility budgets.

While it is not yet possible to provide the complete injury picture at a national level, provisional statistics are available for deaths from the National Non-natural Mortality Surveillance System (NMSS) currently being developed (see section on Injury Surveillance). These data show that homicide and fatal road traffic collisions are the leading causes of non-natural death in South Africa (Figure 1).

**Figure 1: Causes of non-natural death in South Africa (preliminary NMSS data, first quarter 1999)**

- **Homicide**: 47.1%
- **Suicide**: 8.0%
- **Traffic**: 28.4%
- **Undetermined**: 8.2%
- **Other “accidents”**: 8.3%
- **Undetermined**: 8.2%
**Intentional Injuries**

National level data on deaths due to violence are restricted to homicidal deaths reported to and recorded in South African police statistics. For the years 1994 to 1998, Figure 2 shows that the homicide rate per 100 000 population has decreased from 69.3 in 1994 to 59.5 in 1998.

![Figure 2: Annual homicide rates per 100 000 population (1994 - 1998)](chart)

While these data suggest a downward trend followed by stabilisation of the homicide rate at around 60 per 1 000 000 (which is 10 times the US national rate), the likelihood that the data under report homicide by up to one fifth means they should be treated with caution. For instance, Wigton has shown that in Cape Town for some months, up to 20% of all firearm related deaths in children and adolescents that are seen in the state mortuaries were not registered in police homicide statistics.

Data on deaths due to self-directed violence, the demographics of homicide and suicide victims, the causes of violent death, and other risk factors are not available at a national level. However, since the 1998 inception of the NMSS these are starting to become available for a number of the larger cities included as pilot sites for this project (see Injury Prevention Initiatives below).

Regarding manner of death (i.e. whether homicide or suicide), preliminary data from the NMSS for the first quarter of 1999 show a clear relationship between victim race and manner of death. Black and Coloured victims are most likely to be recorded as homicidal and white victims most likely to be recorded as suicidal deaths. These trends are in line with emerging historical data on the epidemiology of violence in South Africa, and if race is considered as a proxy for socio-economic status they suggest that with a general and sustained upswing in the South African economy there may be a related increase in the proportion of suicidal deaths.

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a Butchart A, personal communication
Concerning victim gender and age, Table 1 shows that for both homicide and suicide, males predomi-
late over females in almost all age ranges. In line with universal trends homicidal violence shows a sharp
increase at age 15 and remains high into the mid-40s, whereafter there is a dramatic decline. In the over 65
year age group more females are victims of homicide but this probably reflects the greater proportion of
elderly women in the country.

Table 1:  Homicide and suicide by gender and age (preliminary NMSS data, first quarter 1999)

<table>
<thead>
<tr>
<th>Age ranges</th>
<th>Homicides</th>
<th></th>
<th>Suicides</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>&lt; 15</td>
<td>10 (76.9%)</td>
<td>3 (23.1%)</td>
<td>1 (50.0%)</td>
<td>1 (50.0%)</td>
</tr>
<tr>
<td>15 - 24</td>
<td>166 (91.2%)</td>
<td>16 (8.8%)</td>
<td>22 (91.7%)</td>
<td>2 (8.3%)</td>
</tr>
<tr>
<td>25 - 34</td>
<td>231 (91.3%)</td>
<td>22 (8.7%)</td>
<td>23 (85.2%)</td>
<td>4 (14.8%)</td>
</tr>
<tr>
<td>35 - 44</td>
<td>141 (82.9%)</td>
<td>29 (17.1%)</td>
<td>11 (68.8%)</td>
<td>5 (31.2%)</td>
</tr>
<tr>
<td>45 - 54</td>
<td>48 (84.2%)</td>
<td>9 (15.8%)</td>
<td>9 (81.8%)</td>
<td>2 (18.2%)</td>
</tr>
<tr>
<td>55 - 64</td>
<td>20 (87.0%)</td>
<td>3 (13.0%)</td>
<td>8 (100%)</td>
<td>0</td>
</tr>
<tr>
<td>65+</td>
<td>3 (42.9%)</td>
<td>4 (57.1%)</td>
<td>5 (62.5%)</td>
<td>3 (37.5%)</td>
</tr>
</tbody>
</table>

While patterns in respect of manner of death, victim age and victim gender show negligible variation
between centres included in the surveillance, the primary medical cause of death varies sharply between
sites. Although not all provinces are represented in the preliminary NMSS data, Figure 3 does show that
KwaZulu-Natal and Gauteng have more firearm-related homicides while in the three other provinces
sharp objects, primarily knives, predominate.

Figure 3:  Mechanism of homicide by province (preliminary NMSS data, first quarter 1999)
Phillips performed a cost-of-injury analysis of all homicides occurring in the Western Cape Metropole in 1997. Input data consisted of mortuary records and ancillary documentation on all homicidal deaths seen at the Salt River and Tygerberg mortuaries, mortuary budgets by which to calculate forensic-medical costs per case, survey data on average yearly earnings by occupational category, economic data on present and future market trends, and actuarial data on individuals’ willingness to invest in risk-reduction measures. Data from 2,065 homicides were entered into the calculation and showed that the total economic cost of these homicides ranged from a low of R27 million to a high of R110 million. Her figures also showed that firearm deaths and deaths due to sharp objects each accounted for approximately equal cost proportions, underlying the urgency of interventions to, at the very least, reduce the number of guns in society. Approximately R58 million was spent on incarcerating homicide perpetrators in the Western Cape during 1997, and if this figure is added to the direct and indirect costs then homicide in Cape Town in 1997 cost between R90 and R170 million. Underlining the prevention implications of these findings, Phillips concluded that:

“If only one tenth of this cost was invested in prevention efforts that have been demonstrated to be effective, the long-term benefits to society would be considerable – economically, socially and individually … At a time when limited funds are being allocated for research and development activities to prevent violence, this information may serve as a critical reminder of the costs that are likely to be incurred if such investment is not made”.

Unintentional Injuries

After homicide, traffic is the second leading cause of non-natural deaths in South Africa. Our road traffic death rate is 11.7 per 100 million kilometres travelled and although not the highest in the world we certainly rank in the top ten.

Every year nearly half a million collisions occur in South Africa. Arising from these, more than 9,000 people are killed, more than 33,000 seriously injured and over 85,000 slightly injured. This means that on an average day, 30 people are killed, 100 people sustain serious injuries and 250 suffer minor injuries as a result of traffic collisions. Over the last few years the Directorate of Traffic Safety data does appear to be showing a downward trend in the number of fatal collisions on our roads (Figure 4).
These summary statistics obscure the very high pedestrian component of our traffic problem. Approximately 45% of our road traffic deaths involve pedestrians (i.e. about 4 500 pedestrians are killed and a further 26 000 are injured annually). Since the early 1990s there have been concerted preventative efforts nationally to reduce this carnage and the Directorate of Traffic Safety annual statistics are beginning to show a downward trend (Figure 5).

**Figure 4: South African traffic deaths over 30 years (1968 - 1997)**

**Figure 5: Pedestrians as a proportion of all South African traffic deaths (1985 - 1998)**

Source: Directorate of Traffic Safety data
While police crime statistics and Council for Scientific and Industrial Research (CSIR) road fatality records supply at least some indication of trends in two of the major external causes of death, there are no equivalent information sources for non-fatal injuries. Existing cross-sectional epidemiological studies of the non-fatal injury pattern are now of historical value only, and restricted to Johannesburg, Cape Town and Durban. However, in 1998 state funding was awarded to a national injury surveillance consortium to develop a system of sentinel surveillance by which to monitor patterns of non-fatal injury (outlined below).

**Substance Abuse**

Alcohol increases the risk of injury and numerous reports document this relationship, both internationally and locally. But much less is known about other drugs, particularly in South Africa where the use and availability of illicit drugs appears to have increased since 1994.

Part of the National Injury and Violence Surveillance initiative (outlined below) is to monitor substance abuse among trauma patients in sentinel sites in South Africa. Preliminary results from these studies seem to indicate that although alcohol remains the substance most commonly abused by injured patients, about 40% abuse illicit drugs such as cannabis, methaqualone (mandrax) or crack/cocaine either in combination with alcohol or on their own (Figure 6). The mandrax and cannabis mixture (white pipe) appears to be a problem confined almost exclusively to patients injured as a result of interpersonal violence. This nexus has previously been shown in a study on homicide victims and therefore needs to be studied in more depth.

**Figure 6: Substances abused by injured patients**

- Alcohol only: 19.3%
- Drugs only: 19.3%
- Alcohol + drugs: 23.4%
- None: 19.3%
- Alcohol only: 38.0%
Injury surveillance

Recognition of the magnitude of the injury problem and the imperative for establishing an information system to monitor it, has resulted in research for injury and violence being prioritised (Department of Health, 1996). As part of their National Crime Prevention Strategy, the Department of Arts, Culture, Science and Technology (DACST) provided funding for the development of a surveillance system to monitor injury and violence patterns in South Africa. This project is currently being undertaken by a Consortium comprising the Medical Research Council, the University of South Africa and the Council for Scientific and Industrial Research. The Department of Health’s Directorates of Epidemiology, Mental Health and Substance Abuse, and Health Information Systems and Research are also involved while the Centre for Disease Control and Prevention in Atlanta, Georgia, offers technical assistance under the Gore-Mbeki bi-national agreement.

The system has three parts: fatal injury surveillance, non-fatal injury surveillance, and the sentinel surveillance of substance abuse (both alcohol and illicit drugs) in trauma. These components are at different stages of development and are discussed below.

Fatal injury surveillance

In terms of the Inquests Act No 58 of 1959 (as amended) and the Births and Deaths Registration Act No 51 of 1992, all deaths due to non-natural and undetermined causes are subject to medico-legal investigation. Information generated by these medico-legal procedures serves as input data for the NMSS. The system collates 21 information items from different points in the medico-legal system into a single database using an internationally comparable coding system. Items include case and personnel identifiers, demographic details of the victim, the time, geographical location and scene of injury, the primary medical cause of death, the apparent manner of death (i.e. homicide, suicide, or accident), the presence of alcohol and other drugs, the victim-perpetrator relationship and the context of attack in the case of violence. Inclusion of data into a Geographic Information System (GIS) is also being undertaken.

Excepting three items where information is available only after court investigation, data collection, computer entry and rudimentary analysis are done by mortuary staff. While possibly compromising data quality in the initial phases, this temporary limitation is outweighed by the gains of having the surveillance information immediately available for administrative purposes at the point of entry, and by the sustainability attached to the use of mortuary staff rather than outside researchers as primary data gatherers. Specialist researchers are however required to retrieve information about the context of homicides and suicides from the courts and criminal record centres, as this becomes available only 12 or more months after the mortuary and court investigations are complete.

Pilot implementation and evaluation of the surveillance system began in June 1998 in fifteen mortuaries across South Africa and continues until December 2000, after which it is hoped that the system will be implemented on an on-going basis in all mortuaries across South Africa and the management of this system taken over by the Department of Health, since all the mortuaries currently belonging to the Department of Safety and Security are in the process of being transferred to Health.

The NMSS pilot implementation has provided valuable insights into the personnel, resource and organisational realities that underlie the injury surveillance crisis in South Africa. For example, at two Gauteng mortuaries processing 3 200 and 1 400 cases annually, there were no computers at all, and medico-legal reports were produced using a manual typewriter. At another mortuary performing 1 600 post-mortems a year there was only one low-capacity computer so filled with word processing data that there was insufficient disk space to install the NMSS data capture programme. The Department of Health has
provided computers for four mortuaries in the surveillance system but if the system is to be expanded, more computers will be necessary. The hardware and software costs of providing computers for these and other sites are small compared to the overall forensic medical services budget, suggesting the low value placed on information and information management in these contexts.

The NMSS can help to reverse the information vacuum and begin to build a new information culture for the benefit of administration, budgeting, management and safety promotion. To do this effectively, the NMSS would need to be integrated with other health and crime information systems.

The NMSS has been designed to meet the information requirements of three main stakeholder groups. For forensic medical services the NMSS provides information for the allocation of resources, auditing of costs and rationalisation of services. For the National Crime Prevention Strategy the NMSS provides crucial baseline data for all deaths due to intentional violence, including information on particularly sensitive indicators such as gunshots, alcohol and other substance involvement, the co-variance between violent and unintentional injury deaths, and geographical variations in the magnitude and patterning of homicides and suicides. The third stakeholder group consists of injury prevention agencies including national and local government, the South African Police Services, non-governmental organisations, businesses and para-statals such as Metro Rail. The NMSS will provide these with the descriptive information needed for the design and implementation of preventive interventions at municipal, metropolitan, provincial and national levels.

**Non-fatal injury surveillance**

This component of the surveillance system is still in its early stages of development. The primary objective to be reached by December 2000 is to develop and pilot a methodology for the ongoing surveillance of non-fatal injuries. The methodology will include a description of the human and technological resources required and a budget for start-up, running costs and evaluation.

Since it is not feasible to monitor all injuries seen in the health sector, a sampling-based surveillance system is required. The challenges in setting up a non-fatal injury surveillance system are numerous. Little is known about the patient population presenting with non-fatal injuries, and the few studies which have been done in the area are dated. Firstly, the exact number of non-fatal injuries per year in South Africa is unknown. One can only extrapolate from the ratios to the number of deaths per year. Secondly, there are variances in injury patterns across different locations. Thirdly, there are different levels of severity of injury which necessitate different types of facilities. A surveillance system needs to take all of the above into consideration when selecting a representative sample of health facilities or health districts.

A number of pilot sites will be set up where the surveillance system will be developed and tested. The sites selected will include tertiary, district and private hospitals so that the system and the cost involved can be evaluated in each. Also, the feasibility of sampling a health district, with all its facilities, as opposed to sentinel sites will be investigated so as to establish the most appropriate method.

**Sentinel substance abuse surveillance**

Longitudinal information on both alcohol misuse and drug use is required to identify changes in the nature and extent of the use of these substances and their co-variance with patterns of violence and injury. Unfortunately the ongoing surveillance of these substances among all trauma patients (fatal and non-fatal) is not financially possible.
All fatally injured cases undergoing medico-legal post-mortems who are over the age of 16 and who have not died of the late effect of their injury should have their blood tested for alcohol levels in terms of the Inquest Act. Unfortunately, due to a lack of resources, personnel and access to chemical pathology laboratories, this is not practised equally throughout the country.

Very few hospitals have the facilities or staff to assess alcohol and substance abuse among non-fatally injured patients. Consequently, sentinel sites have been chosen for the assessment of these substances and will be monitored annually in order to identify changes in the nature and extent of the use of these substances and their negative consequences as well as the effect of national and regional interventions aimed at reducing substance abuse and violence in society.

Prevention and interventions

Intentional Injuries

Within South Africa primary prevention initiatives (i.e. those addressing the root causes of violence in order to dry up the supply of new victims and perpetrators) continue to find significantly lower levels of financial and policy support than police and security-oriented strategies aimed at protection through more efficient policing, swifter criminal justice processing and target hardening. Added to this imbalance is the combined weight of the burgeoning private security and insurance industries, both of which are heavily invested in protection ahead of prevention. Such protection strategies do not address the socio-economic inequalities that underlie the high crime and violence rates, and, by reinforcing and even expanding social and class divisions, may make the situation worse, not better.

Victims of domestic violence are among the most vulnerable members of society and all currently available remedies have proved to be ineffective. The Domestic Violence Act 116 of 1998 was passed by government in late 1998. This Act recognises that there is a high incidence of domestic violence in South Africa and that it is a serious social evil which can take on many forms and, more importantly, be perpetrated in a wide range of domestic relationships. The purpose of this Act is therefore to afford the victims of domestic violence the maximum protection that the law can provide. In passing this legislation, the South African government has succeeded in fulfilling its international commitments towards ending violence against women. Although on paper, the Act looks as though it will afford relief to victims of domestic violence, unless it is vigorously implemented and strictly adhered to by both the police and prosecutors “this legislation is bound to remain one of theory”.

About 31 people die of firearm wounds every day in South Africa. Over the years, there has been much debate surrounding the efficacy of stringent gun ownership laws as an injury prevention measure. In mid-1998 a draft Firearms and Ammunition Control Bill was released which will replace the current Arms and Ammunition Act. This Bill, which suggests making firearm licensing more expensive, limiting the number of firearms which a license holder may possess as well as addressing the issues of policing and prosecution of the illegal possession of guns, has generated much debate and will probably require amendment before being accepted by Parliament and enacted.

Over the last year a number of injury prevention lobby groups have been formed. Medics against Crime, a Gauteng-based group of medical doctors, are advocating for the notification of gunshot injuries while a Cape Town group of concerned doctors have formed a group called Cape Doctors against Violence and Rape. The latter group publish educational injury prevention articles and injury mortality statistics in a local newspaper monthly.
Over the last year there has been an increase in violent incidents at schools across the country. A number of initiatives have been developed to address this crisis including, among others, a Ministerial Commission, promotion of the safe schools concept, injury surveillance at schools, conflict management and the inclusion of an injury prevention module in the Life Skills programme of the 2005 school curriculum.

**Unintentional injuries**

The Arrive Alive Road Safety Campaign was launched in 1997 as a short-term initiative to reduce the carnage on South Africa’s roads. Its main objectives were:

- to reduce the number of road traffic accidents in general, and fatalities in particular, by 5% when compared to the same period for the previous year
- to improve road user compliance with traffic laws
- to forge improved working relationships between traffic authorities at the various levels of government.

To date three Arrive Alive campaigns have been held focusing on speed, alcohol and pedestrian collisions.

Extensive use has been made in the media in of slogans such as “speed kills” as well as educational reports and shock tactic advertisements. Speed law enforcement equipment was purchased by the Department of Transport and traffic officials have used this equipment on various roads and highways around the country. This has been combined with visible law enforcement and the prosecution of offenders.

Furthermore, the Traffic Act was amended to include new blood alcohol and breath alcohol levels for general and professional drivers, bringing our law into line with most of those in developed countries (Box 1). Since the Breathalyser test results have been accepted by the Attorneys General as admissible evidence in court it is now much easier for traffic officers to check drivers and take intoxicated drivers off the road immediately. The names of drivers caught drinking and driving are also now published in local newspapers.

**Box 1: Drinking and driving and the law**

Under the new National Traffic Act No 93 of 1996 the levels for *any driver* other than a professional driver will be:

- Blood alcohol : 0.05g/100ml of blood
- Breath alcohol : 0.24mg/1 000 ml of breath

While for *professional drivers* (of goods exceeding a mass of 3.5 tonne and drivers of vehicles carrying passengers for reward) the levels will be:

- Blood alcohol : 0.02g/100ml blood
- Breath alcohol : 0.10mg/1 000 ml of breath

Perhaps the most successful element of the Arrive Alive programme has been the emphasis on pedestrian safety. A combination of street theatre, graffiti walls, taxi rank promotions, community workshops and lectures to community organisations have been used to get the message of pedestrian safety across to road users. These together with television advertisements and engineering measures appear to have gone
a long way to reduce our high pedestrian fatality rate. Since the early 1990s there has been a steady
decrease in the proportion of pedestrians killed on our roads as was indicated in Figure 5.

Since its inception the Arrive Alive road safety campaign had exceeded its target of a 5% reduction in
fatalities during its three campaigns. Since 1996 there has been a 7.52% reduction in fatal collisions and a
1.76% decrease in all types of crashes (including damage-only crashes) resulting in significant economic
savings. Unfortunately the number of deaths on South African roads is still unacceptably high. What is
needed is an effective and integrated system of road traffic management in place 24 hours a day, seven days
a week, 365 days a year. Unfortunately due to financial restraints the Arrive Alive campaign can only be
conducted in phases and expanded according to the ability to raise funds.10

While most unintentional injuries are readily preventable, there is little focus on other non-traffic
“accidents” other than the work done by two non-governmental organisations, viz. the Child Accident
Prevention Foundation of South Africa and the Paraffin Safety Association of South Africa. In addition,
there are a number of smaller local prevention efforts which focus on problem areas such as the “Stop
Burns” campaign launched by the Chris Hani Baragwanath Hospital. Such efforts need to be assessed and
expanded to other areas where burns are a problem, thus pooling the limited expertise and resources in
South Africa. The prevention of unintentional injuries can produce many gratifying results as has been seen
in first world countries with the investment of consumer organisations and large businesses. This area
requires urgent development in South Africa.

**Trauma care and rehabilitation**

Many of the people injured as a result of gunshots, motor vehicle collisions and landmine blasts in
Africa are also those with the least access to formal emergency medical services. Consequently, pre-hospital
care for this group of patients is often rendered by those community members closest to the scene of the
injury. These individuals, known as *first responders*, are thus a crucial link in the injury prevention chain. In
1998 an Emergency Life Support course for trainers of *first responders* was held in Johannesburg. Sponsored
by the World Health Organisation, this course trained 20 individuals from South Africa and nine other
African countries. Participants were taught the principles and practice of emergency medical care through
first response and how to identify and train non-professional first responders at a local level.

Advances have been made in the Emergency Medical Services (EMS) in some areas like the Northern
Province which inherited homeland emergency services with poor infrastructure and very few trained
personnel. This service is now training many personnel and has been given Advanced Cardiac Life Support
accreditation. EMS in other areas like KwaZulu-Natal and Gauteng are in crisis due to the lack of trained
personnel and vehicles, and the inequity of resources in rural areas is now very obvious. However, the
rescue subdivision of the EMS and other mountain rescue services, particularly in KwaZulu-Natal and the
Western Cape, although they do not deal with large numbers of patients, play a significant role since their
work is very important in the eyes of tourists and ecotourism opportunities in South Africa. Communication
in the EMS has been partially addressed by the implementation of a national 10177 emergency number.

The Advanced Trauma Life Support (ATLS) programme, developed by the American College of
Surgeons, was started in South Africa in 1992. It is a 2+ day course aimed at doctors, nurses and emergency
medical staff who may be confronted with major trauma involving life-threatening injuries. The programme
emphasises the significance of the “golden hour” in the initial assessment and primary management of the
patient but also goes on to teach life saving interventions, re-evaluation, stabilisation, and when needed,
transfer to a facility in which the patient can received specialised care. Since 1992, a total of 235 courses
have been run at six approved centres in South Africa and more than 3 000 health care workers have been
successfully trained.
The clinical trauma services at primary, secondary and tertiary levels in South Africa are overloaded with cases and under-staffed. Few of the health care workers working in these areas are trauma trained. Due to financial cuts and the rationalisation process, many nursing colleges in South Africa have been forced to stop training critical care and trauma nurses. Furthermore, there is no official recognition for trauma surgeons in South Africa although this aspect is currently being addressed by the Trauma Society of South Africa who are exploring the possibility of starting a two-year registerable trauma course in the near future. Furthermore, at present there is work on the categorisation of hospital casualties and trauma units so that patients are correctly prioritised and transferred. This will promote equity by redistributing exiting resources.

Non-governmental organisations such as St John’s Ambulance and Red Cross continue to do sterling work in the area of first aid training.

Conclusions and Recommendations

The state-supported initiation of an injury surveillance system represents a major advance on the previous situation where the size and shape of the injury problem was unknown. The major challenge now is to establish an adequate preventive response, in the absence of which surveillance is a futile and resource-wasting exercise.

In response to the problem of violence, two major gaps are evident. The first concerns interpersonal violence including homicide, assault and rape. While occurring in all social sectors, local and international studies unequivocally demonstrate that elevated incidence rates for interpersonal violence are driven by structural determinants. Of these, relative deprivation appears particularly important, high homicide and assault rates clustering in the most disadvantaged sectors of populations with large rich-poor differentials. This suggests that interventions which selectively target alcohol and firearm availability address only the symptoms of structural deficit, and therefore that they must be complemented by an equivalent focus on reducing inequality if sustained violence prevention is to be achieved. The second gap in relation to violence concerns the problem of suicide, and the lack of any vigorous prevention programmes targeted against suicide. As shown in the NMSS data for fatal injuries, suicide is a leading cause of violent death in the white middle- and upper-income sectors. While enhanced gun-control measures can potentially impact on both homicide and suicides, the risk factors unique to suicide and non-fatal forms of self-directed violence demand their own prevention strategies.

Concerning traffic, the Arrive Alive programme which was launched by the Department of Transport in 1997 has reduced the number of collisions on our roads over holiday periods (Easter and Christmas) thereby slightly reducing the overall number of annual collisions. Unfortunately, sporadic efforts such as these will not have a long term impact on our catastrophic traffic problem. This will only be attained by continuous, visible law enforcement so that the perceived risk of being caught speeding or driving drunk outweighs that of not being apprehended thereby effectively reducing the number of offenders on our roads.

For accidental injuries, the elevated incidence of burns, falls and other unintentional causes seen in informal and low-income settlements is clearly related to environmental risks. Of these risks, dependence on fossil fuels and the inadequacy of child recreational areas are among the more prominent, suggesting that electrification coupled with the provision of formal housing and child-safe recreational and caretaking facilities will yield immediate prevention gains.
The key strategic aim to achieve equity in the public mental health service is the transformation of the service to one that is comprehensive, community-based and integrated with other health services. Existing public sector mental health services are least accessible to the most vulnerable sectors of the population and are concentrated in psychiatric hospitals as opposed to other levels of care. Legislation and policies that aim to address these inequities include the Mental Health Care Bill, the South African Medical Devices Regulatory Authority Act, the Criminal Matters Amendment Act and the Draft Policy Guidelines for Adolescent and Youth Health.

Achievements so far include the development of mental health service norms and standards, de-institutionalisation of pilot projects, the development of an Essential Drugs List, and the National Pilot Training Programme for Primary Health Care Practitioners in Victim Empowerment and Trauma Management. Impediments to the transformation of the mental health service system are the lack of clear definitions and goals regarding the nature of a transformed health service, delays in forging new provincial structures, numerous practical problems, feelings of resentment and burnout on the part of staff, insufficient training, a paucity of consumer groups, poor fiscal management systems and inadequate funding for mental health in general. While it is premature to assess the transformation process, future efforts should be devoted to addressing these impediments.
Introduction

Efforts to achieve greater equity in mental health services provision will not be maximally effective if they fail to recognise that large groups of South Africans are systematically disadvantaged by the mental health services dispensation that was inherited from the apartheid government. Such groups include Africans, Coloureds and Indians, women, rural dwellers, the poor, those in poorer provinces, and those with mental health problems that are insufficiently disruptive to demand attention. Public sector mental health services in South Africa are characterised by an emphasis on custodial and medical care of patients with severe psychiatric conditions. The key strategic aim to achieve equity is the transformation of the public mental health service system to one that is comprehensive, community-based and integrated with other health services.

This chapter commences with a review of recent mental health and mental health system trends in South Africa. We then review plans and policies of the national Department of Health before drawing attention to selected achievements and impediments to the achievement of goals. Throughout these sections, the review is somewhat selective in that it highlights aspects that are relevant for the strategic aim of transforming the mental health service system to one that is comprehensive, community-based and integrated. Finally, we comment about the impact of recent developments on mental health services and future plans.

Minimal data are available regarding recent developments in private sector mental health services. In any case, they are utilised by a minority of the population. We have thus confined our focus to public mental health services. However, we have included contracted inpatient services provided under contract by Lifecare in the calculation of bed/population ratios. Substance abuse, mental handicap and violence constitute important aspects of mental health. For reasons of space we are unable to do justice to these topics in this review and have thus omitted them.

Need for mental health services

The bias towards the custodial and medical care of patients with severe psychiatric conditions is reflected in the kind of data provided in reports on mental health trends. Thus, for example, an emphasis on the numbers of patients who are admitted to mental hospitals will not provide the kind of data that are relevant for the development of comprehensive, community-based, integrated services. Goldberg and Huxley have developed a conceptual framework that can contribute towards counteracting this bias. They propose five levels of mental health problems (Figure 1).

The first level refers to people in the community with mental health problems. In a community-based study among adults in Mamre (a small town in the Western Cape) it was found that 27% were suffering from psychiatric disorders, the majority of which were anxiety and depressive disorders. In a similar study in KwaDedaqndlae, KwaZulu-Natal, 24% were found to be suffering from anxiety or depressive disorders alone. A community-based study among children and adolescents aged 6 to 16 years in Khayelitsha found that 19% were suffering from a mental disorder. Although these figures might appear to be high, they are compatible with international findings.

The overwhelming majority of those suffering from a mental disorder would benefit from intervention by the health care system. Those presenting at a health care facility for help with either physical or mental health problems represent the second mental health care level (Figure 1). There have been no recent attempts to estimate the proportion of adults attending health care facilities that are suffering from mental disorders. However, previous clinic-based studies in rural Kangwane and Soweto produced rates of 8% and 10-14% respectively. Among children and adolescents aged 6 to 16 years attending a primary care clinic in Gugulethu, 13% met criteria for a psychiatric disorder with impairment.

The third mental health care level (Figure 1) refers to people with mental health problems that are identified by health system personnel. South African studies have not examined this issue among adults.
However, internationally (and probably in South Africa), detection rates are low. Among children and adolescents in the Gugulethu study mentioned above, only 11% of those with a disorder were correctly identified.\textsuperscript{11}

Those receiving mental health services on an out-patient basis constitute the fourth mental health service level (Figure 1). In 1998, there were 109,943 outpatient visits per month to South African public sector psychiatric services.\textsuperscript{12} If one makes the assumptions that the total population is 41,242,400, 75% of the population use public sector psychiatric services, 64% of the population are aged 15 years or more, and each out-patient has only one visit, this corresponds to a monthly utilisation rate of 0.56%.

The fifth level refers to patients in psychiatric hospitals. Also in 1998, there were 150 psychiatric admissions per 100,000 adults, which corresponds to an annual admission rate of 0.15%.\textsuperscript{12} Thus, the proportion admitted annually is about a quarter of those seen as outpatients in a month. Furthermore, the proportion receiving outpatient mental health services is a small fraction of those at mental health care levels 1, 2 or 3 (Figure 1). Although similar data are not available for children and adolescents, there is every reason to think the same scenario exists in these age groups.

\textbf{Figure 1: Mental health service levels}\textsuperscript{3,4}
South African mental health services

South African mental health services are characterised by substantial inter-provincial inequities. These are manifest for most mental health service indicators, for example the bed/population ratio, which is defined as the number of psychiatric beds per 100,000 population. It provides an estimate of the extent of service provision for psychiatric in-patients. There are 48 public sector beds per 100,000 population for the country as a whole, which is considerably lower than developed countries. This is exemplified by the fact that the United Kingdom, which has relatively well developed community mental health services, has a ratio of 104 per 100,000. Figure 2 shows that the relatively few beds which do exist tend to be concentrated in provinces with densely populated urban areas and greater economic development.

![Figure 2: Bed/population ratios per 100,000 population in South African public sector mental health services](image)

Bed/population ratios do not provide any information about the quality of care. This was examined in a cost-quality analysis in both public and privately contracted hospitals in Gauteng, KwaZulu-Natal and the Northern Province. The results highlighted huge inequities within the psychiatric system along racial lines as well as between the public and privately contracted hospitals. There were, for example, 209 and 44 patients per ward in the private and public sectors respectively, while the staff/patient ratios were 36:1 and 8:1 respectively. (The situation is in fact less favourable in the private sector).

Inequities along racial and gender lines were examined quantitatively in a sample of 2,110 patients admitted to public psychiatric hospitals in the Western Cape. There were several findings that reflect inequities in South African society. Among the most glaring is that relatively more whites and relatively few Africans were admitted to “neuro-clinics”, which offer the most active short-term multi-disciplinary programmes. The absence of clinicians who can speak an African language (other than Afrikaans) may have contributed to this situation. Also, there was some evidence that Africans were most likely to be diagnosed with schizophrenia, while whites were most likely to be diagnosed with depression.
Another useful mental health service indicator is the staff/population ratio, defined as the number of staff per 100,000 population. This too provides evidence of considerable inter-provincial differences (Table 1).12

Table 1: Selected existing staff/population ratios per 100,000 population in South African mental health services*12

<table>
<thead>
<tr>
<th>Province</th>
<th>Total nurses</th>
<th>Psychiatrists</th>
<th>Psychologists</th>
<th>All staff**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>12.1</td>
<td>0.2</td>
<td>0.2</td>
<td>18.7</td>
</tr>
<tr>
<td>Free State</td>
<td>11.0</td>
<td>0.1</td>
<td>0.0</td>
<td>28.7</td>
</tr>
<tr>
<td>Gauteng</td>
<td>19.5</td>
<td>0.8</td>
<td>0.7</td>
<td>34.6</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>13.5</td>
<td>0.3</td>
<td>0.4</td>
<td>20.5</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>8.9</td>
<td>0.2</td>
<td>0.0</td>
<td>11.4</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>4.4</td>
<td>0.1</td>
<td>0.0</td>
<td>12.8</td>
</tr>
<tr>
<td>Northern Province</td>
<td>28.4</td>
<td>0.1</td>
<td>0.0</td>
<td>38.7</td>
</tr>
<tr>
<td>North West</td>
<td>8.7</td>
<td>0.1</td>
<td>0.1</td>
<td>15.2</td>
</tr>
<tr>
<td>Western Cape</td>
<td>19.1</td>
<td>0.8</td>
<td>0.6</td>
<td>25.3</td>
</tr>
<tr>
<td>South Africa</td>
<td>15.6</td>
<td>0.4</td>
<td>0.3</td>
<td>24.7</td>
</tr>
</tbody>
</table>

* Provincial mental health service managers were asked to report the ratios using “full time equivalents” to take account of the fact that many staff do not devote their entire time to the provision of mental health services. The data in the table are as provided by the provincial mental health service managers; the authors of the report from which the data are extracted12 did not alter the data, even when they appeared to be of dubious validity.

** Also includes occupational therapists, occupational therapy assistants, social workers, community health workers, intern psychologists, psychiatric registrars, medical officers, pharmacists and pharmacy assistants.

A more detailed investigation reveals further inequities. A postal survey of all psychiatrists in South Africa, both in the private and public sectors, revealed that 93% work exclusively in urban areas (where 47% of the total population and 33% of Africans live); 11% can communicate in an African language (besides Afrikaans); and 56% work primarily in private practice (to which less than a quarter of the population have access).15

There are also wide inter-provincial differences in the community/hospital ratios for staff. This is defined as the ratio of staff working in community settings (including hospital outpatient departments) to all staff, expressed as a percentage. It provides an indication of the human resources that are channelled into mental health care of psychiatric in-patients (Level 5) in relation to the other levels. Thus, provinces with well developed hospital services have low community/hospital ratios; KwaZulu-Natal, for example, has a ratio of 11%.a,12 Conversely, provinces that do not have well developed hospital services have higher ratios; North West has the highest ratio of 67%.12 Clearly, in moving towards a mental health service that is comprehensive, community-based and integrated, a community/hospital staff ratio that lies between that for provinces with well developed hospital services and that for the remaining provinces would be appropriate.

In summary, existing public sector mental health services are characterised by generally unsatisfactory levels of service provision. Box 1 exemplifies this for the Mount Frere district in the Eastern Cape.16 Those services which do exist are least accessible to the most vulnerable sectors of the population and are

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a As for staff/population ratios (Table 1), “full-time equivalents” were used to calculate these ratios to address the fact that some staff do not devote all their time to the provision of mental health services.12
concentrated in mental health care level 5 (psychiatric hospitals) as opposed to “lower” levels. In order to transform the mental health service, increased levels of service delivery are required for: people with mental health problems who present at health facilities; people with mental health problems at health facilities who are identified as having such problems; and people identified as having mental health problems that actually receive mental health services.

**Box 1: Mental health care in the Mt Frere District**

A situational analysis of mental health care in the Mt Frere district found that the focus was on pharmacological management and that poor infrastructure reduced access to the limited services that were available.

The community mental health service was rendered by a combination of community health workers, traditional healers, and fixed and mobile clinics. The clinics had very limited links with community health workers and traditional healers, and were faced with numerous barriers in their attempts to provide follow-up services to those suffering from mental health problems who were referred to them. The barriers included shortages of medication, deficiencies in mental health skills, inadequate support from trained mental health workers, transport difficulties and outdated and inefficient communication systems. The existing services were barely managing to provide a mental health service to those with an identified mental health problem who were referred to them (Level 4).

Mental health care in general hospitals was provided by the clinic psychiatric nurse. The psychiatric nurse provided support and back up to the medical practitioners who had limited experience and skills in managing mental health problems. However, the medical practitioners were the only health professionals who were authorised to prescribe psychotropic agents. One medical practitioner admitted that he did not have any protocols for managing mental health problems. It frequently occurred that when the psychiatric nurse was not available, people with mental disorders were locked in a side ward. In some cases they were then forgotten about.

**National legislation and policies**

**Mental Health Care Bill**

There are several proposals in this bill that contribute to the creation of an enabling environment for better service provision:

- The rights of mentally ill people are protected.
- Provision is made for mental health care at primary, secondary and tertiary levels to be accessible (for example, through community-based treatment and rehabilitation) and integrated into general health services as an aspect of comprehensive health services.
- Provision is made for involuntary treatment of mentally ill people in either a community setting or a hospital. Involuntary treatment is based on clinical assessment and observation over a period of 72 hours at any health facility. It is only when the final order is issued that a person would need to be admitted to a designated mental health facility.
- Further provision is made for the establishment of Mental Health Review Boards to review all involuntary and assisted admissions before they are ratified by the judicial system.

See chapter 2
The South African Medicines and Medical Devices Regulatory Authority Act of 1998

According to this Act, the definition of an authorised prescriber is broadened potentially to accommodate other health professions. However, it does not specify which professionals, nor under what conditions they may prescribe (see chapters 2 and 3).

Another provision is that medication for anxiety and depression can be prescribed for longer than six months only if a psychiatrist has been consulted. As indicated in Table 1, there are very few psychiatrists in the country in general, and particularly in certain provinces. Thus, there is the danger that this Act may hinder the delivery of appropriate treatment, particularly for people receiving ambulatory services for mental health problems (level 4). Indeed, those that are most in need of additional mental health services are potentially most disadvantaged by this legislation. In the case of antidepressants, this danger is magnified by the fact that a course of antidepressants should be at least six months in duration. If the prescriber is a psychiatrist, the patient should be reviewed by another psychiatrist! Clearly, this would result in a considerable amount of wasted time and resentment, which would have an adverse impact on service provision.

Criminal Matters Amendment Act of 1998

The main amendment to this legislation is the distinction it introduces between minor and serious offences. It is no longer required that a person committing a minor offence be sent for a one month period of observation and, if found unfit to stand trial, be classified as a State Patient. This will however remain necessary for those who have committed a major offence.

This change will certainly contribute to a reduction in the number of people that will need to be assessed and subsequently spend long periods in a mental hospital. Thus, this amendment will contribute to reducing the number of patients in mental hospitals (level 5), thereby freeing resources for provision at other levels.

Draft Policy Guidelines for Adolescent and Youth Care

These policy guidelines integrate mental health into adolescent and youth health in general. They create an enabling environment for better service provision from at least two points of view. First, they are consistent with the aim of transforming the mental health services system. Second, they locate mental health services for adolescents and youth squarely in a health promotion framework. Thus, there is a de-emphasis on the custodial care of adolescents and youth with severe psychiatric conditions.
Achievements

Development of mental health service norms

The first task is to ensure equitable levels of care between and within the provinces. Baseline norms in Table 2 are guided by the national mean of existing services indicators (“benchmarking”). Target norms, on the other hand, are based on estimations of need and reflect a basic acceptable minimum level of mental health services. They were developed from a computerised mathematical model that generates annual mental health service needs based on assumptions of prevalence rates and population size.

If a province is above the baseline norm, this does not imply over-provision and should not be used as a rationale to justify service cuts. Also, the norms cannot be understood in isolation from one another. A reduction in long stay hospital beds, for example, is contingent on the development of acute hospital care and ambulatory and residential care facilities at community level. Clearly, the success of the development of national norms is dependent on the extent to which they are affordable and used by the provinces in their budgeting and planning. The development of a set of standards is an achievement in its own right. However, their usefulness will be determined by the extent to which: (a) they are accepted by national and provincial departments of health; (b) they are used in strategies to improve quality of care, for example by quality assurance instruments based on the standards; and (c) the ability, commitment and resources of the departments to apply the standards in a uniform manner (see appendix 1).
<table>
<thead>
<tr>
<th>Definition</th>
<th>Baseline</th>
<th>Target</th>
<th>National mean (provincial range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bed/population</td>
<td>Acute: 13</td>
<td>Medicine: 10</td>
<td>25,6 (35,0-28,4)</td>
</tr>
<tr>
<td>Staff/population (clinical staff only)</td>
<td>Total staff: 24.7</td>
<td>Total staff: 0.36</td>
<td>24.7 (11.4-38.7)</td>
</tr>
<tr>
<td>Staff/bed (clinical staff only) (acute and medium-long stay)</td>
<td>Total nurses: 0.25 (0.17-0.69)</td>
<td>Total nurses: 0.32</td>
<td>0.25 (0.3-1.15)</td>
</tr>
<tr>
<td>Staff/PDE (clinical staff only) (ambulatory care only)</td>
<td>Total nurses: 0.4 (0.1-2.4)</td>
<td>Total nurses: 0.2</td>
<td>0.6 (0.1-4.0)</td>
</tr>
<tr>
<td>Community/Hospital</td>
<td>1. Community staff ÷ (hospital + community staff)</td>
<td>2. Attendance rate ÷ (admission rate + attendance rate)</td>
<td>1. 21% (6-57%)</td>
</tr>
<tr>
<td>Bed occupancy</td>
<td>Occupied beds ÷ available beds</td>
<td>83% (63-109%)</td>
<td>83% (63-109%)</td>
</tr>
<tr>
<td>Admission rates</td>
<td>Annual admissions per 100,000 population</td>
<td>150 (33.3-300)</td>
<td>150</td>
</tr>
<tr>
<td>Length of stay</td>
<td>Median length of admission (days)</td>
<td>Psychiatric hospitals: 219 (60-365)</td>
<td>Psychiatric hospitals: 219 (60-365)</td>
</tr>
<tr>
<td></td>
<td>(hospital beds only)</td>
<td>General hospitals: 11 (11-528)</td>
<td>General hospitals: 11 (11-528)</td>
</tr>
<tr>
<td></td>
<td>(dedicated wards): 14</td>
<td>District hospitals: 7 (1-5.14)</td>
<td>District hospitals: 7 (1-5.14)</td>
</tr>
<tr>
<td></td>
<td>(non-dedicated wards): 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Default rate</td>
<td>Defaulters ÷ Appointments</td>
<td>11% (6.21%)</td>
<td>11% (6.21%)</td>
</tr>
<tr>
<td>Readmission rate</td>
<td>Patients readmitted ÷ patients discharged x 100</td>
<td>Not available</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Table 2: Norms for mental health care in South Africa
From hospital to community care

In response to cuts in hospital budgets, Western Cape psychiatric hospitals embarked on a dehospitalisation process by discharging 696 people with chronic psychiatric disorders who lived in long-term care wards. In Gauteng, on the other hand, the de-institutionalisation process was driven by legal constraints. Newly appointed judges questioned the continued compulsory detention of people in contracted mental health care facilities, and in approximately 380 cases such continued detention was not confirmed. So far, approximately 300 have been discharged.

What is clear from the two examples is that the impetus for change was driven by fiscal and legal constraints (in the Western Cape and Gauteng respectively), as opposed to quality of life considerations. The processes embarked on can thus be characterised as de-hospitalisation, which refers to discharging hospital patients because of a need to close beds. This should be distinguished from de-institutionalisation, in which the context of mental health service structures is adjusted to prevent ongoing personal and social marginalisation. Responsibility for care is not shifted to individual families or non-governmental organisations (as occurred in both of these examples). Rather, there is a commitment to psychosocial rehabilitation, a process which aims to facilitate the optimum functioning and independence of ill and disabled people in the environment in which they live.19

In April 1998, the Directorate: Mental Health and Substance Abuse of the Department of Health and the South African Federation for Mental Health held a consultative workshop to develop national policy guidelines for psychosocial rehabilitation. Many of the principles emerging from this workshop were incorporated in the Mental Health Care Act. Other important developments were the establishment of the South African Association for Psychosocial Rehabilitation and the provision of psychosocial rehabilitation training for mental health practitioners in two provinces (KwaZulu-Natal and the Western Cape).

In the Western Cape, there is a plan to discharge a further 225 people. However, there is close linking with the psychosocial rehabilitation programme in the psychiatric hospital, the regional mental health services, the Department of Social Services and non-governmental organisations. In a de-institutionalisation pilot project conducted at all public sector mental hospitals in the Eastern Cape and KwaZulu-Natal, it was found that it would not be possible to discharge the majority of the patients in these hospitals if community facilities were not developed.20 Such facilities should be developed in advance of or in conjunction with the discharge process.

Essential Drugs List

The inclusion of psychiatric medications in the EDLs21-23 promotes integration of mental health into health services in general. However, there are a number of aspects of the EDLs that may be counterproductive. First, the limitations on who can prescribe specific psychotropic agents affects the level at which services can be provided (even if the full range of medications are available at all levels). Continuity between different levels of care would be hindered, thus inhibiting the development of a comprehensive, community-based and integrated mental health service. Second, the prescription of the antidepressant fluoxetine is limited to psychiatrists only. Given the low psychiatrist/population ratios in most of the country (Table 1), this restriction may result in a failure to prescribe this safe and effective agent for a patient who would benefit from it. An avoidable hospital admission or even suicide could result. Third, the range of antipsychotic agents is very limited. The availability of other agents (under certain conditions) would reduce the hospital admission rate and of course improve the quality of life of significant numbers of patients. The psychiatric EDL is currently under review.
The national Pilot Training Programme for Primary Health Care practitioners in Victim Empowerment and Trauma Management

This programme aims to increase the detection rate for mental health problems at health facilities (resulting in an increased proportion of people with mental health problems which are identified by the health services system (level 3)) and improve the management of trauma-related mental health problems among people receiving ambulatory services for mental health problems (level 4).

So far, 30 primary health care workers in each province have been trained and are implementing these aims under the supervision of the consortium. After this pilot project, additional primary health care workers will be trained in substantially larger numbers. Evaluation will be necessary to determine the extent and quality of these services.

Impediments

Despite the achievements mentioned above, there are substantial impediments to the development of a mental health service that is comprehensive, community-based and integrated. These were identified in a systematic study of the integration process in two Western Cape districts and in a qualitative description of mental health services in all nine provinces. The principle impediments mentioned in these studies are as follows:

- There is a lack of clear definitions and goals on the part of both mental health management and service providers regarding the nature of a transformed mental health service
- Primary health care workers providing mental health services encounter a myriad of practical problems on a day to day basis, such as poor infrastructure, inadequate pharmacy facilities and services, inadequate transport, a lack of clinic space, poor staff/patient ratios and a lack of time
- There are feelings of resentment and burnout on the part of many mental health workers. These are caused by the practical problems mentioned above; the perception that they were insufficiently consulted in the process of developing the new model of mental health services delivery; and increased service demands due to the de-hospitalisation processes mentioned above, coupled with an increased community awareness of mental health problems and demands for counselling. There are three areas where such demands for counselling are particularly pronounced: HIV/AIDS, genetics and trauma. Primary level health care practitioners generally receive minimal training in counselling. Feelings of resentment and burnout can be exacerbated by deficiencies in technical skills and a lack of preparation for dealing with the emotional demands that characterise the counselling process
- There has been insufficient ongoing training of primary care staff who deliver mental health services, including training in counselling. This is essential for the transformation of the mental health services since the basic training of all categories of primary level staff (including nurses and medical practitioners) generally does not adequately equip them to deliver quality mental health services. Much of the ongoing training that does occur is centralised in academic centres or nursing colleges without ongoing local trainee support, mentoring and clinical supervision. Thus, trainees experience difficulty in applying what they have learned in their day-to-day clinical duties. Also, insufficient numbers of staff are involved in providing training; they are frequently insufficiently trained to train, and there is a lack of suitable training resources such as manuals
- There are few “consumer” groups, and those that do exist tend to interact only minimally with the mental health services. By and large, patients that stand to gain the most from such “consumer”
groups, such as the poor, Africans, Coloureds and Indians, and more seriously disabled people, tend to be excluded and thus do not have their needs articulated

- The budgets for psychiatric hospitals and the budgets for primary care services are situated within different management structures. It is thus difficult to manoeuvre funds between different levels of service provision. Thus, for example, savings made by de-hospitalisation are generally not channelled into “lower” levels of service delivery.

The Truth and Reconciliation Commission has identified 10 000 individuals who are considered to be in need of mental health care such as counselling, psychotherapy, medication and even hospitalisation. They were referred to the relevant provincial departments of health to receive this care. However, the capacity of these departments to provide the care is clearly limited as additional funding did not accompany this mandate. Although the individuals found to be in need of mental health care were provided with limited funding, this was merely intended to facilitate physical access to services as opposed to fund the actual services. The consequence is an increase in the already substantial burden of unmet need for mental health services.

**Impact and future plans**

The transformation of the mental health system is in its infancy. It is thus premature to speculate as to the impact of these developments. However, the development of norms and standards for mental health services has provided some tools that can contribute to an evaluation of the extent to which equity and the restructuring of the mental health care system has been achieved.

Of particular importance is the necessity of increased budgetary allocations for mental health services. Most of the money that is released by deinstitutionalisation would be required to care for these patients in the community. Nationally, about 2.5% of total health expenditure is spent on mental health. Efforts to secure greater funding for mental health services are more likely to be successful if they can draw on local research that demonstrates the cost effectiveness for the health system of increased allocations to mental health. Other research should be directed to evaluating mental health interventions, programmes and systems.

Finally, much of the focus of this chapter has been on clinical services. It is important not to neglect the responsibility that the health services have to promote mental health. The main focus in this regard would be on people in the community with mental health problems (Level 1) as well as those who do not have mental health problems. Examples of mental health promoting strategies include:

- creating a safe and supportive environment by providing adequate sport and recreation facilities, supporting parents to prevent negative conflict, facilitating the formation of fora to identify community-specific causative factors for poor mental health, working with the media to ensure that mental health issues are reported in a responsible manner, and supporting legislation that promotes mental health;

- providing information with a view to de-stigmatising mental health problems and assisting people to recognise mental health problems and obtain the necessary assistance;

- building skills, including life skills such as anger management, conflict resolution and assertiveness;

- increasing access to counselling by: a) developing and supporting counselling services at primary health care level, telephone hot lines and crisis centres; and b) providing training to people who occupy positions where they are approached for assistance regarding mental health issues (such as religious and sports leaders, health workers and educators).
This is an article extracted from the first review conducted in South Africa of all research addressing the implementation of the Choice on Termination of Pregnancy Act No 92 of 1996. A systematic and detailed methodology was undertaken to identify published and on-going research. Of the 86 identified studies, 41 were reviewed, 13 were forthcoming studies, 3 were published but unavailable, 6 focused on the process of advocacy reform and 23 were excluded as they did not meet the inclusion criteria. A framework developed for the review looked at service and community factors affecting access of potential and current abortion service users. From the reviewed studies, this article provides information on what is known about women’s access to abortion services, but excludes findings of clinical research, methodologies for abortion research and forthcoming studies. The article also identifies what information is still required in order to ensure that abortion services are available and accessible to all South African women. Details of the methodology and the remaining included studies are available from the Health Systems Trust and the Women’s Health Project.
Introduction

The passing of the Choice on Termination of Pregnancy Act No 92 of 1996 (CTOP) was South Africa’s tangible expression of a commitment to allow women to attain their right to self-determination. However, while the removal of legal obstacles to the right to choose when and if to have children is an essential component, it is not sufficient. Providing services and ensuring equitable access to services is now the challenge. There is significant activity and commitment to making this a reality.

As the promotion of women’s right to choose and the resulting TOP services are developed for women, the method for assessing delivery is taken from the viewpoint of service users, both actual and potential. Thus the framework developed for the review looks at the flip side of delivery, namely access. A paper providing a useful exploration of factors affecting access to services incorporating the Bruce framework for quality of care has been used to develop the framework within which the current research has been reviewed.

Ensuring access is complex. It requires looking at more than just health services per se. While the physical provision of services is an essential prerequisite it is not sufficient. Services need to be affordable, appropriate and acceptable to service users. The supply side of the equation is important and includes organisation of services, distance barriers, distribution and availability of trained personnel and affordability of services. The demand side is often significantly influenced by the supply side. Service fees become a deterrent to use when clients cannot afford them. Health workers’ attitudes are an obstacle when clients perceive disrespect or indifference. In addition, there are other demand-side determinants specifically those associated with user beliefs, knowledge and practices. This review looks at both the supply side and demand side in the analysis of delivery of abortion services. The supply looks at service factors, and the demand side explores community factors.

Service factors affecting women’s access to TOP

Availability of abortion services

The impact of the previous abortion legislation has been documented and included:

a) High numbers of women (44 686 women per year) treated for complications from incomplete abortions

b) High rates of mortality (37 per 100 000 live births) and morbidity rates (385 per 100 000 live births)

c) Services being particularly inaccessible for young, black, single women.

Two years after the passing of the Act, a total of 69 894 TOPs were reported. There has been an increase in the overall numbers of TOPs performed in South Africa during this period.
However there is wide variation in the numbers of TOPs performed across provinces.
Forty-nine percent of all TOPs were done in Gauteng while only 1% were carried out in the North West. The high percentage of terminations in Gauteng may reflect well functioning and well-equipped services. It may also reflect use of these services by women from neighbouring provinces (Mpumalanga, the North West and Northern Province).

When comparing the female population per province with the number of reported TOPs, KwaZulu-Natal with the highest female population in the country (21%) registered 10% of the total TOPs. In contrast, the Northern Cape with 2% of the national female population, registered 1.5% of TOPs.

Regarding health facilities providing TOP and the distribution between urban and rural areas, of the 246 designated public health facilities 73 are currently providing services (“online”) and 99% of these are hospitals. Only two are community health care centres and these are both in Gauteng. In addition to public sector facilities there are 138 private facilities providing TOP.
A Free State community-based study reported that 78% of TOP patients had to travel for about one hour or less to get to services and 84% of clients reported using taxis to get to the facility. In the predominantly rural Eastern Cape, 38% of clients had to travel over 100 km to access the service.

**Training**

Increasing the availability of trained midwives is critical to ensure that women’s needs are met at primary health care level. So far, 90 midwives have completed the theoretical training. Of these, 45 have completed the clinical training, with 31 being involved in the provision of abortion services. Twenty-two physicians have been trained in the manual vacuum aspiration (MVA) technique to serve as provincial resource persons, who in turn have trained 124 other physicians.

The training of midwives is being undertaken through a three-year (1998 to 2001) donor-funded national abortion care training programme. A Northern Cape study reported that plans to incorporate the South African Nursing College approved curriculum into the basic nursing curriculum have so far not been drawn up.

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Cost of Services

It has been estimated that R18.7 million was spent by the Government in 1994 in treating incomplete abortions. Sharp curettage used in the treatment of incomplete abortions, made the service highly expensive. A review of international studies comparing vacuum aspiration to sharp curettage in induced and incomplete abortions, reported MVA to reduce in-patient load and cost to the health sector, and decrease levels of major complications associated with sharp curettage. Four variables affect the cost of abortions: gestational age; level of care; length of in-patient stay and additional use of drugs to induce abortion. If first trimester abortions are done at secondary level, the costs increase by 26% and if done at tertiary level it costs 133% more compared to primary level. Similarly if second trimester abortions were provided at tertiary level, the costs would increase by 89%.

Quality of Care

Technical Skills

Midwives are competent to use MVA in evacuating the uterus in uncomplicated incomplete abortions. In 81% of patients the clinical diagnosis of gestational age by midwives was accurate.

Knowledge of the Act

Most providers have a fair knowledge of the Act. A Free State study reported that 78% of those conducting abortions and 67% of those referring cases gave correct answers to questions regarding the Act. A KwaZulu-Natal study reported all 25 nurses in the study had heard of the Act.

Referral Mechanisms

General practitioners are the main source of referral in KwaZulu-Natal and the Western Cape. In the Northern Cape, people at the periphery mainly gain access to trained staff located more centrally by being referred. Peripheral staff act as gate-keepers of the service either by not providing the results of pregnancy tests or by dissuading women from having an abortion, resulting in users labelling services as unhelpful and then presenting at more helpful clinics or providers.

Counselling

On a busy day pre-counselling was often skipped or done as a group event. The decision of whether to provide counselling or not was at the discretion of the provider. Twenty-four percent of patients reported having had no pre-counselling service and 56% no post-counselling service.
Attitudes to Abortion

Providers accept abortion under specific circumstances but are less open to the idea of minors having free access. Less than 8% of nurses and social work students mentioned “on request” as a justifiable reason for women to have TOP, while of those involved in the abortion procedure, 56% mentioned “on request”. On the issue of consent from partners and parents, 81% of those conducting abortions mentioned that women have sole rights over their bodies while only 13% mentioned the same for minors. Ninety-four percent of social work students mentioned that minors should be compelled to inform their parents and 88% felt that parental consent should be mandatory.

Interpersonal relationships

Women who had illegal abortions prior to the Act complained of negative and judgmental attitude of providers. In contrast, since the new Act a Free State community-based study has shown that clients who had TOPs reported being treated well by staff providing abortions. However, in the Northern Cape study women reported that people directly involved in providing TOP related to them in a positive way, but other staff (e.g. ward staff, referring staff) were negative.

Contraceptive usage in TOP clients

Between 25-80% of women accessing abortion services were not using contraception services. Of those using contraceptives, the majority were using the pill (68% - Kalafong TOP unit and 15% - Chokoe et al) or the injectables (48% - Adanlawo). Nearly 100% of people expressed their intention to use contraception after the abortion, with over a third mentioning the injectable contraceptive as the method of choice.

Factors affecting contraceptive usage

A variety of quality of care aspects affect contraceptive usage including client-provider relationships, level of information and organisation of services. The KwaZulu-Natal and Mpumalanga studies reported that people interviewed felt that family planning services were accessible and client-friendly. In the Northern Cape unplanned pregnancy was due to hostile health services and negative attitudes to teenage sexuality. Unplanned pregnancy is also attributed to incorrect information on contraceptive methods. Between 4-12% of TOP users have heard of emergency contraceptives and even fewer can describe it. The separation of contraceptive services from TOP, either by having another health worker in charge of contraceptives or having a separate location for contraceptive services, appears to negatively influence the number of women who leave the service with a contraceptive method. When the sterilisation service is organised for the following day, 60% of those who choose sterilisation go ahead with it. When the service meant being booked after a scheduled interval, only a fifth of the patients returned for the sterilisation.
Community-based factors affecting women’s access to TOP

Profile of women using abortion services

People using TOP services are mainly older, single, multiparous, unemployed, students, and educated.4,6,14,18-20,22 Prior to the Act, women classified as induced cases or treated for incomplete abortions were young, primiparous, single, and unemployed.2,23

Information barriers

Knowledge on the availability of TOP services is higher compared to information on women’s sole right to consent. In a KwaZulu-Natal community-based study, 94% of rural women and men had heard of the Act.13 In a Northern Cape facility and community-based study amongst peri-urban and urban women and men, 55% had heard abortion is available on request and 24% had heard that parental or partner consent is not required.7

In the Eastern Cape and Northern Cape the majority (40%) mentioned radio as source of information, and 1% in the Northern Cape mentioned the clinic as their source of information.6,7

The majority of men and women can identify later signs of pregnancy and have little knowledge about the conception period. Regarding duration when an abortion can be done, the majority (41%) mentioned up to the second trimester.7 In contrast, in the national pre-Act survey 20% of respondents mentioned any time during the pregnancy and 5% mentioned up to 6 months.24 For those who recognised their pregnancy, the decision to abort and present at health services was immediate. Between 60–85% of women knew they were pregnant by about week 8.5,14,15,18 The majority of women presented to the service by week 10 and 70% had the procedure within a week.14,15

In a KwaZulu-Natal community study, 18% of respondents expressed support for abortion on request,13 compared to 8% in a Northern Cape study.7 From a national pre-Act survey, of those supporting abortion 15% stated personal choice as justifiable reasons for an abortion.24 While in a Northern Cape study 60% felt that women should not require consent from partners, 55% felt that minors do require parental consent.7

Women’s self-esteem and status

Inability to negotiate safer sex is a major cause of unplanned pregnancy. Younger people expressed difficulties in being able to talk about their sexuality at home and at health care settings.7 Women who had a healthy post-abortion adjustment were women who: b,c,25-28

- held strong views on woman’s right to choose
- had positive beliefs about their own ability to cope
- had higher education


c van Zuydam E, Poggenpoel M, Myburgh CPH. The study aims to describe the emotional status of teenagers coming for TOP and its impact on teenagers. Reproductive Choices. Forthcoming.
Termination of pregnancy

- had supportive social structures
- were able to talk about their experience

Factors which resulted in negative feelings after the abortion were:
- attachment to foetus in women undergoing late trimester abortions
- high trait anxiety
- coercion and no support from partner
- negative social stigma.

In 81% of women, the pre-abortion scores of depression and self-efficacy were able to correctly predict the absence or presence of post-abortion depression, thus proving to be a good screening tool for clients who may need further counselling or support. In one study of women two to six weeks after a first trimester legal abortion, indicated low percentages of negative post-abortion psychological outcomes.

Influence of health workers and partners on women’s access to TOP

Interventions with health workers on their attitudes to abortion seem to help with regard to providers’ attitudes. Comparing the pre- and post-test results from the piloting of the “abortion values clarification workshops” (VCW), 48% of participants felt that their opinion or attitudes had changed substantially. The remaining either mentioned “somewhat changed” (22%), “a little changed” (19%) or “no change” (12%). Those providing abortion services required support, due to the negative feedback from their colleagues. Thus to sustain the momentum of the once-off VCW initiative, systemic and structural interventions to support health workers need to be put in place.

Irrespective of the legal status of abortion, women reported that talking to their partners about their decision to have an abortion is hard. Women who had illegal abortions reported that fear of being stigmatised, disapproval and violence had prevented them disclosing their decision to terminate to their partner and families. Fifty-six percent of women requesting TOP fear a negative reaction, and this is the main reason for not telling their partners. Of those that do disclose, 31% get a negative reaction.

Socio-cultural factors

Religion and frequency of religious attendance affect attitudes to abortion. Rejection by nurses of abortion appears to be linked to their own identification as mothers, nurses and wives, and the inseparable linkages between these roles. Nurses also mention that their professional commitment is to save not take away lives and hence are against abortions. On the other hand social work students argue that their professional commitment to their patient means they could recommend an abortion.

Support for abortion is steady across the lower age groups, but falls amongst people above 60 years. Amongst homeowners, support for abortion was highest and least amongst those in difficult housing circumstances, and support rose from the uneducated through to the highly educated. There was no significant difference between men and women on support for abortion, with slightly higher support amongst non- or very infrequent religious service goers.
What more do we need to know?

The question remaining is what more needs to be known to implement quality abortion services, so that the right to self-determination becomes a reality for all South African women? In an attempt to identify research priorities three processes were used to supplement the literature review. Managers responsible for implementing the legislation viz. those in charge of women’s health and primary health care from all the nine provinces, were asked to identify implementation issues that require research. A national planning workshop was conducted with 39 participants. The participants were provincial MCWH and PHC managers, members of the health portfolio committee, non-government organisation representatives and researchers. Lessons from countries who have recently passed abortion legislation were reviewed to identify barriers and tested solutions. This was done by contacting activists in Guyana and reviewing the recent documentation of Ipsas.

Going back to the framework on service and community access factors, Table 1 defines a future research agenda for South Africa.

Table 1: A research agenda for abortion services

<table>
<thead>
<tr>
<th>A. Service factors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing availability of service</td>
<td>a) Identify reasons and solutions for lack of implementation by designated facilities b) Explore users’ opinions on how abortion service should be organised and implemented c) Collate routine data collected from private and public sector, determine basic and uniform data requirements and determine usage of information</td>
</tr>
<tr>
<td>Increasing access to personnel</td>
<td>a) Develop supervision systems and performance indicators in relation to TOP</td>
</tr>
<tr>
<td>Affordable services</td>
<td>a) Do a costing study on the budget requirements and allocation for the sustainability of TOP services b) Assess the social cost of abortions on women and society</td>
</tr>
<tr>
<td>Improving quality of care</td>
<td>a) Further research into intra and post operative pain and pain relief b) Assess midwives’ skill in conducting MVAs in induced abortion and counselling c) Examine standards of counselling and contraceptive services. Lack of these services, four years since legislation in Guyana has resulted in nearly 60% of abortions being repeat-cases. d) Follow up TOP users to assess actual contraceptive usage and barriers associated with it e) Identify strategies on how abortion can be integrated into a primary health care package</td>
</tr>
</tbody>
</table>

B. Community Factors

<table>
<thead>
<tr>
<th>Users of service</th>
<th>a) What is the extent of unwanted pregnancies being carried to term, why are women still resorting to back street abortion, and what were barriers to access services?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information barriers</td>
<td>a) Develop and test effective educational messages, especially for radio</td>
</tr>
</tbody>
</table>
| Women’s self-esteem and status | a) Gather clients’ perception on the role of counselling. This along with the conducted research on a screening tool to predict women who require intensive counselling, could determine what should become part of the counselling service  
  b) assess psychological impact of second trimester requested abortions and the long-term psychological impact in women requesting TOP  
  c) investigate the role of social support for women susceptible to post-abortion depression |
| People who influence access | a) Measure the long-term impact of the “values clarification workshops” on the implementation of abortion services  
  b) Develop and test interventions to transform and sustain providers’ attitudes, including “gatekeepers” of the service  
  c) Document health workers’ understanding of balancing rights with duties |

Conclusions

The commitment displayed by implementers and researchers is significant and obvious. An assessment of the methodologies used by the studies indicate that the majority were facility-based using quantitative data collection tools. In addition, very few studies discussed their methodological issues, limiting the possibility for a discussion on the appropriateness of different methodologies. In terms of geographical location of research projects, most were located in urban areas, with few in rural and peri-urban areas. There is no known research initiative on abortion services undertaken in the North West and Northern Provinces, two under-resourced provinces of South Africa.

Research information is spread thin over a wide area of access issues, making it difficult to draw overall conclusions.

Legalisation of abortion has made services more available. However, access for specific groups, particularly women from rural areas and teenagers continues to be a problem. This is evident from the information that: users of abortion services are mainly more educated, have to travel long distances and use private referral to have an abortion; there are few health centres providing abortions; training of midwives is still being undertaken through donor funded programmes with plans to introduce the module into medical and nursing curricula not yet drawn; there is a reluctance to provide abortion “on request”; and that community members do not have basic information on fertility periods and signs of pregnancy.

While barriers to access the service are both service and community related, a greater emphasis has been placed on the service-dimension of abortion care as compared to community aspects. As women’s self esteem, women’s status in society and support from men and family play a critical role in adjusting to an abortion, the lack of attention paid to developing interventions that would build supportive structures for women and build women’s confidence in themselves is perturbing. From studies that examined quality of care:
Midwives can to some extent clinically estimate gestational age of pregnancy and health workers have a fair knowledge of the Act. While health workers seem to be technically competent, they are less accepting of abortion on request, minors’ right to consent, the involvement of their colleagues in this service, and at times serve as gate-keepers to the service.

The constellation of services mainly looked at contraceptive usage amongst TOP patients. They report a range of 25-80% of women not using contraceptives prior to the abortion with nearly 100% of women expressing their intention to use a post-TOP contraceptive. Within this research little focus was given to providing linkages between abortion and other services, such that it maintains good quality care, increases demand and use of contraceptive methods, is acceptable to users and providers, and reduces opportunities to prevent future unplanned pregnancies.

Very little is known about inter-personal relationships and provider-client information exchange. What is therefore urgently required is research to generate solutions on how to: increase equity in access; introduce the module into curricula for the present training of health personnel, and transform and sustain attitudes of gate-keepers in order to institutionalise the delivery of TOP as a routine service at all levels of health care; provide support for providers and users of TOP; increase information on ones’ own body and health rights; push society’s acceptance of human rights; increase women’s confidence in themselves; and ensure male responsibility.
Health Research in South Africa

Well prioritised health research that produces results which can be converted into action can improve the health status of the people in South Africa. There has been an overemphasis on expensive, high technology medical research in the past. Early attempts to organise research into health issues in South Africa resulted in the establishment of the South African Institute for Medical Research (SAIMR) in 1917. Since then there have been many major milestones in health research. Since 1994 there are also new challenges. Health issues now dominate over purely medical issues and there is a greater understanding and acceptance that ill-health is a consequence of poor development more than anything else. In 1996 the Department of Arts, Culture, Science and Technology (DACST) developed a White Paper on Science and Technology wherein the importance of health research as part of the broader science system in providing answers to the nation’s health problems is recognised.

This chapter looks at the degree to which the country is making progress towards these changes in emphasis in health research. However, due to a lack of adequate information systems it is difficult to separate South Africa's expenditure on health research from other research. The chapter discusses the two main approaches being followed to set priorities for health research, viz. Essential National Health Research (ENHR), and “Foresight Exercises”.

The major resources for health research are the Medical Research Council (MRC), the South African Institute for Medical Research (SAIMR), the National Institute for Virology (NIV), the National Centre for Occupational Health (NCOH) and the Higher Education Institutions (HEI). The Department of Health (nDoH) Directorate: Health Information and Epidemiology, is also an important role-player, as are provincial departments. Each of these is briefly visited and discussed, as is the new, parastatal National Health Laboratory Service (NHLS).

In the private sector the pharmaceutical industry is a very substantial player in South Africa. However there is very little original drug discovery or development taking place in the country. The only major funders of health research among NGOs include the Health Systems Trust (HST) and the National Progressive Primary Health Care Network (NPPHCN). South Africa has been receiving donor funding since the mid-1980s. Following the 1994 elections there has been a significant increase in development aid but no clear figures are available on donor funded health research.

It is extremely difficult to measure the impact of the research that is being conducted. The chapter concludes that health research in South Africa is still unco-ordinated. The establishment of the ENHR Committee could go a long way towards improving co-ordination, thus ensuring greater efficiency, quality and relevance of public and private sector health research activities. It is unfortunately not possible to quantify the progress that is being made.
Introduction

Well prioritised health research that produces results which can be converted into action can improve the health status of the people in South Africa. However, much as the past dispensation resulted in unequal distribution of healthcare resources and fragmentation of healthcare delivery, so too has the over-emphasis on expensive, high technology medical research contributed to the inequity in, and sometimes dubious value of, research in this country.

The early attempts to organize research into health issues in South Africa were in response to a growing and commercially valuable mining sector. The research was concerned with the imperatives of maintaining production rather than the individual miner’s health and productivity. The Union Government and the Witwatersrand Native Labour Association (a recruitment agency for the mines which subsequently became TEBA) began collaborating in 1912 and established the South African Institute for Medical Research in 1917. Since then there have been many major milestones in health research, including in the fields of polio, malaria and tuberculosis. However, the country rapidly developed an enormous capacity for research into “first-world” conditions (for example into organ transplantation, immunology, cardiac physiology, etc.) and by 1987 was ranked twelfth in the world in terms of output of scientific publications.

Health research has historically been dominated by males, mostly white males. This is not surprising considering the paucity of science and mathematics education that has been available in the “Bantu Education” system for so long. South Africa has also been a researcher’s “paradise” in the past because of its first-world technology alongside a third-world captive population largely unprotected by codes of conduct and with extremely poor human rights protection. More recently there has been an exodus of the more talented research scientists to better-resourced research appointments overseas.¹

The country was forced into self-imposed exile and isolation by sanctions and international pressure at the same time as it experienced an escalation in military aggression. In response research was stepped up in an attempt to become self-sufficient. The Council for Scientific and Industrial Research (CSIR), the Arms Corporation (Armscor), the Atomic Energy Corporation (AEC) and other agencies grew extremely strong. Together with several government departments and universities these agencies engaged in research with tremendous fervour.

Since 1994 the challenge has changed completely. The thrust is to convert the strategic military and defence capability and the focus on the “first-world’s” problems to the extensive “third-world” problems of the country. Although classed as an upper middle income country (with a per capita GNP in 1997 of US$3 400), South Africa has a huge gap between the rich and the poor. This is measured by the Gini index. South Africa’s is very high at 58.4 (Brazil 60.1).² Attendant upon this wide socioeconomic divide come all of the health and development problems of a country in the midst of the second phase of the epidemiological transition – i.e. both communicable and non-communicable diseases.³ Health issues now dominate over purely medical issues and there is a greater understanding and acceptance that ill-health is a consequence of poor development more than anything else. To be relevant, health research must be applied and focused on the real issues that impede “nation-building”.

The Government is committed to a focus on primary health care and the curtailing of tertiary care and is supporting the expansion of public health training programmes and courses in health management. There is also a commitment to repaying the country’s debt in a time when the world is experiencing a recession. Budgets are tight and funds are needed to manage the transformation. This has to some extent impacted negatively on government-funded health research in that research in medical schools, that was often officially or unofficially subsidised by provincial health departments in terms of materials, facilities and salaried time of professionals, has been severely reduced.
In tandem with these changes in the health sector, the Department of Arts, Culture, Science and Technology (DACST) developed a White Paper in 1996 mapping out the development of a National System of Innovation (NSI).4 This document acknowledged that in the “Knowledge Age” of the 21st century people will truly become a nation’s “most valuable resource” because only people can take the information generated by investigative processes and craft such information into “knowledge”. South Africa cannot afford to be left behind in this knowledge race if it is to become competitive in the global markets and win enough resources to provide a better life for all of its people. Science and technology will be the key “knowledge markets” through which such wealth will be generated. Biomedical sciences in particular have a critical role to play in the future. The White paper on Science and Technology recognised the importance of health research as part of the broader science system in providing answers to the nation’s health problems – such as HIV/AIDS. Solutions to the health problems will in turn provide a healthy workforce vital to the objects of the Growth and Development Strategy.5

COHRED (the Council on Health Research and Development) recommends that at least 2% of a developing nation’s gross domestic product should be allocated to research and development. In South Africa in 1998 the estimated gross expenditure on research and development amounted to R9.55 billion, which is 1.2% of South Africa’s 1997 gross domestic product (GDP) of R780 billion. This proportion declined steadily from 1987 to 1995 (0.9%) as South Africa faced economic sanctions.6 The figure has been rising again since 1995 but is still low when compared with that of the developing countries that South Africa competes with. Countries that spend 0.9% of their gross domestic product on research and development are Hungary, Spain, Portugal, New Zealand, Chile and Brazil. Brazil’s 1999 target is to increase the nation’s spending on research to 1.5% of GDP. Australia is determined to double health research funding over the next 5 years. Thailand spent US$139 million (or 0.13% of GNP and 6.25% of all research and development) on health research in 1996. Among the established market economies the European Union spends 2.75% of its GDP on research and the USA increased spending on non-defence research by 8% in 1999 and plans to increase it by 32% from 1999 to 2003.

Due to a lack of adequate information systems it is difficult to separate South Africa’s expenditure on health research from other research. It is stated that 19 000 South Africans are engaged in research and development activities, publishing a little over 1 500 health research publications in peer-reviewed journals annually,7 but the funding that these researchers use is more difficult to measure.

Besides the need to secure sufficient funding to sustain and increase health research, the challenges facing the country in health research are therefore (amongst others) to:

- raise the standards of research
- encourage young people to conduct appropriate health research
- recruit black scientists into health research
- institute systems of prioritisation of health research funding
- induce “Africanisation” of health research
- insist on “human rights” as a core value in health research
- encourage participatory research methods
- foster inter-disciplinary collaboration and an intersectoral approach
- promote a “holistic” approach to the human mind and body
- instill greater “client orientation” by applying research results in policy and practice
- transfer technology to commercial or sustainable operations
exploit indigenous technology. This chapter looks at the degree to which the country is making progress towards these changes in emphasis in health research.

**Priority Setting**

The first step in addressing the challenges was to establish a mechanism for priority setting for health research in South Africa. This will limit *ad hoc* individual pursuit of the esoteric and will demonstrate the Government’s commitment to areas where the greatest impact can be achieved. It will also provide a visible framework for managing the research that may encourage potential funders to invest in a responsible plan.

There are two main approaches being followed to set priorities for health research: Essential National Health Research and Foresight Exercises.

**Essential National Health Research (ENHR)**

ENHR is an integrated strategy for organising health-related research. Its goal is to promote development in a manner that achieves equity and social justice. It adopts an integrated approach to priority health problems with a commitment to linking research with implementation and working to form partnerships among researchers, health services and communities. ENHR utilises the full range of health research methodologies and encompasses two research platforms: country specific and global research.

- Country specific research refers to policy-directed research that seeks to address, in the short- or medium-term, the priority health problems of a specific country.
- Global research on the other hand takes a longer term view of these and other priority world health problems, seeking to alter fundamental causes of ill health through, for example, new vaccine development, molecular biology etc.

ENHR provides a mechanism to realign research priorities and to reallocate resources set aside for health research. It is a programme that advocates a five-step approach to identifying the health research priorities of the country, incorporating the following key elements:

- Priority setting
- Promotion and advocacy
- Financing
- Capacity building
- Networking and information dissemination
- Evaluation.

The ENHR methodology uses the “burden of disease” (developed by the WHO Ad Hoc Committee on Health Research and measured by “disability adjusted life years” [DALYs]), the cost effectiveness of interventions and the institutional and human resource availability to apply interventions at community level in order to set priorities.
The implementation of ENHR has been under discussion in South Africa since 1991. In December 1994 the National Department of Health (nDoH) convened a national meeting of stakeholders in health research in order to further the ENHR process. In March 1995, the then Minister of Health, Dr NC Dlamini Zuma, appointed a national technical committee to further develop recommendations for the implementation of ENHR. In 1995/96 there was broad consensus around the establishment of the ENHR Committee that would have as its main objective to assist the reform of health research in the country. In the interim the Directorate for Information, Epidemiology and Research at the nDoH made significant progress in developing a “National Health Research Policy” following broad consultation with many stakeholders. The members of the ENHR Committee have now been finalised and will soon begin their work.

**Foresight Exercises**

The second approach to priority setting derives from Foresight Exercises that were recently completed by the Department of Arts, Culture, Science and Technology. These use future tools and visioning exercises, are highly intersectoral and take account of the changing political, economic and technological environment of the future. They attempt to project a vision of the future that is not simply an extrapolation of current trends.

Priority setting must take account of:

- the contextual environment (in terms of burden of disease, national development priorities such as the Reconstruction and Development Plan and its further manifestation in the Growth, Employment and Redistribution Strategy)
- the contractual environment (such as the relationship between researchers and funders of research, between communities, policy makers and researchers)
- the operational environment (in terms of the societal organisation of existing infrastructure and human resources in order to pursue health research).

Such priority setting processes should ideally go hand in hand with an audit of the existing resource capacity, allocation of funds, monitoring of progress in research, reporting of results and translation of research results into policy and practice.

**Medical Research Council**

There are eight Science Councils in South Africa, each governed by its own Act, covering broad areas of science, such as agriculture and mining, and each responsible to a specific government department. The Medical Research Council (MRC) is one such Council. It is an independent parastatal agency created by the Medical Research Council Act of 1969. It is the Government’s agent for the commissioning and management of health research and is responsible to the Department of Health. All Science Councils are, however, co-ordinated by the Department of Arts, Culture, Science and Technology (DACST).
The Medical Research Council currently receives 6% of the Government’s allocation to science (R42.7m in 1991/92, increasing to R84m in 1998/99). This figure will hopefully increase in 1999/00 because the international norm for Government spending on health research from a committed science allocation is 25%.

The MRC has several specific “corporate thrusts”:
- Capacity Development
- Policy and Decision Support
- Corporate Systems
- Nutrition
- HIV/STDs/TB
- Health and Development
- Infectious Diseases, Vaccines and Immunity
- Trauma
- Chronic Diseases, Cancer and Ageing
- Oral and Dental Health
- Child and Adolescent Health
- Women’s Health
- Mental Health and Substance Abuse

There are further “bridging thrusts”:
- Burden of Disease
- Health Systems
- Health Promotion and Disease Control Interventions
- Health Technology Development
- Molecular Medicine
- Research Methods Development and Support
- Clinical and Experimental Research

The thrusts are co-ordinated by convenors either within the MRC or at a university with an associated MRC project or unit. The MRC funds research into projects that are conducted either in its own research units or by independent researchers. There are 13 MRC programmes (Table 1) that are currently engaged in or supporting 268 research projects. There are a further 306 MRC supported research projects being undertaken at MRC research centres, units and groups at universities (Table 2).
### Table 1: MRC programmes (1998)

<table>
<thead>
<tr>
<th>Programme</th>
<th>Number of projects</th>
<th>Research papers (in press)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amoebiasis Research Programme</td>
<td>11</td>
<td>11 (5)</td>
</tr>
<tr>
<td>CERSA*</td>
<td>75</td>
<td>72 (44)</td>
</tr>
<tr>
<td>Chronic Diseases of Lifestyle Programme</td>
<td>31</td>
<td>9 (7)</td>
</tr>
<tr>
<td>Experimental Biology Programme</td>
<td>25</td>
<td>25 (10)</td>
</tr>
<tr>
<td>National Health Promotion Research and Development Programme</td>
<td>18</td>
<td>6 (8)</td>
</tr>
<tr>
<td>National Malaria Research Programme</td>
<td>28</td>
<td>5 (2)</td>
</tr>
<tr>
<td>Programme on Mycotoxins and Experimental Carcinogens</td>
<td>22</td>
<td>21 (6)</td>
</tr>
<tr>
<td>National Research Programme for Nutritional Intervention</td>
<td>18</td>
<td>19 (12)</td>
</tr>
<tr>
<td>National Trauma Research Programme</td>
<td>12</td>
<td>5 (2)</td>
</tr>
<tr>
<td>National Tuberculosis Research Programme</td>
<td>33</td>
<td>13 (3)</td>
</tr>
<tr>
<td>National Urbanisation and Health Research Programme</td>
<td>58</td>
<td>25 (1)</td>
</tr>
<tr>
<td>South African Cochrane Centre</td>
<td>-</td>
<td>7 (1)</td>
</tr>
<tr>
<td>Technology and Business Development Group</td>
<td>28</td>
<td>20 (2)</td>
</tr>
</tbody>
</table>

* CERSA is the Centre for Epidemiological Research in South Africa

Table 2: MRC Research Centres, units and groups at universities (1998)

<table>
<thead>
<tr>
<th>MRC Research Centres, Units and Groups at Universities</th>
<th>Number of projects</th>
<th>Research papers (in press)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety and Stress Disorders Research Unit</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>Bio-energetics of Exercise Research Unit</td>
<td>28</td>
<td>22 (11)</td>
</tr>
<tr>
<td>Bone Research Unit</td>
<td>9</td>
<td>2 (6)</td>
</tr>
<tr>
<td>Cape Heart Research Unit</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Centre for Molecular and Cellular Biology</td>
<td>12</td>
<td>11 (4)</td>
</tr>
<tr>
<td>Dental Research Institution</td>
<td>10</td>
<td>7 (6)</td>
</tr>
<tr>
<td>Diarrhoeal Pathogens Research Unit</td>
<td>11</td>
<td>7 (4)</td>
</tr>
<tr>
<td>Genital Ulcer Disease Research Unit</td>
<td>12</td>
<td>7 (4)</td>
</tr>
<tr>
<td>Health Policy Research Group</td>
<td>20</td>
<td>9 (9) (6 submitted)</td>
</tr>
<tr>
<td>Liver Research Centre</td>
<td>31</td>
<td>30 (11)</td>
</tr>
<tr>
<td>Mineral and Metabolism Research Unit</td>
<td>6</td>
<td>4 (4)</td>
</tr>
<tr>
<td>Molecular Hepatology Research Unit</td>
<td>6</td>
<td>13 (3)</td>
</tr>
<tr>
<td>Molecular Reproductive Endocrinology Research Unit</td>
<td>6</td>
<td>9 (2)</td>
</tr>
<tr>
<td>MRC/CANSA Oesophageal Cancer Research Group</td>
<td>11</td>
<td>5 (3)</td>
</tr>
<tr>
<td>Perinatal Mortality Research Unit</td>
<td>15</td>
<td>15 (8)</td>
</tr>
<tr>
<td>Pneumococcal Diseases Research Unit</td>
<td>35</td>
<td>20 (6)</td>
</tr>
<tr>
<td>Pregnancy Hypertension Research Unit</td>
<td>13</td>
<td>21 (3)</td>
</tr>
<tr>
<td>Research Group for Traditional Medicines</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td>Research Unit for Inflammation and Immunity</td>
<td>6</td>
<td>6 (4)</td>
</tr>
<tr>
<td>Research Unit for Maternal and Infant Health Care Strategies</td>
<td>26</td>
<td>15 (1) (14 submitted)</td>
</tr>
</tbody>
</table>


South African Institute for Medical Research (SAIMR)

The South African Institute for Medical Research (SAIMR) is a major medical research asset. It was established in 1912, and formalised in 1917, primarily for research but it has developed a significant diagnostic service capacity throughout the country except in KwaZulu-Natal. It is intimately associated with the University of Witwatersrand, the University’s School of Pathology being within the SAIMR. The SAIMR is funded by income from the diagnostic services it provides to provincial health departments (and minimally to the private sector) through its 100 laboratories, by interest generated on reserves and from donations and grants. The annual turnover is over R300m. In 1997 the SAIMR Board established a “Research Foundation” using R45m of the Institute’s reserves. The trust also served as a channel for donor
funds and research grants from the MRC and other sources. The interest from this trust has been used to fund research since that time.

The Chamber of Mines withdrew from the partnership at the end of 1998 and the SAIMR is now fully owned by the Department of Health. The intention of the nDoH is to amalgamate all of the resources of the SAIMR, the National Institute for Virology (NIV), the National Centre for Occupational Health and all provincial laboratory and pathology services into a single new, parastatal National Health Laboratory Service (NHLS) in 2000. The primary objective of the NHLS will be to act as the “preferred provider” of laboratory services to the public health services. Research and teaching will be the function of the higher education institutions. To this end the Interim Board has terminated the SAIMR Foundation (which closed with a balance of R62m) and is in the process of drafting a new trust deed to create a pathology research trust to be administered by the MRC on behalf of the NHLS for the benefit of all universities. It has been proposed that at least R30m be used to capitalise this new trust.

SAIMR allocations to research have risen from R5.276m in 1997 to R5.72m in 1998 and R8.553m in 1999 as can be seen from Table 3.

<table>
<thead>
<tr>
<th>Year</th>
<th>Medical Research Council (R)</th>
<th>National Cancer Association (R)</th>
<th>Other (R)</th>
<th>SAIMR Foundation (R)</th>
<th>Total (R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>342 050</td>
<td>114 800</td>
<td>2 739 199</td>
<td>2 080 256</td>
<td>5 276 305</td>
</tr>
<tr>
<td>1998</td>
<td>382 700</td>
<td>291 677</td>
<td>1 763 623</td>
<td>3 298 000</td>
<td>5 720 900</td>
</tr>
<tr>
<td>1999</td>
<td>542 764</td>
<td>171 937</td>
<td>2 913 065</td>
<td>4 925 555</td>
<td>8 553 321</td>
</tr>
<tr>
<td>2000*</td>
<td>393 300</td>
<td>164 550</td>
<td>2 374 871</td>
<td>2 755 712</td>
<td>5 687 933</td>
</tr>
</tbody>
</table>

* Allocations for 2000 are not yet complete. There are multi-year research awards of over R10m that have not been reflected in the year 2000 and onwards.

The health research areas that are benefiting from the SAIMR Foundation’s contribution are many, including diseases like malaria, diabetes, TB, STDs, pneumocystis and other respiratory infections plus several cancers including oesophageal, breast, liver, uterus and cervix. Research into the R&D of chemistry diagnostics, haematology, immunology and genetics are also supported.

The SAIMR and the Wits Health Consortium have recently entered into an agreement that will establish a laboratory to support clinical trails. This is a University initiative that is benefiting from the synergy with the substantial resources of the SAIMR.

**National Institute for Virology (NIV)**

The NIV is a component of the national Department of Health and is funded directly from the budget of the nDoH. It essentially provides a reference laboratory for diagnosis of viral diseases. The staff of the NIV are involved in monitoring and researching a variety of conditions and provide support not only
to South Africa but to the rest of Africa too. The Institute is linked to the University of the Witwatersrand. There are five main areas of research activity linked to the service functions:

1. HIV/AIDS. There is a research programme linked to the monitoring of the strains of the virus. The NIV is part of the vaccine development collaborative effort in the country.

2. Special pathogens. This unit is involved in research that is linked to the intervention programmes in respect of viral haemorrhagic fevers, arboviruses (linked to which is research into the *Aedes* sp. of mosquitoes and *Simulium* sp. of ticks) and formidable viral infections.

3. Molecular virology. The NIV is a WHO polio diagnosis reference centre. It is also a reference centre for influenza, measles and hepatitis viruses.

4. Virus detection. This unit is linked to a serology service, together with which the NIV provides a diagnostic service for the full spectrum of viral illnesses.

5. Surveillance. Public health issues are monitored from the results of the NIV specimen tests and from several other sentinel sites.

Researchers in the NIV published 35 original articles in scientific journals in 1998.

**National Centre for Occupational Health (NCOH)**

The NCOH, like the NIV, is a component of the national Department of Health and is funded directly from the budget of the nDoH. It provides a reference laboratory for diagnosis of occupational illness. The Centre is linked to the University of the Witwatersrand. Although NCOH is very service orientated, and has played a major role in the management of asbestosis, researchers are busy with 38 current research projects related to the service functions.

A major piece of applied research was completed in 1998/99 that resulted in the acceptance of 16 occupational health indicators. After the identification of these indicators the NCOH commenced with the collection of data and will compile regular reports in the Surveillance of Work Related and Occupational Respiratory Diseases (SORDSA).

Researchers published 66 original articles in scientific journals in 1998.

**Other Science Councils and the Innovation Fund**

A few of the other science councils are involved in health research. It is, however, often difficult to know where research can be classified as “health research” and where it is research into the social sciences and humanities that has a direct impact on health. The Council for Scientific and Industrial Research (CSIR), the Human Sciences Research Council (HSRC), the Agricultural Research Council (ARC) and the National Research Foundation (NRF) in particular are engaged in research that is very closely allied to health interests. The CSIR indicates a figure of R1.5 million spent on health research. This may be as large as R50m, and even R150m if the human health-related research and development activities such as food research, biotechnology and indigenous medicines are included. The CSIR is, for instance, involved in vaccine development research and may well be involved in the development and manufacture of human vaccines in the near future. The CSIR has been restructured and each division has to generate 70% of its operating budget from its activities as a business centre. Technologies that are developed are “grown” at “incubator sites” by establishing fledgling businesses and nurturing their development until they can move into the competitive market. This has encouraged the move to more appropriate and applied research.
Similarly the HSRC indicates a figure of R1.9 million on health research that would be substantially
more if one included all its human health-related research.

The NRF funds research and bursaries in the biological sciences in higher education institutions
(HEIs), including health research. The research funded through this source is generally of a more “blue-
sky” nature (very esoteric) rather than the applied and clinical health research that the other Councils
favour. The NRF has a Health Research Division that will undertake agency funding of health research.
There is potential for an overlap of functions with the MRC. The NRF’s mission is directed at education
and capacity building, whereas that of the MRC is directed at improving the health status of the nation
through quality health research.

Table 4: Allocations by the Science Councils to health research in 1999

<table>
<thead>
<tr>
<th>Science Council</th>
<th>(R) million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Research Council</td>
<td>2.7</td>
</tr>
<tr>
<td>Council for Science and Industrial Research</td>
<td>1.5</td>
</tr>
<tr>
<td>Council for Geosciences</td>
<td>0</td>
</tr>
<tr>
<td>Health Sciences Research Council</td>
<td>1.9</td>
</tr>
<tr>
<td>Mintek</td>
<td>0</td>
</tr>
<tr>
<td>Medical Research Council</td>
<td>102.0</td>
</tr>
<tr>
<td>National Research Fund</td>
<td>6.6</td>
</tr>
<tr>
<td>South African Bureau of Standards</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Institutions as above

The National Advisory Council on Innovation (NACI) was formed in 1998 to advise the Minister of
Arts, Culture, Science and Technology on matters pertaining to the National System of Innovation,
especially the eight Science Councils. Currently NACI is investigating the current state of science and
technology funding in South Africa. Hitherto, the proportions of funding for different sectors have been
based largely upon historical practices, with the Agricultural Research Council (ARC) and the Council
for Science and Industrial Research (CSIR) receiving the lion’s share (R250m and about R24m respectively
in 1999 compared with R76m for the Medical Research Council (MRC)).

More and more of DACST’s science “core budget” has been “top-sliced” over the past 2 years and
used to fund a competitive resource pool called the Innovation Fund. The aim of this was to force
abolution and the introduction of a Trans-disciplinary and intersectoral approach by calling for pro-
posals from consortia to deliver specific research and technology products in the science and development
area. A sum of R30 million was allocated to this fund in 1998 and R45m in 1999. The target is to
commit 25% of the DACST science allocation (R350m) in this fund over the next few years until only
60% remains in the “core budget” for direct allocations to the eight Councils. All Science Councils are
therefore being constrained through this financial lever and are forced to prune their unproductive and
uncompetitive research units in favour of developing the high performance sectors.

The IF strategy seems to have worked well. Several of the Science Councils have undergone quite
drastic “rightsizing” over the past two years and there is an increase in high quality applications to the IF
(currently in its third round).
Higher Education Institutions

The definition of a Higher Education Institution (HEI) is captured in the Higher Education Act. It includes all universities, colleges and technikons.

In South Africa, HEIs, as is the case in most countries, produce the bulk of health research in terms of publications. Most of the publications come from the eight medical schools. Often the research activity is funded through agency monies or through research units that agencies have established within the HEIs (such as the MRC research units listed in Table 2).

Most university research is funded by the Department of Education, either through the university subsidy, used to pay for infrastructure and grants, or indirectly through SAPSE (South African Post School Education - the university and technikon information system), the quota that the national Department of Education (DoE) allocates per student or per publication to the universities for research. In total the government spends R4.2 billion of its R7.37 billion budget for HEIs on research. It is not clear how much of the SAPSE allocations are actually spent on research and it is likely that in the future the DoE will call for much stricter auditing and control of how these funds are spent. The total subsidy from the DoE to HEIs for 1999/00 is R6 550 225.

The majority of the Technikons are still awaiting the implementation of a Research Development Programme so that they can complete the development of their health research agendas. Only one of the Science Councils, the National Research Foundation (NRF) contributes substantially towards health research at Technikons. In 1998 the NRF granted research awards to rated researchers in the 8 Technikons to the value of R1 771 240. Of this total, less than 10% (R144 630) was made available to the historically disadvantaged institutions. Cape Technikon spends R245 000 on health research and Wits Technikon R300 000.

The Medical Research Council has plans to fund health research in Technikons and Nursing Colleges.

National and Provincial Departments of Health

Most of the Directorates of the National Department of Health (nDoH) commission research in one form or another, either through the MRC (by virtue of the MRC Act) or through a tender process to universities, NGOs and private companies. The nDoH also funds research in the National Institute of Virology and the National Centre for Occupational Health which have been mentioned already.

Many of the research activities of nDoH are co-ordinated through its Directorate: Health Information and Epidemiology, which is also responsible for overseeing the prioritisation of the MRC's research activities (which have to be approved annually by the Minister of Health), and the regular disbursement of the DACST science allocation to the MRC. This Directorate is also likely to play a major role in the newly formed ENHR Committee.

It is estimated that the Department of Health spent R55.6m on research projects in 1997/98. This is approximately 10.8% of the nDoH budget (or 7.2% if the NIV and NCOH are accounted for separately).
### Table 5: National Department of Health contribution to research 1997/98

<table>
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<th>SOURCE</th>
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<td>Directorates estimates (n=7)</td>
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<td>Research Institutes</td>
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<td>- NIV</td>
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<td>- State Vaccine Institute</td>
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<td>- NCOH</td>
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<td>Department additional estimates</td>
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<td><strong>TOTAL</strong></td>
<td><strong>55.6m</strong></td>
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Provincial departments have been active in establishing committees to review and manage research in the respective provinces. There are six provinces that have functional committees (Northern Province, Eastern Cape, North West, Mpumalanga, Gauteng and the Northern Cape). Some of these committees have already completed the development of research priorities for their provinces.

Most provincial governments do not have accurate figures of their allocations to health research and it is difficult to distinguish between research and operational improvements in the provincial services. However, Free State has allocated R750 000 this year (mostly sourced from donor funds) and Northern Province has committed R640 000 to research. Northern Cape has allocated R100 000 and has entered into agreements with University of Oxford and the MRC to conduct specific research. Provincial health departments have been terminating funding of research posts in the light of increased budgetary demands in other healthcare sectors, causing severe difficulties for many university research departments.

**Private Sector**

The Pharmacy Info Guide published in 1998 reveals that approximately 96 pharmaceutical companies operate in South Africa. These belong to three significant Associations, namely the Pharmaceutical Manufacturers Association (PMA), the National Association of Pharmaceutical Manufacturers (NAPM) and the National Association of Pharmaceutical Wholesalers.

The pharmaceutical industry is a very substantial player in the private sector in South Africa. However there is very little original drug discovery or development taking place in the country. Most of the Research and Development activities are usually undertaken by the parent companies abroad. Most pharmaceutical company “research expenditure” in South Africa is in clinical trials, some of them part of larger multinational trials. Some would argue that many of the smaller (GP-based) studies are in fact marketing strategies designed to habituate the prescribing physician to the use of a particular drug. They are often part of the “post-marketing surveillance” that regulatory authorities such as the Food and Drug Administration (FDA) insist upon nowadays. They also provide an opportunity to assess the performance of “me-too” drugs in the field (drugs that differ little from the parent compound but are able to circumvent the patent rights on the parent compound).
According to the survey that was conducted in 1996 by the Pharmaceutical Manufacturer’s Association (PMA), the pharmaceutical industry spent approximately R425 million on health research in South Africa in 1996. This figure is based on extrapolation from responses from 50% of the PMA’s members.

**Non-governmental organisations**

Despite the thousands of NGOs in South Africa, many of which are involved in health issues, only a few actually undertake or fund health research. This may reflect the feeling that it is a luxury to question, test and validate the interventions.

The only major funders of health research among NGOs include the Health Systems Trust (HST) and the National Progressive Primary Health Care Network (NPPHCN).

The Health Systems Trust (HST) spent R8.66 million on research in 1998, the rest of its R18.76 million income for that year being spent on its Initiative for Sub-district Support (ISDS) (R6.01 million) and other health development activities. The NPPHCN over a 3-year period (from 1997 to 1999) spent R18.8 million on health research and development.

One other major NGO’s active in health research is the Community Agency for Social Enquiry (CASE). CASE often performs contract research that it tenders for from Government.

**International funding and support for health research**

South Africa has been receiving donor funding since the mid-1980s. Following the 1994 elections there has been a significant increase in development aid (grants and technical assistance) of about US$3.8 billion by 1997 (Department of Finance 1997). Somewhere between US$230 and 250 million has been spent by international agencies in the South African health sector over the past 5 years.

Besides the United Nations agencies (UNFPA, UNICEF, UNDP, UNAIDS and the WHO), major foreign country donors to the health sector include the European Union (EU), the UK’s Department for International Development (DFID) and the United States Aid Agency (USAID), the Japanese International Co-operation Agency (JICA) and Scandinavian countries. Philanthropic donors include the Henry J Kaiser Family Foundation, the Glaxo Wellcome Trust and the WK Kellogg Foundation. Over the years donors have shifted from operating largely within a non-governmental based framework to bilateral channels with South African government departments.

South Africa and the EU have a bilateral agreement where EU donor funds are channelled through the European Programme for Reconstruction under the management of the European Investment Bank. The EU contributes an annual figure of 125 million ECU towards the programme.

Between 1996 and 1999 the EU supported 37 projects in health research co-ordination and health research, with a total expenditure of $US23 million. Five of these projects were in the field of HIV/AIDS research, with a total expenditure of $US11.5 million. The EU, like USAID and DFID works closely within the policy frameworks and priorities established by the Government.
USAID has been in operation in South Africa since the opening of its country office in 1985. Between 1985 and 1993 the US government disbursed US$338 million to South African organisations. Current funding is set within frameworks agreed at the bi-annual USA/South Africa Bi-national meetings. Currently the portion of this funding that is spent on health research is being directed to primarily three interrelated activities within the HIV/AIDS arena.

A significant portion of this transition support funding has been used for health research and health research aiding activities, such as capacity building and technical assistance. The Department of Finance ensures the overall planning and co-ordination of donor aid and DACST and the nDoH play roles in formulating policies and practices for the use of foreign donor aid for health research.

South Africa is an attractive site for global health research investment because:

- there are good telecommunications, transport and financial sectors infrastructure
- there are well developed Higher Education Institutions, with islands of world class research within them
- there is large burden of disease on which to conduct research
- there is a good drug regulatory framework which is being rapidly expanded
- there are fairly low levels of corruption and fairly good systems of medical ethics.

It is possible to obtain development aid for joint projects between South Africa and other African countries that qualify for aid because South Africa can often provide the technical assistance or training for such projects. Examples of such synergy are the “Afroimplement Project” of the European Union (EU) (health systems research) and the “Mapping Malaria in Africa” (MARA) project where the MRC provides training and expertise in malaria research to other sub-Saharan countries.

No clear figures are available on donor funded health research.

**Monitoring Outputs**

It is extremely difficult to measure the impact of the research that is being conducted. The only directly measurable outputs of research are the papers that are presented at conferences and that are published in journals. The South African health research community produces approximately 3,000 publications in international health and related publications annually, of which 1,500 are peer reviewed, index-linked publications.

One other measurable indicator of research activity is the numbers of people engaged in post-graduate studies. The figures for all HEIs were not available at the time of writing this chapter.
Conclusions

Health research in South Africa is still unco-ordinated. The establishment of the ENHR Committee could go a long way towards improving the co-ordination, ensuring greater efficiency, quality and relevance of public and private sector health research activities. It could also potentially ensure that standards are maintained and that ethics are upheld.

There is an urgent need for ongoing audit and monitoring of health research activities and resource flows.

The ENHR Committee will have an initial task of auditing current resource flows and outputs. The Committee will then be in a position to make recommendations as to appropriate priorities for government investment in health research. All role-players can then transform their research agendas accordingly. In time the powers of the ENHR Committee may be widened to encompass recommendations to the various stakeholders concerning funding allocation and to audit the outputs of research and the efficacy of translation of research results into policy and practice. Such co-ordination of health research will ensure that high quality research outputs are facilitated with a more efficient follow-through into policy formulation or technology transfer. This will enable health research in South Africa to play its part in the mission to provide better health and quality of life for all South Africans.

It is unfortunately not possible to quantify the progress that is being made. The impression, however, is that there are efforts to raise standards of research and to encourage young people to conduct appropriate health research. There is definitely an attempt to institute systems of prioritisation of health research funding and to foster inter-disciplinary collaboration and an intersectoral approach to health research. No figures are available to show whether there is a successful recruitment of black scientists into health research. It is also not clear if there is any movement to induce “Africanisation” of health research.

The CSIR has made appreciable efforts to transfer technology to commercial or sustainable operations but other institutions and Councils still have much work to do in this area. There is no clear evidence of success in the exploitation of indigenous technology from health research. Perhaps the research into traditional medicines will open new doors for the future of indigenous technology.

All health researchers are at least highly aware of “human rights” issues as a core value in health research and where appropriate most are encouraging participatory research methods and promoting a “holistic” approach to the human mind and body. There is a clear sense that researchers are aware that they have to instil greater “client orientation” in the objectives of their research so that it is possible to apply the research results to policy and practice. Without this commitment there will be no funds for the research in the future.
### Appendix 1: Standards for mental health care in South Africa

<table>
<thead>
<tr>
<th>No</th>
<th>Standard</th>
<th>Description</th>
</tr>
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<tr>
<td>1.</td>
<td>Rights and legal protection</td>
<td>The rights and legal status of people affected by severe psychiatric conditions (SPCs) are upheld by services within the ethos of care, equity and respect for human rights</td>
</tr>
<tr>
<td>2.</td>
<td>Safety and risk management</td>
<td>The services’ activities and environment are safe for users, care-givers, providers and the community</td>
</tr>
<tr>
<td>3.</td>
<td>Access</td>
<td>The services are accessible to the population of the district or catchment area, and users with severe psychiatric conditions in particular</td>
</tr>
<tr>
<td>4.</td>
<td>Confidentiality and privacy</td>
<td>The services ensure confidentiality and seek optimum privacy for users with SPCs and their care-givers</td>
</tr>
<tr>
<td>5.</td>
<td>Personal interaction and relationships</td>
<td>The services promote and provide care for users, which is based upon humane and respectful interaction and relationships and the need for social integration and support</td>
</tr>
<tr>
<td>6.</td>
<td>Treatment and support environments</td>
<td>The environment and structure in which treatment and support occurs should promote mental health goals, community integration and service accessibility</td>
</tr>
<tr>
<td>7.</td>
<td>User and care-giver participation</td>
<td>Users and care-givers should be involved in the planning, implementation and when possible, the evaluation of their treatment and the services</td>
</tr>
<tr>
<td>8.</td>
<td>Community participation and development</td>
<td>The service promotes community participation and development that benefits and addresses the needs of users and their care-givers</td>
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<td>9.</td>
<td>Community living</td>
<td>The service emphasises and facilitates the ongoing living, support, care and empowerment of users and their care-givers in the community</td>
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<tr>
<td>10.</td>
<td>Mental health and promotion</td>
<td>The services work with users, care-givers, providers and the community to promote positive and informed awareness of severe psychiatric conditions, reduce disabling and stigmatising practices, and provide prevention, early detection and care of SPCs and its associated impairments</td>
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<tr>
<td>11.</td>
<td>Language, culture and context</td>
<td>The services strive to ensure equity and acceptability through the prioritisation of language, and culturally and contextually sensitive practices to users, their care-givers and communities</td>
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<td>12.</td>
<td>Resource management and affordability</td>
<td>The services seek to offer acceptable and equitable mental health services to users with the best utilisation of available resources, and in the most cost-effective manner</td>
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<tr>
<td>13.</td>
<td>Service management and development</td>
<td>The policy, structure and management processes of the health services facilitates the delivery of the best possible care for users in all health care levels and settings</td>
</tr>
<tr>
<td>14.</td>
<td>Documentation</td>
<td>There is accurate documentation of clinical information to assist with the delivery of care, management of services and public education for users</td>
</tr>
<tr>
<td>15.</td>
<td>Provider training and support</td>
<td>Providers are adequately trained, supported and supervised in order to offer the best possible care to users and care-givers</td>
</tr>
<tr>
<td>16.</td>
<td>Entry or admission</td>
<td>The process of entry or admission into the services occurs at the appropriate care level in and accessible, timely and rights-sensitive manner</td>
</tr>
<tr>
<td>17.</td>
<td>Emergency care</td>
<td>The services ensure that users have access to the acceptable emergency mental health care in a range of care settings</td>
</tr>
<tr>
<td>18.</td>
<td>Screening, assessment and review</td>
<td>All users are screened for severe psychiatric conditions, and users receive a comprehensive timely socio-culturally sensitive and accurate assessment and regular review of progress</td>
</tr>
<tr>
<td>No</td>
<td>Standard</td>
<td>Description</td>
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<td>----</td>
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<tr>
<td>19</td>
<td>Treatment, care and therapies</td>
<td>Treatment, care and therapies are provided in a manner that promotes efficacy, participation, safety and maximum possible quality of life for users</td>
</tr>
<tr>
<td>20</td>
<td>Medication and other technologies</td>
<td>These are provided in a manner which promotes efficacy, choice (within the available range), safety and maximum possible quality of life for users with severe psychiatric conditions</td>
</tr>
<tr>
<td>21</td>
<td>Psycho-social rehabilitation</td>
<td>This is provided as an integral component of all types and levels of service provision, and promotes their highest level of personal and economic independence, self esteem and quality of life for users and care-givers</td>
</tr>
<tr>
<td>22</td>
<td>Discharge and re-admission</td>
<td>Users and care-givers are assisted in planning for discharge to ensure that ongoing follow-up is available if required. Re-admission into the services is appropriately accessible and available to users</td>
</tr>
<tr>
<td>23</td>
<td>Hospital Care</td>
<td>The service ensures users' access to adequate, safe and non-discriminatory hospitals, which seek to maintain and restore functioning and promote re-integration into the community</td>
</tr>
<tr>
<td>24</td>
<td>Community clinics and community health centres</td>
<td>The services offer comprehensive and where appropriate, specialist care and support for severe psychiatric conditions at integrated primary health clinics and community health centres</td>
</tr>
<tr>
<td>25</td>
<td>Supported accommodation and group homes</td>
<td>Supported accommodation is provided in a manner which promotes choice, safety and maximum quality of life for the user</td>
</tr>
</tbody>
</table>
## References

### Chapter 1


### Chapter 2

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Chapter 12


Chapter 14


Chapter 16

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Note:

For all references containing web site addresses (URLs) the location of documents or the website address may change from time to time.

If a page is not found:

- try going back to the home page of the site (usually the first part of the URL),
- make use of a search engine, or
- refer to the electronic SAHR at www.hst.org.za.

Note that some URLs are case sensitive.
# Health and Related Indicators

## Demography by Province

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</tbody>
</table>

Notes:

- **a** Although the population figures do not add up to the total given, they are quoted directly from source.
- **b** Annual Population Growth Rate: the rate at which the population is increasing or decreasing in a given year expressed as a percentage of the base population size. It takes in all the components of population growth, namely births, deaths and migration. For a gender disaggregated exponential growth model see Statistics SA (http://www.statssa.gov.za/releases/demograp/99/p0302.htm)
- **c** Crude death rate: number of deaths in a year/population at mid-year per 1 000 population
- **d** Total fertility rate: the average number of children that a woman gives birth to in her lifetime, assuming that the prevailing rates remain unchanged.
- **e** Teenage birth rate: the total number of live births per annum to women younger than 20 years (expressed here as a percentage).
## Socio-Economic Indicators by province

<table>
<thead>
<tr>
<th>Area as a % of total area of South Africa</th>
<th>Eastern Cape</th>
<th>Free State</th>
<th>Gauteng</th>
<th>KwaZulu-Natal</th>
<th>Mpumalanga</th>
<th>Northern Cape</th>
<th>Northern Province</th>
<th>North West</th>
<th>Western Cape</th>
<th>Average/Total</th>
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<td>Age dependency ratio</td>
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<td>Per capita income (Rands)</td>
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<td>2419</td>
<td>4992</td>
<td>1910</td>
<td>2164</td>
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<td>725</td>
<td>1789</td>
<td>4188</td>
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<td>% households with piped water</td>
<td>1996¹</td>
<td>53.4</td>
<td>94.0</td>
<td>96.0</td>
<td>66.3</td>
<td>82.2</td>
<td>91.2</td>
<td>75.5</td>
<td>81.4</td>
<td>96.8</td>
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<tr>
<td>% households with no toilet</td>
<td>1996¹</td>
<td>28.9</td>
<td>8.8</td>
<td>2.5</td>
<td>15.1</td>
<td>8.6</td>
<td>10.6</td>
<td>21.1</td>
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<td>5.4</td>
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<tr>
<td>% households using electricity for cooking</td>
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<td>31.7</td>
<td>57.1</td>
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<td>53.5</td>
<td>56.6</td>
<td>70.7</td>
<td>36.6</td>
<td>44.1</td>
<td>85.2</td>
</tr>
<tr>
<td>% households with telephone</td>
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<td>23.0</td>
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<td>18.3</td>
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<td>7.5</td>
<td>16.5</td>
<td>55.4</td>
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</table>

Notes:
- f People aged 20 years and more with no schooling or with some primary schooling are illiterate.
- g Labour dependency ratio: the number of people supported by every member of the labour force excluding him or herself.
- h Age dependency ratio: the ratio of the combined child population (0-14 years) and the aged population (65 years and over) to the intermediate age population (15-65 years).
# Health Status Indicators by province

## MORTALITY

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Province</th>
<th>Eastern Cape</th>
<th>Free State</th>
<th>Gauteng</th>
<th>KwaZulu-Natal</th>
<th>Mpumalanga</th>
<th>Northern Cape</th>
<th>Northern Province</th>
<th>North West</th>
<th>Western Cape</th>
<th>Average/Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant mortality rate (per 1 000 live births)</td>
<td>1998</td>
<td>61.2</td>
<td>50.5</td>
<td>36.3</td>
<td>36.8</td>
<td>37.2</td>
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<td>Under 5 mortality rate (per 1 000 live births)</td>
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<td>74.5</td>
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<tr>
<td>Maternal mortality ratio (per 100 000 live births)</td>
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<td>*</td>
<td>*</td>
<td>*</td>
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## MORBIDITY

### Communicable Diseases

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<th>Mpumalanga</th>
<th>Northern Cape</th>
<th>Northern Province</th>
<th>North West</th>
<th>Western Cape</th>
<th>Average/Total</th>
</tr>
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<tbody>
<tr>
<td>HIV prevalence (%) (antenatal)</td>
<td>1998</td>
<td>15.9</td>
<td>22.8</td>
<td>22.5</td>
<td>32.5</td>
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<td>Syphilis prevalence rate (%) (antenatal)</td>
<td>1998</td>
<td>17.5</td>
<td>10.8</td>
<td>16.2</td>
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<td>11.0</td>
<td>4.7</td>
<td>17.6</td>
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<tr>
<td>Reported cases of TB (per 100 000)</td>
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<td>245.0</td>
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<td>110.0</td>
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<td>7.8</td>
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</tbody>
</table>

Notes:
- **i** Infant mortality rate: the number of children less than one year old who die in a year, per 1 000 live births during that year.
- **j** Under 5 mortality rate: the number of children under 5 years old who die in a year, per 1 000 live births during that year.
- **k** Maternal mortality ratio: the number of women who die as a result of childbearing or within 42 days of termination of pregnancy in one year, per 100 000 live births during that year.
## Health Status Indicators continued

<table>
<thead>
<tr>
<th></th>
<th>Eastern Cape</th>
<th>Free State</th>
<th>Gauteng</th>
<th>KwaZulu-Natal</th>
<th>Mpumalanga</th>
<th>Northern Cape</th>
<th>Northern Province</th>
<th>North West</th>
<th>Western Cape</th>
<th>Average/Total</th>
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<tr>
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Notes:  
2. Stunting: height for age under 2 standard deviations from the norm.  
3. Under-weight: weight for age under 2 standard deviations from the norm.
Health Status Indicators continued

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<thead>
<tr>
<th>Indicator</th>
<th>Eastern Cape</th>
<th>Free State</th>
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<td>% clinics with health promotion services every week day</td>
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<td>57.0</td>
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<td>% facilities with functioning community participation services</td>
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<td>% households with medical care &lt; 5 kms away</td>
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<td>% PHC facilities with access to 24 hr communication system</td>
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<td>% clinics with emergency response shorter than 1 hour</td>
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### Health Status Indicators continued

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# Demographic Indicators by population group

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<th>Indian</th>
<th>White</th>
<th>Other/Unstated</th>
<th>South African</th>
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<td>1996**</td>
<td>31 127 631</td>
<td>3 600 446</td>
<td>1 045 596</td>
<td>4 434 697</td>
<td>375 204</td>
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<td>1998**</td>
<td>32 449 200</td>
<td>3 721 000</td>
<td>1 074 900</td>
<td>4 500 400</td>
<td>385 100</td>
<td>42 130 500</td>
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<td>33 239 879</td>
<td>3 792 361</td>
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<td>4 538 727</td>
<td>390 815</td>
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<table>
<thead>
<tr>
<th>Population group as a % of total population</th>
<th>1996</th>
<th>1998</th>
<th>1999</th>
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<td>African</td>
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<table>
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<th>Annual population growth rate*</th>
<th>1994</th>
<th>1991 – 1996*</th>
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<th>Crude death rate p</th>
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<th>1991 – 1996*</th>
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<td>7.2</td>
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<tr>
<td>1991 – 1996*</td>
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<table>
<thead>
<tr>
<th>Total fertility rate q</th>
<th>1991*</th>
<th>1998*</th>
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<tr>
<td>1998*</td>
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<td>2.4</td>
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<table>
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<th>Teenage birth rate r</th>
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<th>1998*</th>
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<tr>
<td>1998*</td>
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<td>15.7</td>
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<thead>
<tr>
<th>Average household size</th>
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<tr>
<td>1996*</td>
<td>5.3</td>
<td>4.7</td>
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</table>

Notes:
- o Annual Population Growth Rate: the rate at which the population is increasing or decreasing in a given year expressed as a percentage of the base population size. It takes in all the components of population growth, namely births, deaths and migration.
- p Crude death rate: number of deaths in a year/population at mid-year per 1 000 population.
- q Total fertility rate: the average number of children that a woman gives birth to in her lifetime, assuming that the prevailing rates remain unchanged.
- r Teenage birth rate: the total number of live births per annum to women younger than 20 years (expressed here as a percentage).
# Socio-Economic Indicators by population group

<table>
<thead>
<tr>
<th></th>
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<th>Indian</th>
<th>White</th>
<th>Other/Unstated</th>
<th>South African</th>
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<td>% Functional urbanisation</td>
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<td>91.1</td>
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<td>48.3</td>
</tr>
<tr>
<td>1996†</td>
<td>43.3</td>
<td>83.4</td>
<td>97.3</td>
<td>90.6</td>
<td></td>
<td>53.7</td>
</tr>
<tr>
<td>% Literacy rate†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991†</td>
<td>54.0</td>
<td>66.0</td>
<td>84.0</td>
<td>99.0</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>1996†</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td>66.0</td>
</tr>
<tr>
<td>Unemployment rate†</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1994†</td>
<td>41.1</td>
<td>23.3</td>
<td>17.1</td>
<td>6.4</td>
<td></td>
<td>33.0</td>
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<tr>
<td>1996†</td>
<td>42.5</td>
<td>20.9</td>
<td>12.2</td>
<td>4.6</td>
<td></td>
<td>33.9</td>
</tr>
</tbody>
</table>

* Data not available by population group

Notes:

s People aged 20 years and more with no schooling or with some primary schooling are illiterate.

t The official unemployment rate is calculated as the percentage of the economically active population which is unemployed. The unemployed are those people within the economically active population, who: a) did not work during the seven days prior to the interview, b) want to work and are available to start work within a week of the interview, and c) have taken active steps to look for work or to start some form of self-employment in the four weeks prior to the interview. The economically active population consists of both those who are employed and those who are unemployed. Its size therefore varies according to the definition of unemployment used. (http://www.statssa.gov.za/releases/demograp/94_97/notes.htm)
### Health Status Indicators by population group 1998

<table>
<thead>
<tr>
<th>Indicator</th>
<th>African</th>
<th>Coloured</th>
<th>Indian</th>
<th>White</th>
<th>Other/Unstated</th>
<th>South African</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infant mortality rate</strong> (per 1000 live births)</td>
<td>47.0</td>
<td>18.8</td>
<td>*</td>
<td>11.4</td>
<td>45.4</td>
<td></td>
</tr>
<tr>
<td><strong>Under 5 mortality rate</strong> (per 1000 live births)</td>
<td>63.6</td>
<td>28.2</td>
<td>*</td>
<td>15.3</td>
<td>59.4</td>
<td></td>
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<tr>
<td><strong>Maternal mortality ratio</strong> (per 100 000 live births)</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>150.0</td>
<td></td>
</tr>
<tr>
<td><strong>Immunisation coverage (%)</strong></td>
<td>61.8</td>
<td>74.6</td>
<td>*</td>
<td>62.7</td>
<td>63.4</td>
<td></td>
</tr>
<tr>
<td><strong>Teenage birth rate</strong> (%)</td>
<td>17.8</td>
<td>19.3</td>
<td>4.3</td>
<td>2.2</td>
<td>16.4</td>
<td></td>
</tr>
<tr>
<td><strong>Contraceptive use (%)</strong></td>
<td>58.6</td>
<td>68.8</td>
<td>80.1</td>
<td>76.2</td>
<td>62.1</td>
<td></td>
</tr>
<tr>
<td><strong>Hypertension prevalence measured (%)</strong></td>
<td>13.9</td>
<td>13.6</td>
<td>9.6</td>
<td>14.8</td>
<td>12.1</td>
<td></td>
</tr>
<tr>
<td><strong>Obesity prevalence (%)</strong></td>
<td>19.1</td>
<td>18.7</td>
<td>14.5</td>
<td>22.1</td>
<td>19.4</td>
<td></td>
</tr>
</tbody>
</table>

* Data not available by population group.

Notes:
- **u** Infant mortality rate: the number of children less than one year old who die in a year, per 1000 live births during that year.
- **v** Under 5 mortality rate: the number of children under 5 years old who die in a year, per 1000 live births during that year.
- **w** Maternal mortality ratio: the number of women who die as a result of childbirth or within 42 days of termination of pregnancy in one year, per 100 000 live births during that year.
- **x** Teenage birth rate: the total number of live births per annum to women younger than 20 years (expressed here as a percentage).
10 Extent of moderate and severe reported disability of the disability experience (CASE). Department of Health, 1999.
14 Regional Health Management Information System (RehMIS). Department of Health, 1994/95.
16 PERSAL 1998 database (Department of State Expenditure and Department of Public Service Administrator's Personnel and Establishment System database) as reported in Chapter 7 South African Health Review 1998. (Note: uses public sector dependent adjusted population)
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIC</td>
<td>African Instituted / Initiated / Independent Churches</td>
</tr>
<tr>
<td>ATR</td>
<td>African Traditional Religion</td>
</tr>
</tbody>
</table>
| BHF     | Board of Healthcare Funders  
|         | [http://www.bhf.co.za](http://www.bhf.co.za) |
| BT      | Bekimpilo Trust |
| CATHCA  | Catholic Health Care |
| CCMA    | Commission for Conciliation, Mediation and Arbitration  
| CGE     | Commission on Gender Equality  
| CERSA   | Centre for Epidemiological Research in South Africa |
| CHESS   | Centre for Health and Social Studies (based at the University of Natal) |
| CME     | Continuing Medical Education |
| CMF     | Christian Medical Fellowship |
| COHSASA | Council for Health Service Accreditation of Southern Africa |
| COIDA   | Compensation for Occupational Injuries and Diseases Act, No 130 of 1993  
| COMED   | Co-ordinating Committee for Medical Procurement |
| COPD    | Chronic Obstructive Pulmonary Disease |
| CPD     | Continuing Professional Development |
| CPI     | Consumer Price Index  
|         | [http://www.statssa.gov.za/Economic
dicators/Economic.htm](http://www.statssa.gov.za/Economic
dicators/Economic.htm) |
| CPSA    | Church of the Province of SA  
| DACST   | Department of Arts, Culture, Science and Technology  
<p>| DENOSA  | Democratic Nursing Organisation of South Africa |
| DEPAM   | Decentralised Education Programme on Advanced Midwifery |
| DER     | District Expenditure Review |
| DFC     | District Financing Committee |
| DHA     | District Health Authority |
| DHER    | District Health Expenditure Review |
| DHS     | District Health System |
| DHSC    | District Health Systems Committee |
| DIB     | Demographic Information Bureau |
| DMT     | District Management Team |</p>
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>DoF</td>
<td>Department of Finance</td>
</tr>
<tr>
<td>DoH</td>
<td>Department of Health</td>
</tr>
<tr>
<td>DOT</td>
<td>Directly Observed Treatment</td>
</tr>
<tr>
<td>DOTS</td>
<td>Directly Observed Treatment, short course</td>
</tr>
<tr>
<td>DPSA</td>
<td>Department of Public Service and Administration</td>
</tr>
<tr>
<td>DRC</td>
<td>Dutch Reformed Church</td>
</tr>
<tr>
<td>EAP</td>
<td>Economically Active Population</td>
</tr>
<tr>
<td>EDL</td>
<td>Essential Drugs List</td>
</tr>
<tr>
<td>EHO</td>
<td>Environmental Health Officer</td>
</tr>
<tr>
<td>EMS</td>
<td>Emergency Medical Services</td>
</tr>
<tr>
<td>ENHR</td>
<td>Essential National Health Research</td>
</tr>
<tr>
<td>EPI</td>
<td>Expanded Programme of Immunisation</td>
</tr>
<tr>
<td>EXCO</td>
<td>Executive Council</td>
</tr>
<tr>
<td>FBO</td>
<td>Faith Based Organisation</td>
</tr>
<tr>
<td>FDA</td>
<td>Food and Drug Administration (US)</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus Group Discussion</td>
</tr>
<tr>
<td>GAAP</td>
<td>Government AIDS Action Plan</td>
</tr>
<tr>
<td>GEAR</td>
<td>Growth, Employment and Redistribution</td>
</tr>
<tr>
<td>HAST</td>
<td>HIV/AIDS, STDs and TB (training module)</td>
</tr>
<tr>
<td>Hb A₁c</td>
<td>Glycosylated Haemoglobin</td>
</tr>
<tr>
<td>HERTT</td>
<td>Health Expenditure Review Task Team</td>
</tr>
<tr>
<td>HIS</td>
<td>Health Information System</td>
</tr>
<tr>
<td>HISP</td>
<td>Health Information System Programme</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>HOSPERSA</td>
<td>Hospital Personnel Association of South Africa</td>
</tr>
<tr>
<td>HPC</td>
<td>Health Professions Council</td>
</tr>
<tr>
<td>HR</td>
<td>Human Resources</td>
</tr>
<tr>
<td>ICC</td>
<td>Interim Co-ordinating Committee</td>
</tr>
<tr>
<td>IES</td>
<td>Income and Expenditure Survey</td>
</tr>
<tr>
<td>IFCC</td>
<td>International Federation of Christian Churches</td>
</tr>
<tr>
<td></td>
<td>1995 survey carried out by Statistics SA</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organisation</td>
</tr>
<tr>
<td>IMA</td>
<td>Islamic Medical Association</td>
</tr>
<tr>
<td>IMCI</td>
<td>Integrated Management of Childhood Illness</td>
</tr>
<tr>
<td>IMR</td>
<td>Infant Mortality Rate</td>
</tr>
<tr>
<td>IP</td>
<td>In-patient</td>
</tr>
<tr>
<td>IPA</td>
<td>Independent Practitioner Association</td>
</tr>
<tr>
<td>IPU</td>
<td>Impendle, Pholela, Underberg (district in KwaZulu-Natal)</td>
</tr>
<tr>
<td>ISB</td>
<td>Institute for the Study of the Bible (based at the University of Natal, Pietermaritzburg)</td>
</tr>
<tr>
<td>JUDASA</td>
<td>Junior Doctors’ Association of SA</td>
</tr>
<tr>
<td>LA</td>
<td>Local Authority</td>
</tr>
<tr>
<td>LAN</td>
<td>Local Area Network</td>
</tr>
<tr>
<td>LG</td>
<td>Local Government</td>
</tr>
<tr>
<td>LRA</td>
<td>Labour Relations Act, No 66 of 1995</td>
</tr>
<tr>
<td>LSDS</td>
<td>(Project for) Living Standards and Development</td>
</tr>
<tr>
<td>MASA (now SAMA)</td>
<td>Medical Association of South Africa</td>
</tr>
<tr>
<td>MBChB</td>
<td>Bachelor of Medicine and Bachelor of Surgery (SA medical degree)</td>
</tr>
<tr>
<td>MBOD</td>
<td>Medical Bureau for Occupational Diseases</td>
</tr>
<tr>
<td>MCHRD</td>
<td>Ministerial Committee on Human Resource Development</td>
</tr>
<tr>
<td>MCWH</td>
<td>Maternal, Child and Women’s Health</td>
</tr>
<tr>
<td>MDB</td>
<td>Municipal Demarcation Board</td>
</tr>
<tr>
<td>MDR TB</td>
<td>Multi-drug Resistant Tuberculosis</td>
</tr>
<tr>
<td>MDU</td>
<td>Minimum Data Unit</td>
</tr>
<tr>
<td>MEC</td>
<td>Member of Executive Council</td>
</tr>
<tr>
<td>MEDUNSA</td>
<td>Medical University of South Africa</td>
</tr>
<tr>
<td>MHSA</td>
<td>Mine Health and Safety Act</td>
</tr>
<tr>
<td>MINMEC</td>
<td>Ministerial Forum</td>
</tr>
<tr>
<td>MRC</td>
<td>Medical Research Council</td>
</tr>
<tr>
<td>MTEF</td>
<td>Medium Term Expenditure Framework</td>
</tr>
<tr>
<td>NAHEPGRO</td>
<td>National Alliance of Health Provider’s Group</td>
</tr>
<tr>
<td>NAPM</td>
<td>National Association of Pharmaceutical Manufacturers</td>
</tr>
<tr>
<td>NCOH</td>
<td>National Centre for Occupational Health</td>
</tr>
<tr>
<td>NEDLAC</td>
<td>National Economic Development and Labour Council</td>
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</tbody>
</table>

**MINMEC**

These are sectorally-based meetings of national ministers and provincial MECs, established to promote co-operation, coordination and communication between the national departments and their provincial counterparts. MINMECs comprise a national minister and members of the executive council (MECs) in each of the provinces, e.g. the Minister of Finance together with the MECs for finance in each of the provinces. [http://www.gov.za/reports/prc98/chap2.htm](http://www.gov.za/reports/prc98/chap2.htm)
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<tr>
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<th>full name</th>
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<tr>
<td>NEHAWU</td>
<td>National Education, Health and Allied Workers Union</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Government Organisation</td>
</tr>
<tr>
<td>NHA</td>
<td>National Health Accounts</td>
</tr>
<tr>
<td>NHIS/SA</td>
<td>National Health Information System of SA</td>
</tr>
</tbody>
</table>
| NIV         | National Institute for Virology  
http://www.niv.ac.za |
| NMSS        | National Non-natural Mortality Surveillance System |
| NMTTS       | Ngwaritsi-Makhudu-Thamaga-Tubatse-Steelpoort (district in the Northern Province) |
| NOSA        | National Occupational Safety Association |
| NPPHCN      | National Progressive Primary Health Care Network |
| ODMWA       | Occupational Diseases in Mines & Works Act, 1973 |
| OHS         | October Household Survey  
Demographic survey published by Statistics SA  
| OHSA        | Occupational Health and Safety Act, No 85 of 1993  
| OPD         | Outpatients Department |
| PAH         | Provincial-aided Hospital |
| PAHF        | Provincial-aided Health Facilities |
| PEP         | Perinatal Education Programme |
| PGVT        | Post-graduate Vocational Training |
| PHAST       | Participatory Hygiene and Sanitation Transformation |
| PHC         | Primary Health Care |
| PHO         | Physician Hospital Organisation |
| PHRC        | Provincial Health Restructuring Committee |
| PMA         | Pharmaceutical Manufacturers Association |
| PPMS        | Personnel Performance Management |
| PSA         | Public Servants’ Association |
| PSCBC       | Public Sector Co-ordinating Bargaining Council |
| PSNP        | Primary School Nutrition Programme |
| PTB         | Pulmonary Tuberculosis |
| PTC         | Pharmacy & Therapeutic Committee |
| PWA         | People living With HIV/AIDS |
| RAMS (now BHF) | Representative Association of Medical Schemes |
| RAP         | Religious AIDS Programme |
| RICSA       | Research Institute on Christianity in South Africa  
http://www.ricsa.org.za |
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>RTHC</td>
<td>Road to Health Chart</td>
</tr>
<tr>
<td>RWOPS</td>
<td>Remunerative Work Outside the Public Sector</td>
</tr>
<tr>
<td>SA</td>
<td>South Africa / South African</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>SAIMR</td>
<td>South African Institute for Medical Research</td>
</tr>
<tr>
<td>SAMA</td>
<td>South African Medical Association [<a href="http://www.samedical.org">http://www.samedical.org</a>]</td>
</tr>
<tr>
<td>SAMCC</td>
<td>South African Managed Care Coalition / Co-operative [<a href="http://www.samcc.co.za">http://www.samcc.co.za</a>]</td>
</tr>
<tr>
<td>SAMMDRA</td>
<td>South African Medicines and Medical Devices Regulatory Authority Act, No 132 of 1998</td>
</tr>
<tr>
<td>SANDF</td>
<td>South African National Defence Force</td>
</tr>
<tr>
<td>SANGOCO</td>
<td>South African NGO Coalition</td>
</tr>
<tr>
<td>SANTA</td>
<td>South African National Tuberculosis Association</td>
</tr>
<tr>
<td>SASOHN</td>
<td>South African Society of Occupational Health Nurses</td>
</tr>
<tr>
<td>SASOM</td>
<td>South African Society of Occupational Medicine</td>
</tr>
<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
</tr>
<tr>
<td>STD</td>
<td>Sexually Transmitted Disease</td>
</tr>
<tr>
<td>STG</td>
<td>Standard Treatment Guideline</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>TBA</td>
<td>Traditional birth attendants</td>
</tr>
<tr>
<td>TEASA</td>
<td>The Evangelical Alliance of South Africa</td>
</tr>
<tr>
<td>TOP (CTOP)</td>
<td>Termination of Pregnancy (Choice on Termination of Pregnancy), Act 92 of 1996</td>
</tr>
<tr>
<td>TRAMED</td>
<td>Traditional Medicines Programme [<a href="http://www.uct.ac.za/depts/pha/">http://www.uct.ac.za/depts/pha/</a>]</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| UCT          | University of Cape Town  
http://www.uct.ac.za |
| UDIPA (see IPA) | Uitenhage-Despatch Independent Practitioner Association |
| UNAIDS       | Joint United Nations Programme on HIV/AIDS  
http://www.unaids.org |
| UNDP         | United Nations Development Programme  
http://www.undp.org |
| UNFPA        | United Nations Population Fund  
http://www.unfpa.org |
| UNICEF       | United Nations Children’s Fund  
http://www.unicef.org |
| UOFS         | University of the Orange Free State  
http://www.uovs.ac.za |
| URTI         | Upper Respiratory Tract Infection |
| US           | United States (of America) |
| WAN          | Wide Area Network |
| WHISE        | Welfare and Health Internal Standard Examinations |
| WHO          | World Health Organisation  
http://www.who.int |
| Wits         | University of the Witwatersrand  
http://www.wits.ac.za |
| WTO          | World Trade Organisation  
http://www.wto.org |
| ZCC          | Zion Christian Church |
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