CHAPTER 5

Public Sector Financing

The funding of the public health care system in South Africa has reached a critical juncture. While much was done to improve equity in the funding of public health care in the first few years of democratic government, this trend appears to have reversed. Data on public health expenditure and human resources, from a recent National Health Accounts Project, are presented. They reveal that from 1997 there have been declines in the public per capita funding of health care, increased inequity in provincial resource allocation and even a decline in per capita funding of primary health care. Furthermore, projections of future revenue availability suggest a continued decline in per capita funding of the public health sector. All these factors should sound alarm bells for a government committed to the equitable provision of primary health care through the district health care system. In response, the chapter concludes by examining possible policy options for government to renew its attack on inequity in health funding.

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Introduction

The drive for equity has ostensibly been at the heart of public health sector policy since 1994.[1-4] Most visibly, there has been a commitment to the equitable provision of primary health care (PHC) to improve the health status of previously disadvantaged populations. The apartheid era left an appalling legacy of inequity in accessing services and inefficiency through the misallocation of resources to inappropriate activities. Subsequent attempts to redress these entrenched inequities have had to battle with the effects of the introduction of fiscal federalism and current macro-economic policy. This had led some authors to suggest that the drive for equity has stalled.[5-6]

This chapter reviews recent progress toward equity in health financing and expenditure and likely prospects for the future. The particular focus is on the expenditure in the public health sector where spending should match stated government priorities and, in particular, promote equity. The data are drawn from the draft public sector report[7] of the recent National Health Accounts (NHA) project conducted in South Africa[a] (this is described briefly in Section B). This chapter focuses on changes in overall spending in the public health care sector and the distribution of resources to primary health care and under-resourced provinces. From this will emerge a picture of government's progress toward alleviating inequity in the public health sector.

Before examining the NHA data it is useful to recap on the importance of the contextual environment for attaining equity in the public health sector. Achievement of goals is dependent as much on the prevailing economic and political conditions as on effective health policies. We briefly touch on two issues that have been covered in more detail by other authors in previous Health Reviews; namely the macro-economic environment and the budgeting process.

The **macro-economic environment** would appear to be quite hostile to the achievement of equity in the health sector. In June 1996, the government announced its new macro-economic policy, the Growth, Employment and Redistribution Strategy (GEAR). The focus of GEAR was economic growth. This was to be achieved through promotion of private investment, improvements in productivity and better export competitiveness. Business confidence was to be developed by reducing the public sector deficit and maintaining tight monetary and fiscal policies.[8, 9] Nevertheless, progress has not been as planned. While 1995 and 1996 saw healthy growth in GDP, the economy slowed significantly in 1998 and 1999, with a contraction in GDP per capita (Table 1). It may well be that the openness of the economy to international market fluctuations increases its *vulnerability* to financial shocks in the global market. This may impede growth, through higher interest rates for example. The huge inequities left by the apartheid health care system might well have been a less massive obstacle had there been a subsequent period of significant economic expansion. Strong economic growth would have provided a platform for redistribution, a luxury the government was not afforded.

a The NHA project is being conducted by a consortium consisting of the Health Economics Unit, University of Cape Town; the Centre for Health Policy, University of Witwatersrand; the Department of Economics, University of Durban-Westville; the National Department of Health and an independent consultant.

Table 1: Key macro-economic indicators, 1995-2000

	1995	1996	1997	1998	1999	2000
GDP (R billion)	548.1	614.9	680.2	737.8	793.2	862.6
Real GDP Growth	3.1%	4.2%	2.5%	0.5%	0.9%	3.5%
Real GDP Growth per capita	0.9%	2.0%	0.3%	-1.7%	-1.3%	1.3%
Inflation: Headline	8.7%	7.4%	8.6%	6.9%	5.5%	5.2%
Current Account Balance (% of GDP)	1.5%	1.3%	1.5%	1.6%	-0.5%	-1.3%

Notes: 1. Figures for 1999 and 2000 are projections

2. Real GDP Growth – This refers to the change from year to year in real GDP, where the GDP figures have been deflated to remove any notional increase caused by rising prices.

3. Headline inflation – This is the year on year growth rate of the Consumer Price Index.

4. Current Account Balance – This is the balance of physical goods and services traded with other countries.

Sources: Department of Finance,[10] Statistics South Africa[11]

It has also been argued that GEAR imposes additional constraints on the resources flowing to the health sector. Recent studies claim that GEAR targets for the budget deficit and tax to GDP ratio place limits on the expansion of public expenditure. Specifically, public expenditure growth must be lower than overall economic growth.[5] Such a policy must be of concern when economic growth results have been so mixed (Table 1). Department of Finance[10] data showed that per capita expenditure through the national budget grew only marginally between 1996/97 and 1998/99. Further, McIntyre *et al*[5] argued that central bargaining of civil service salaries also ties up a substantial proportion of health sector expenditure, again placing limits on the potential for redistribution. This also reinforces the importance of redistributing human resources to the pursuit of equity which is explored further on page 142.

The **budgeting process** in South Africa has restricted the pursuit of equity in several ways:[5, 6]

1. Decentralisation of budgetary authority to provinces makes decisions around the provincial health allocation hostage to local politics.
2. The focus of conditional grants relates to levels of care and not to equity.
3. The budgeting process does not give explicit concern to equity in health sector funding across provinces.
4. The Department of Finance inter-provincial resource allocation formula waters down equity concerns by including components and weightings which favour richer provinces.[5]

The White Paper for the Transformation of the Health System in South Africa[4] is effectively the national health policy statement before the National Health Bill is passed. Its vision embraces a unified health system where all actors are co-ordinated in pursuit of the fundamental goals of equity.[4, 6] None of the above contextual factors appear to favour this approach. Health sector policy, directed at improving equity, appears to be at odds with

current monetary and fiscal policy. This may suggest that solutions to problems of resource allocation and financing in the public health sector cannot be resolved purely by action within the sector. We turn now to reviewing progress toward equity in the financing of public health care, having first set out background information on the NHA project.

The NHA project

Accurate quantification of resource availability and resource distribution within the health sector is vital to inform the design of appropriate reforms and for monitoring progress during implementation of these reforms.[12] Consequently, the use of National Health Accounts (NHAs) to provide a picture of health related resource flows is an initiative undertaken by many countries throughout the world.

The Scope of NHA

The current NHA initiative arguably provides one of the most comprehensive representations of health expenditure ever completed in South Africa, providing data on both public and private sectors. The South African NHA project is a direct descendent of the Health Expenditure Review (HER) conducted in 1994/95. Internationally, NHAs essentially reflect a logical progression from the earlier Health Expenditure Reviews towards more routine production of health resource availability and distribution estimates for both the public and private sectors. Nevertheless, they have much in common in terms of the analytic framework and the types of data presented. Typically, they evaluate:

- The size of the health sector relative to other sectors in the economy
- The overall sources of health care financing, their relative importance and implications along with the flow of funds within the health sector
- The distribution of expenditure between types of providers, geographic areas and public and private sectors
- The distribution of expenditure between line items (such as salaries and maintenance) allowing an analysis of recurrent and capital expenditure.

The current NHA project has completed such analyses for three financial years 1996/97, 1997/98 and 1998/99 for the public health sector which will be supplemented by private sector data for two of the three years. The NHA project produces one of the first analyses of health *expenditure*, as opposed to budgets, collected from primary data sources that uses the same methodology over a number of consecutive years in South Africa. It is far easier to analyse trends in budgets but this often does not reflect what was actually spent in the health sector. Hence, the NHA produces a more accurate picture of the actual *use* of resources which is vital when evaluating progress against stated goals.

This data and analysis in *this* chapter, however, are limited to the public sector as at the time of writing the private sector component of the study has not been completed. Nevertheless, the NHA team has taken great pains to capture expenditure on all directly health-related activities in the public sector. The NHA portrayal of financing and expenditure in the public health system includes not only spending by the national and provincial Departments of Health, but also health care expenditure by provincial Departments of Works, Local Authorities and other national and provincial institutions, departments and funds. The latter grouping incorporates the Departments of Defence, Education, Correctional Services and Police, along with Public Enterprises, the Workmen's Compensation Fund and the Road Accident Fund.

Sources of Data

Financial data, including expenditure and funding flows, were collected systematically from all the relevant bodies of government, noted above. The dataset even includes the contributions by all government departments to employees' medical schemes. Some gaps in data were filled using the *Vulindlela* financial database, housed by the Department of State Expenditure. Local government datasets on health spending were the weakest and had to be subjected to considerable manipulation.

Provincial Departments of Health were the key source for *non-financial* data. The latter included indicators of outputs or activity in the public health sector, such as numbers and classification of facilities, numbers of beds, and activity data such as visits and inpatient days. However, it appears that the quality of such data in some provinces was questionable.

Human resource data for filled posts in provincial health departments were extracted from the PERSAL database housed in the Department of State Expenditure in Centurion. Underlying problems with the accuracy of PERSAL, and the extent of reclassification of data required for the NHA analysis, may mean that there are some inaccuracies in the personnel data, particularly where there are disaggregations. Interested readers are referred to Thomas and Muirhead[7] and Doherty[13] for further explanations of methodology. No personnel data from departments other than provincial health departments could be obtained.

Overall Financing and Expenditure

An important basis for improving equity in public health financing is an expanding health sector budget accompanied by regular and predictable sources of funding. This allows authorities to anticipate additional funds and plan for their redistribution to under-funded activities or geographic areas. It is not impossible to achieve equity in health financing without this foundation but it is certainly difficult. In this section we review overall financing and expenditure of the public health sector in this light.

Expenditure in the public health sector is displayed in Table 2. It is important to note that there are different interpretations of what can be included. We explore this in relation to three possible definitions:

- *Narrow* – Expenditure through the national and provincial Departments of Health[b]
- *Broad* – Narrow plus expenditure by Local Authorities and provincial Departments of Works
- *Comprehensive* – Broad plus expenditure by other national Departments and Funds and other provincial Departments.

As can be seen, the narrow definition of health expenditure excludes a substantial proportion of public health sector funding. By including Local Authorities, provincial Departments of Works and other national and provincial departments and institutions an extra R8 billion is added to spending in the public health sector, or an extra R235 per capita, without medical aid.[c]

b This is not an adequate definition of the public health sector as many provinces have substantial resources flowing through provincial Departments of Works and Local Authorities. Further, comparisons across provinces may for the same reason be invalid. This is explored later in this chapter.

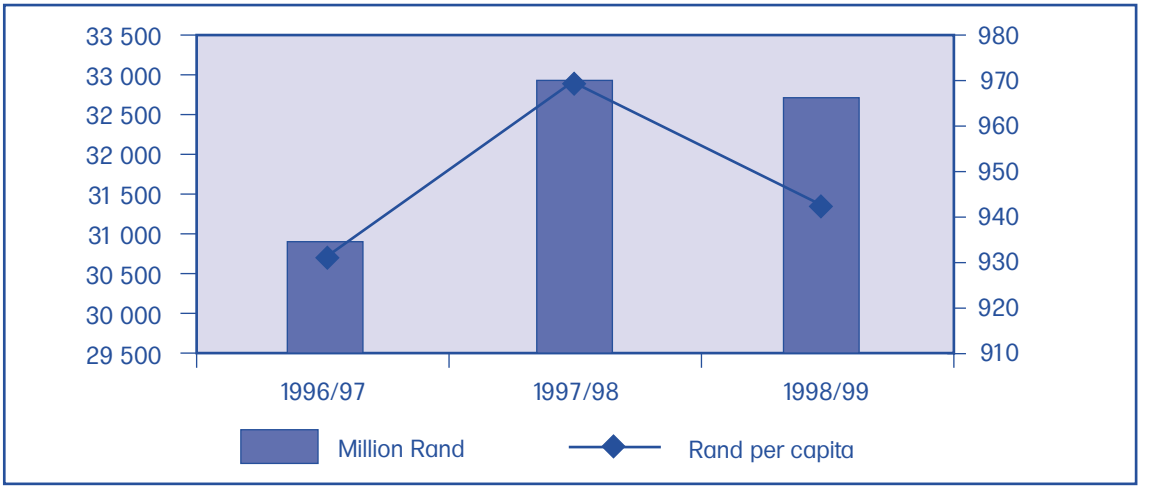
c The basis for using this measure is that the *eligible* population for the public sector is probably better represented by leaving out those with medical aid. While this is far from perfect it may well portray a more accurate picture of funding to public sector *users* which might otherwise be underestimated by more than 20%. It is also common practice in such analyses in South Africa.

Table 2: Public Health Sector Expenditure, according to different definitions, 1996/97-1998/99 (R million, 1999/00 prices)

	1996/97	1997/98	1998/99
Narrow	23 438	24 754	24 650
Broad	25 689	27 436	27 041
Comprehensive	30 941	32 963	32 695
Narrow	*76%*	*75%*	*75%*
Broad	*84%*	*83%*	*83%*
Comprehensive	*100%*	*100%*	*100%*

Figure 1 shows both the *comprehensive* expenditure in the public health sector in millions of Rands (left hand axis) and expenditure per capita[d] (right hand axis). Between 1996/97 and 1998/99 the total spending by the public health sector increased significantly by R 1.7 billion. Nevertheless, there was a slight drop, year-on-year, in 1998/99. This downward move is more notable when the per capita amounts are considered. The 1998/99 per capita figure is R29 lower than in 1997/98, but R10 higher than in 1996/97 (see Figure 1 and Table 3). The drop for 1998/99 was also reflected in the proportion of GDP and the Government Budget devoted to public health expenditure. In 1998/99 public health financing expenditure amounted to 4.1% of GDP and 15.1% of the overall budget, down from 4.3% and 15.8% respectively in 1997/98.

Figure 1: Total (R million) and Rand per capita Public Sector Health Financing, 1996/97-1998/99 (non medical scheme members, real 1999/00 prices)



What is the cause of this year-on-year decrease in health expenditure? Is it part of a longer term trend? To help examine the first of these questions it is worth exploring Tables 3 and 4 which show the different sources of funds for the three years, in total and per capita terms. By far the largest funding source in the public health sector is general taxation. General taxation accounts for approximately 94% of the total throughout the period, or

d Unless otherwise stated, all per capita figures are for those without medical aid.

R891 per capita in 1998/99 (Table 4). It is interesting to note that Local Authority sources (not including the subsidy from provincial Departments of Health) are the next largest, 3% of total funds in 1998/99, according to available data and best estimates.

Donors, which are so important in other sub-Saharan African countries, account for less than 1% or only R2 for every person in South Africa in 1998/99. It is important to note though that this is donor financing through the public sector for health and does not include financing through private organisations. The decrease in funding of the public health sector for 1998/99, noted above, appears to be due to declines in user fees from households and provincial own revenue.[e] In particular user fee revenue fell by an annual average of 17% between 1996/97 and 1998/99. There was also a slight decline in general taxation funding.

Table 3: Sources of Comprehensive Public Health Sector Financing, 1996/97-1998/99 (R million, real 1999/00 prices)

	1996/97	1997/98	1998/99
General Taxation	29 244	30 972	30 908
Local Authority Revenue	845	963	996
User fees from Households	499	418	340
Provincial Government – Own Revenue	334	578	384
Donors	18	33	68
Total	30 941	32 963	32 695

Notes: 1. Households contribute user fees into the health sector, predominantly at provincially run facilities.

2. Local Authority Revenue is an *estimate* based on information from selected Local Authorities, provincial Departments of Health and Finance.

Table 4: Per capita Comprehensive Public Health Sector Financing by source (excluding medical scheme members), 1996/97-1998/99 (1999/00 Rand)

	1996/97	1997/98	1998/99
General Taxation	881	912	891
Local Authority Revenue	25	28	29
Households	15	12	10
Provincial Government Own Revenue	10	17	11
Donors	1	1	2
Total	932	971	942

e The structure of NHAs internationally identifies user fees or out-of-pocket expenditure as a separate source of financing. In South Africa, the link between user fees and expenditure in the health sector is presently circuitous in most provinces. Nevertheless, we keep the convention to allow an examination of user fees in the light of revenue retention proposals. For those readers who disagree with this approach households should be ignored as a financing source and the finances subsumed under provincial own revenue.

While the health sector is spared dependency on foreign resources, unlike most sub-Saharan African countries, its reliance on general taxation is pronounced.[f] The decline in user fees may, therefore, be of extra concern. User fees, as a source of funds, are the only existing domestic alternative to government taxation and local rates. Some observers see general taxation as a potentially unstable form of revenue given:

- The frequent low priority of health in national and provincial budget negotiations
- The low tax-base in many developing countries
- The domination of expenditure policy by macro-economic concerns; and
- The fragility of growth in developing countries.[14]

Given current macro-economic directives and reliance on general taxation based funding the financing of the public health sector is highly vulnerable. This is not a position of strength when it comes to tackling inequities in health sector funding. On the contrary it guarantees a "scramble for scarce resources".[15]

Longer Term Trends

It is useful to discern how overall financing and expenditure have changed since the apartheid era. Figure 2 displays average annual growth in different public health sector sources from 1992/93 to 1998/99 and reveals some interesting findings. First, total public *health* sector financial resources grew substantially between 1992/93 and 1998/99 by approximately 9% per annum, reflecting similar growth in general taxation financing of the public health sector. This is not surprising given the overarching importance of general taxation, discussed above.

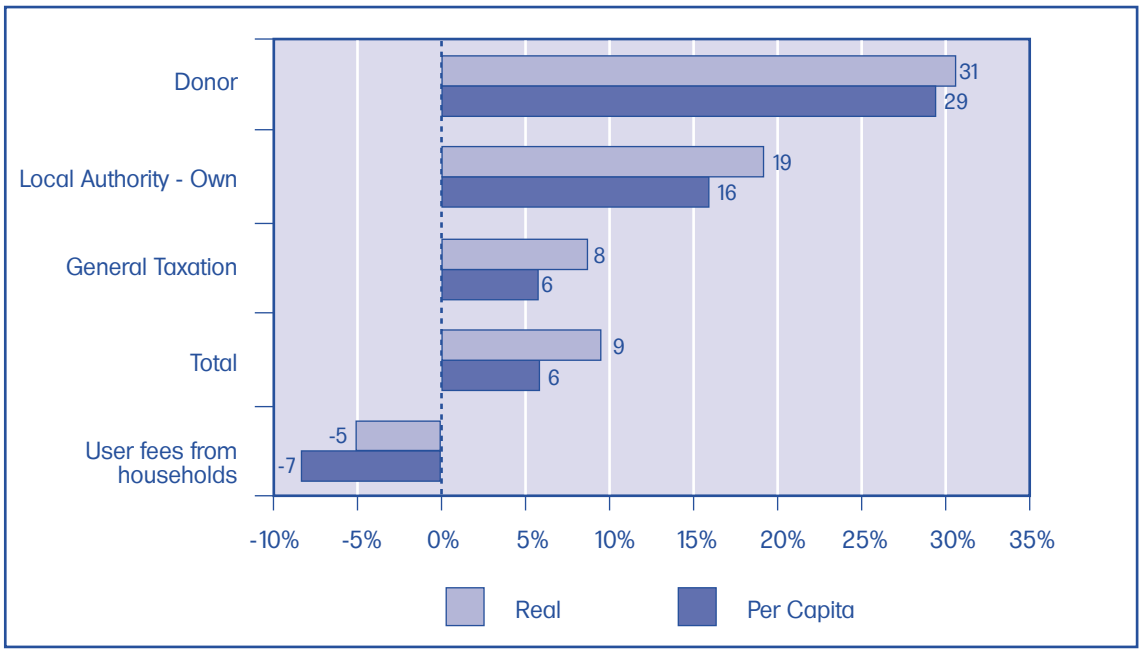
It seems that the drop in 1998/99 is, therefore, not part of a previous trend. In fact, the public health sector enjoyed a large real expansion of funding from the end of apartheid of R275 per person without medical aid. Nevertheless, it would appear that this expansion has now come to a halt (see Table 3 and Section F).

Of the different sources, donor funds experienced the largest growth over the period in question. However, this was from such a low base as to make little impact on overall funding. The increase in funding from Local Authorities is more important, though slightly less impressive (increasing at a rate of over 20% per year – assuming accuracy of data). Such growth is welcome in the furthering of decentralisation, lower level decision making and the primary health care approach.[g] In contrast, user fees from households declined sharply, by 5% per year.

f The situation has improved marginally since 1992/93 when general taxation was 96% of total funding.

g Nevertheless, such growth is only an average and ignores the range of different Local Authority structures. It is highly likely that the large growth was driven by larger urban Local Authorities.

Figure 2: Average annual growth in financing from different sources of the Public Health Sector, 1992/93-1998/99 (Real and per capita)



Notes: 1. Provincial government as a source was not relevant in 1992/93 and, therefore, is not included in the analysis.

2. Real data excludes any increases due to inflation.

3. Per capita data measure how well real increases keep pace with population growth.

Expenditure on Priorities

This section reviews the extent to which expenditure patterns match stated government priorities, particularly related to equity. Key questions focus on whether resources have been redeployed to supporting the PHC approach and whether inequities in resource allocation across provinces have been reduced. While these markers by themselves do not achieve equity in financing of, and access to, public health care they are important stepping stones.

Funding of PHC

Increased spending on PHC activities should be at the heart of government financing policy to alleviate inequity. Have government funds been redirected to supporting such services? To help answer this question it is useful to examine the division of expenditure by level of care and, in particular, those activities that support the PHC approach. Defining PHC in relation to expenditure is always open to debate.[16] For our purposes expenditure on PHC activities is defined as an aggregation of expenditure on:

- Out-patient care centres
- Public health programmes, including nutrition programmes
- Out-patient care in district hospitals.

While the first two are directly related to the NHA provider categories, the last is not. Current expenditure data in all provinces do not separate out expenditure on out-patients in district hospitals. Proxies, therefore, must be used to get indicative figures. Expenditure

on out-patient care has been calculated crudely on the basis of cost and patient-day equivalents. This is not ideal and the results for *hospital based* PHC should therefore be taken as indicative only.[h] It must be noted further that PHC provided by higher levels of care is ignored in the calculation for simplicity.

Table 5 provides us with an approximate calculation of public sector expenditure on PHC between 1996/97 and 1998/99. The data reveal that expenditure on overall PHC activities rose in real terms from 21% of total provider expenditure to 22% in 1998/99, an increase of R 0.6 billion or R9 per person without medical aid (Table 6). In nominal terms this was equal to over 10% growth per year on PHC spending in the public health sector.

Table 5: Comprehensive expenditure on non-hospital based PHC, as well as total PHC services, 1996/97-1998/99 (R million, 1999/00 prices)

	1996/97	1997/98	1998/99
OP Care Centres	2 722	3 319	3 059
Public Programmes	1 303	1 507	1 453
Non-Hospital Based PHC	**4 025**	**4 826**	**4 512**
Estimated District Hospital OPD	1 836	2 015	1 958
Total PHC estimate	**5 861**	**6 841**	**6 470**
Hospitals	16 207	17 385	17 627
Total Public Providers	**27 462**	**29 096**	**28 743**
% Total PHC (of total providers)	21%	24%	23%
% Non-Hospital Based PHC (of total providers)	15%	17%	16%

Notes: i) District Hospital OPD was derived using standard ratios of costs and patient day equivalents (i.e. the cost of one IP day is equal to 3 OP visits). These figures should, therefore, be treated as estimates only.

ii) Apart from the Total PHC Estimate and Hospitals, Total Public Providers includes expenditure on other providers such as ambulance services, laboratories, health administration, education and training institutes etc.

Table 6: Real Per Capita Expenditure on PHC (for population without medical aid), 1996/97-1998/99 (1999/00 Rand)

	1996/97	1997/98	1998/99
a. OP Care Centres	82	98	88
b. Public Programmes	39	44	42
c. Total Non-Hospital Based PHC (a + b)	121	142	130
d. Total Hospital Based PHC	55	59	56
Total PHC (c + d)	**176**	**202**	**186**
Total Public Providers	827	857	828

h Until good activity data are available for hospitals throughout the country it will impossible to differentiate precisely PHC services, and therefore expenditure.

Comparisons of *overall* PHC expenditure between 1992/93 and 1998/99 are not possible, because of differences in classification. Nevertheless, there clearly has been a substantial increase in the funding of *non-hospital* PHC over the same time, by around 6% of total expenditure. While this is to be commended, the drop in funding between 1997/98 and 1998/99 may be of concern, especially when compared with high expenditure growth on tertiary hospitals (7.1%) over the same period.[7] Indeed, recent strong growth in the funding of such hospitals might threaten equity particularly if it crowds-out expenditure on PHC activities. This may well be the result of conditional grants which serve to protect and, indeed, develop central hospitals.

Nevertheless, the long run increase in funding of PHC since 1994 is positive and has complimented the free health care policies introduced in 1994 and 1996, capital investment in the form of the Clinic Upgrading and Building Project, and other initiatives to expand PHC delivery. Indeed, there appears to have been a dramatic increase between 1997/98 and 1998/99 in the proportion of staff working in provincial health departments and who are based in non-hospital PHC settings (see Table 7).[13]

Table 7: The proportion of provincial Health Department staff working in non-hospital PHC, 1997/98 and 1998/99 (excluding the Free State)[i]

Province	1997/98	1998/99
Eastern Cape	6.6	8.8
Gauteng	6.7	13.7
KwaZulu-Natal	5.6	10.9
Mpumalanga	17.7	18.7
Northern Cape	14.1	17.7
Northern Province	5.9	19.1
North West	15.8	18.5
Western Cape	1.3	8.5
Average	**7.2**	**12.8**

Note: The proportion for the Free State in 1998/99 was 4.3.

This shift in part reflects policies that prioritise PHC services, including the downgrading of certain hospitals across the country to facilities that provide PHC services. However, the change also reflects the re-classification of several hospitals to community health centres according to new definitions agreed upon by the national and provincial health departments. In these cases, the nature of service provision would not necessarily have changed (that is, their re-classification does not necessarily imply an expansion of PHC services on the ground). The shift might also reflect improvements in the identification of staff on the PERSAL system as working in PHC. Nevertheless, the PERSAL system is still far from

i Data for the Free State were not available for either year and, hence, are excluded from Table 9.

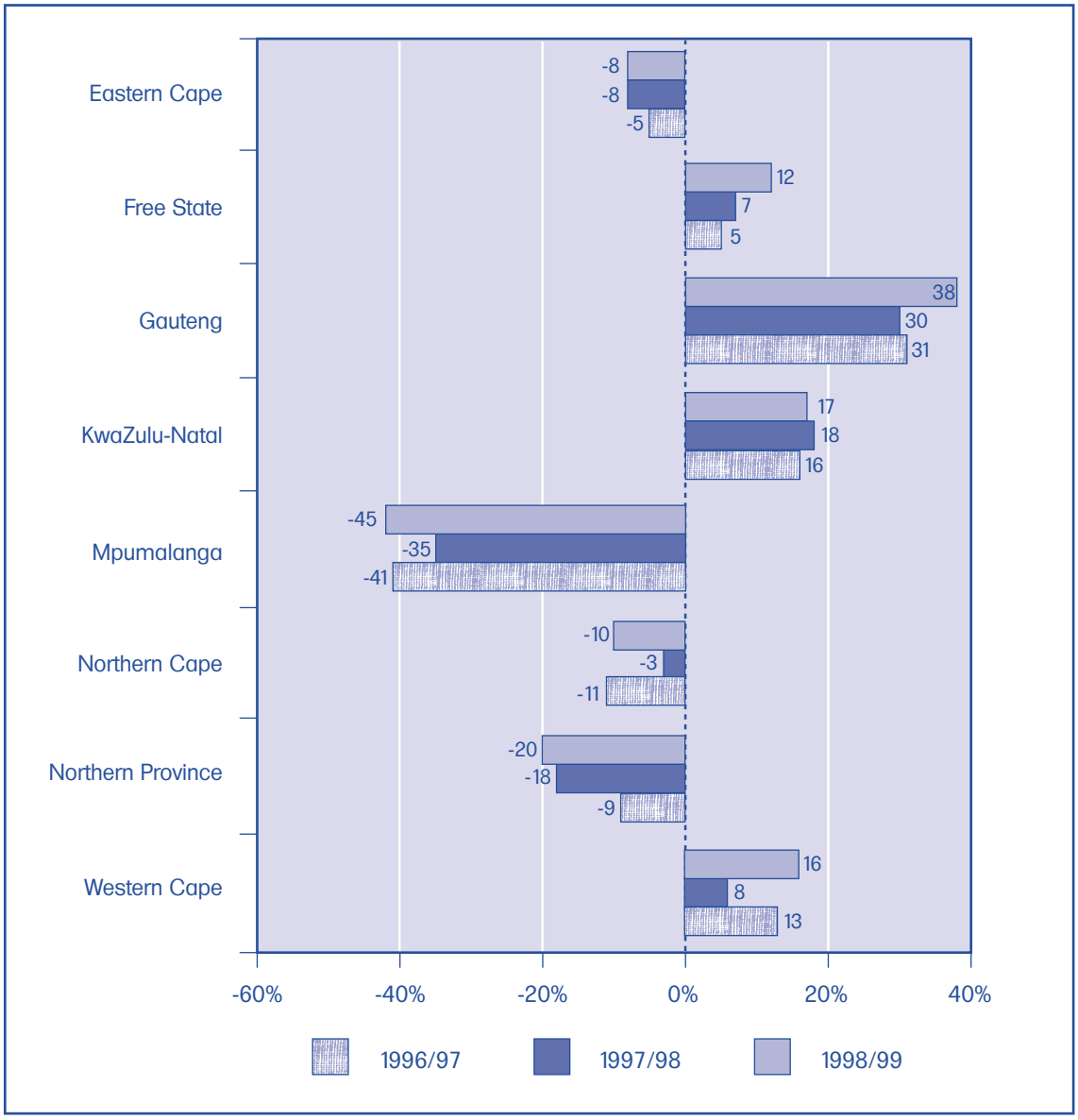
powerful in terms of identifying PHC staff and many who do work in PHC services may still be hidden in the dataset within other provider categories. Certainly, reported problems in the accuracy of PERSAL mean that the data presented in Table 7 need to be interpreted with caution, particularly as they do not reflect the changes in PHC spending reported in Table 5 (it should be remembered, however, that this Table includes spending by departments other than provincial health departments). Also, comparison of one province with another is difficult, especially as some provinces outsource services to contractors (in which case personnel working in these services do not appear on the PERSAL system), while others have more extensive local authority-run (and staffed) PHC services than others.

Equity in Inter-Provincial Resource Allocation

Previous South African Health Reviews, along with the 1997 White Paper, have noted the difficulty of pursuing equity in a framework of fiscal federalism.[4, 5, 17] By analysing public health sector expenditure over three years and for all government departments and institutions, the current NHA is able to provide a full picture of resource allocation and its implications for equity. McIntyre *et al*[5] assert that the inclusion of non-health departments, such as Defence and Education may well "accentuate inter-provincial inequities." We evaluate this claim alongside the continuing effects of resource allocation policies on inter-provincial equity in health spending. Our analysis considers the three differing definitions of public health spending as discussed earlier.

Results for the narrow definition of public health sector expenditure are shown in Figure 3, which deals only with expenditure by provincial Departments of Health in each province. This excludes expenditure on tertiary facilities as these are likely to serve populations wider than a single province. Figure 3 notes the provincial deviations in per capita expenditure from the national average. The graph highlights the vast differences in spending between provincial Departments of Health, with the Eastern Cape and Northern Province steadily moving further away from the national average. Gauteng has by far the greatest health expenditure per capita increasing slightly in real terms over the three financial years. Such data support prior analyses of public sector budgets, to show that geographic financing of health care is becoming more inequitable.[5, 6]

Figure 3: Deviations from National Average, provincial Department of Health real per capita spending 1996/97-1998/99 (Non medical scheme members, excluding tertiary hospitals 1999/00 Rand)



Note: The North West as an outlier province was removed from this analysis because of its over-weighted effect on the average per capita expenditure figure.

One suggested reason for lack of progress toward improving equity is the bargaining power of different provincial health sectors. Further, some commentators feel that health is losing out to other sectors in provincial budget negotiations. Nevertheless, as Table 8 shows, the share of provincial resources devoted to health appears to have increased slightly between 1996/97 and 1998/99 in all provinces except Mpumalanga and the Northern Province. This may suggest that it is the overall allocations to each province which have recently stalled redistribution rather than any sudden worsening in health's share of the pie.

Nevertheless, the share of total funding received by the health sector differs from province to province, probably as a result of existing health infrastructure and service activity. If incremental budgeting continues historical inequities will be perpetuated. Approximately

one fifth of Gauteng's provincial expenditure is absorbed by the provincial department of health, (exclusive of tertiary care). This is a far higher proportion than in under-resourced provinces such as Mpumalanga and the Northern Province.

Table 8: Provincial Department of Health spending (less tertiary hospitals) as a percentage of estimated total provincial spending 1996/97-1998/99 (1999/00 Rand)

	1996/97	1997/98	1998/99
Eastern Cape	16	17	18
Free State	17	18	18
Gauteng	19	20	20
KwaZulu-Natal	22	24	22
Mpumalanga	12	14	12
Northern Cape	14	15	13
Northern Province	16	16	16
North West	17	20	23
Western Cape	15	15	17
Average	16	18	18

Note: This does not include Provincial Department of Works expenditure therefore capital expenditure may be reflected for some provinces eg. Northern Province but not for others.

Source: Intergovernmental Fiscal Review 1999

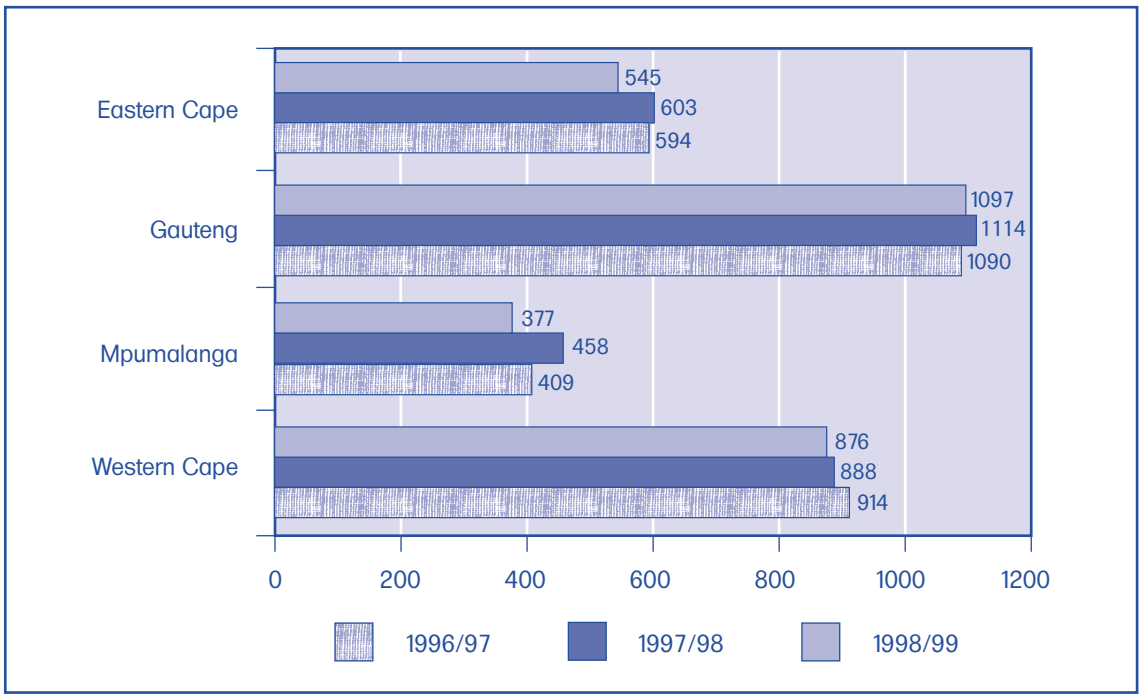
What happens to the overall funding picture of provinces with more inclusive definitions of public health sector expenditure? Table 9 displays for five provinces the narrow expenditure on health, plus the increases implied by using the broad and comprehensive definitions (data for the remaining provinces are incomplete due to problems estimating expenditure by Local Authorities). As suggested, the effect of adding in Local Authorities, provincial Departments of Works and other national and provincial departments and institutions is to exacerbate the inequities across provinces. Figure 4 further highlights these increased inequities. Gauteng in particular receives a massive boost to its health sector funding, equivalent to over R385 per capita in 1996/97, from non-health-specific agents compared to only R84 per capita for the Eastern Cape.[j] This may be largely due to the additional revenue raising ability of the urban local authorities through property taxes and the like. This unequal ability exacerbates inequities in health expenditure between provinces and needs to be considered in resource allocation.

j While these figures present significant inequities across provinces, they do not take into account private sector expenditure data which greatly exacerbates the maldistribution of resources. Such issues will be more adequately addressed in the NHA consolidated report which will combine data from both the public and private sectors.

Table 9: Breakdown of real per capita comprehensive health expenditure by selected provinces, 1996/97-1998/99 (non medical scheme members, 1999/00 Rand)

Year	Province	Narrow	Broad (add)	% added	Comp (add)	% added	Total pc exp
1996/97	Eastern Cape	509.93	55.37	11%	28.43	5%	593.73
	Gauteng	703.35	143.53	20%	243.36	29%	1 090.24
	Mpumalanga	313.43	79.10	25%	16.60	4%	409.14
	Western Cape	605.82	172.64	28%	135.76	17%	914.22
1997/98	Eastern Cape	510.42	66.17	13%	26.68	5%	603.28
	Gauteng	724.46	151.66	21%	238.26	27%	1 114.38
	Mpumalanga	359.55	81.50	23%	17.18	4%	458.23
	Western Cape	599.62	154.03	26%	134.52	18%	888.17
1998/99	Eastern Cape	474.24	45.89	10%	24.54	5%	544.68
	Gauteng	714.49	146.46	20%	235.96	27%	1 096.91
	Mpumalanga	281.62	80.26	28%	15.58	4%	377.47
	Western Cape	597.90	147.51	25%	130.95	18%	876.36

Figure 4: Comprehensive per capita spending on health in four provinces 1996/97-1998/99 (non medical scheme members, 1999/00 Rand)



How does the distribution of *human resources*, in total and by personnel types, match the population in each province? Table 10 presents the ratio of provincial health department personnel, by different categories, per 100 000 of each province's population without medical aid in 1998/99. The Western Cape and Gauteng are the only two provinces which consistently have ratios above the national average, except for environmental health officers (EHO's) (however, in these two provinces EHO's are employed by Local Government). In contrast, Mpumalanga has the lowest total personnel to population ratio at just less than half that of the Western Cape. These figures would appear to confirm the entrenched geographic inequities highlighted in earlier sections. Unfortunately trend data on personnel distribution is not currently of sufficient quality to be useful for analysis.

Table 10: Provincial health personnel per 100 000 population without medical aid, 1998/99

	Total specialists (excl. psychiatrists)	Total doctors (medical officers)	Total prof. nurses	Total psychologists and psychiatrists	Total dental staff (dentists and others)	Total pharmacy staff	Total environ. health officers	Total health professionals
EC	4	17	119	0	1	2	3	349
FS	4	30	136	0	2	3	2	364
G	27	45	170	2	6	7	0	524
KZN	6	24	120	1	1	3	1	390
MP	2	16	81	-	1	3	2	261
NC	1	17	97	0	2	2	1	275
NP	2	12	102	0	1	2	3	297
NW	2	15	92	0	1	3	1	304
WC	32	51	135	2	4	8	0	544
South Africa	9	25	121	1	2	4	2	380

Notes: 1. Staff employed by Local Government are not included.

2. Cells with a zero reflect cases where the number of personnel per 100 000 is less than one.

3. Cells with a '-' reflect cases where there are no personnel in this category at all.

4. Shaded cells represent cases above the national average.

Figure 5: Percentage difference from the national average of ratios of specialists, medical offices and professional nurses, working in provincial health departments, to 100 000 population without medical aid, 1998/99

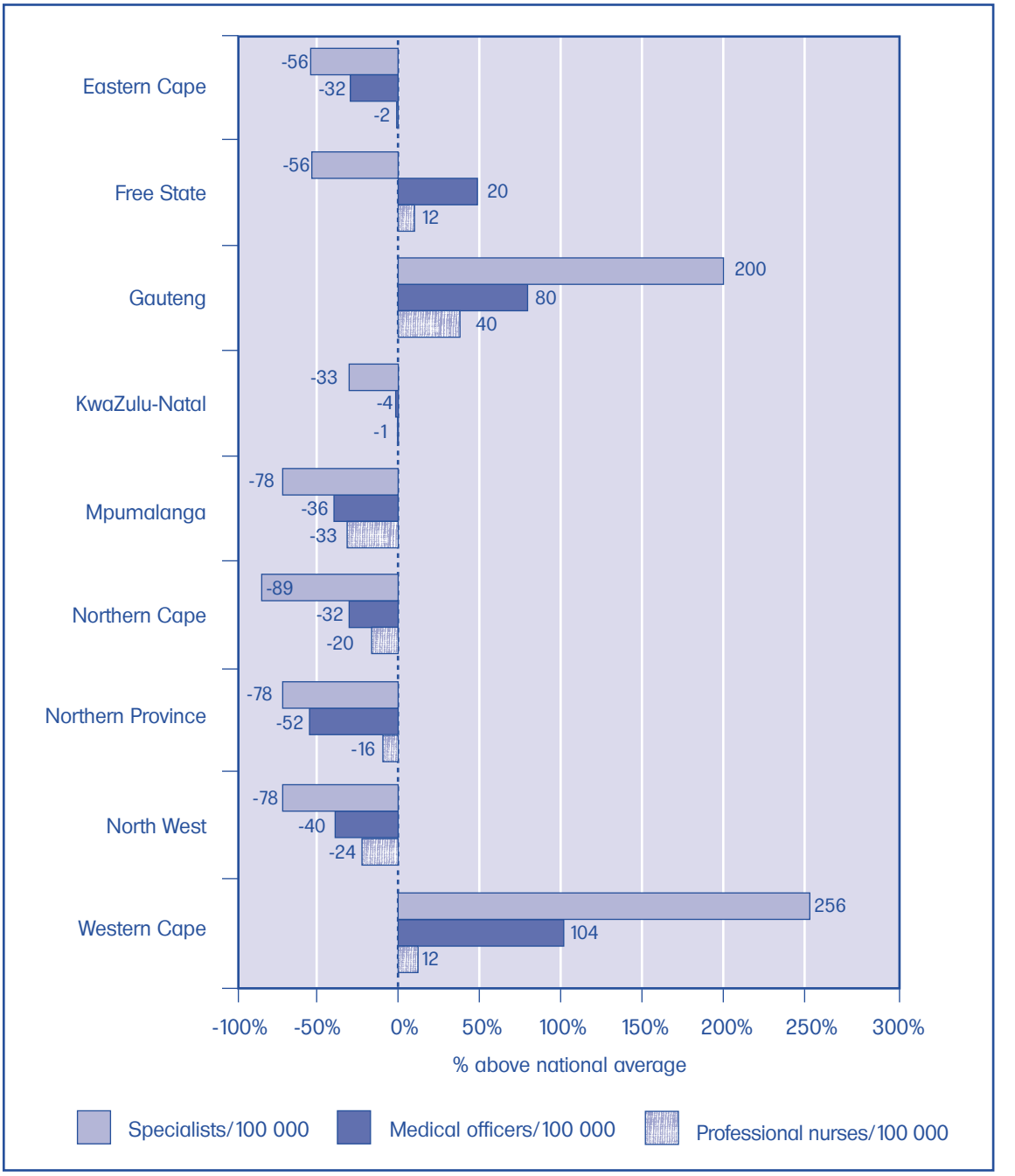


Figure 5 illustrates the magnitude of the differences between provinces using three types of clinical personnel as examples (namely, specialists, other than psychiatrists, medical officers and professional nurses). The predominance of specialists in the Western Cape and Gauteng is to be expected, because of the concentration of high level services. Nevertheless, these provinces also have disproportionately high numbers of medical officers. Similar results are also evident for non-health professionals. Still, the PERSAL data suggest that there has been retrenchment of personnel in both the Western Cape and Gauteng between 1996/97 and 1998/99, by approximately 7% and 4% respectively. While this may be a step in the right direction, a more equitable allocation will require previously under-resourced provinces

to expand their public health sector personnel. Available data suggest that such an increase occurred in the Eastern Cape between 1997/98 and 1998/99, growing by just under 8%, but there appears to have been contractions in staffing in the North West (4.5%) and Mpumalanga (1%) for the same period. Further data and analysis are, however, required before comparisons can be drawn across all provinces.

Projected Financing of the Public Health Sector

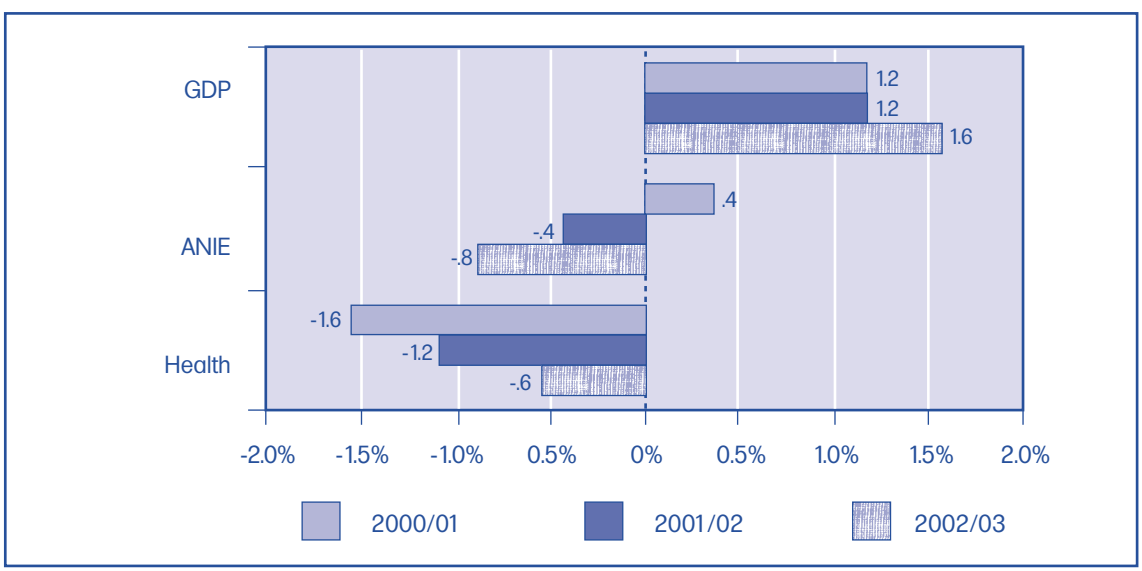
While there was initially progress made towards improving equity and the funding of PHC, recent data are cause for concern. Will this situation continue? To understand the likely trends in public health sector financing, and its implications for expenditure, we examine the economic outlook and explore possible trends.

Economic outlook and implications for future financing

Projections of the macroeconomic environment over the medium term allow us to assess the viability of pursuing equitable financing in the future. Real GDP growth is expected to reach 3%, up from current levels by 2000/01.[10] Nevertheless, public expenditure growth will be lower than GDP growth - as noted earlier this appears to be a stipulation of the GEAR policy - *and* public expenditure will decline in real *per capita* terms, by 0.9% per year between 1998/99 and 2002/03. Even this may be optimistic, as discussed earlier.

How do these economic forecasts translate into health sector funding? Figure 6 illustrates real health expenditure trends for the medium term. Here, available funds for public expenditure (equivalent to budget projections) are projected. Funds to be used for financing debt are removed. Of the remaining funds, health receives an allocation in line with that noted in the MTEF. The health budget figures are, therefore, derived from the MTEF health shares and remain approximately constant over the period (between 14.6-14.8%), implying very small growth in available health resources for budgetary expenditure. The year-on-year growth only climbs above 1% in 2002/03. When translated into per capita figures this equates into a decline in health sector budgets *each* year.

Figure 6: Projections of year-on-year increases in GDP per capita, ANIE per capita and health sector budget expenditure per capita (2000/01-2002/03)



Key: GDP – Gross Domestic Product, ANIE – Available non-interest expenditure (through Public Sector Budgets), Health – Combined National and Provincial Department of Health Budgets.

Non-taxation-based financing

When other sources of financing are considered is the future picture any better? We discussed earlier the dependence of the public health sector on taxation. This situation is unlikely to change much in the next few years. Briefly let us consider the other sources of funds for the public health sector:

- *Donors* – While there has been a significant expansion in donor funding of the public health sector since 1992/93, this is probably one-off and donor funds may increase only modestly from current levels, which are in any event not substantial.
- *User Fees* - The declining trend in public sector user fees is troubling to those who see this source as a critical compliment to general taxation. Cost recovery ratios at facilities have slumped to just over 2% for all hospitals and 4% for tertiary hospitals.[7] Without major reform to fee collection, pricing, retention and utilisation of fee revenues, this situation will only get worse. Indeed, if fee revenues decrease at the rate experienced between 1996/97 and 1998/99 they will plummet to less than a quarter of their 1996/97 level by 2003/04, at approximately R120 million.[7]
- *Local Authorities* – Funds from this source have grown substantially on average in recent years (though, as noted earlier, this may be driven by strong growth in large urban Local Authorities). This may well prove to be important especially to the funding of PHC. Nevertheless, there is much controversy about the appropriate funding of Local Authorities for health sector activities. Until appropriate roles and responsibilities are determined there may not be a large expansion in available funds from this source.

Pressure on government health sector budgets is therefore likely to continue for the foreseeable future, with little relief from other funding sources. The prospect of continued declining per capita funding of the public health sector is looming. Without corrective action little may be done to stop the slide toward increased inequity in resource allocation.

Conclusions, Options and Recommendations

In the face of such constraints there are a number of initiatives that might help improve equity in the financing of and access to the public health system. These are explored below. First, however, we explore the general trends that arise from the analysis of expenditure and financing in the public health sector.

The data from the NHA exercise reveal two eras of public health sector financing. The first ran from 1992/93 to 1997/98. It was characterised by substantial growth in funding (both in real and per capita terms), reallocation of resources to PHC and redistribution of health sector funds across provinces. In contrast, the second era, from 1997/98 onwards, is characterised by falling per capita public health sector funding, a reversal of redistribution across provinces and a decline growth in PHC expenditure. The transition between the two periods would appear to relate to the introduction of both GEAR and fiscal federalism. As was argued earlier both these have affected the potential for increased equity in the public health sector. The current macro-economic environment translates into a highly constrained financing environment for health for the foreseeable future. Further, the current resource allocation formula for provinces and subsequent provincial budget processes have done little to encourage redistribution to where funds are most needed.

Nevertheless, there is still time for corrective action, before the features of the second era become entrenched. For South Africa to avoid a crash landing in the health sector it needs

to find ways of boosting public health sector financial resources and encouraging redistribution of resources. The importance of current budgeting arrangements has been noted. The formula for inter-provincial allocations (the equitable share formula) needs to reflect more of an equity perspective. A complementary measure to boost public health sector resources will be to introduce a Social Health Insurance scheme as part of a social security package (see chapter on Social Health Insurance). This, together with hospital management reform that attracts paying patients back to the public sector, may alleviate the current funding crisis by providing between an extra R1.5 and R3.0 billion.[18] These additional resources could well ease the process of redistribution and targeting toward PHC activities (nevertheless, to do this the finances raised must not be offset by lower allocations from general taxation). Indeed, expenditure on PHC activities must be protected from any effective health sector budget cuts.

Exploration of use of norms and standards may be one option to support the financing of a PHC package. Indeed, a detailed evaluation of the financing of PHC may well be an important additional area for research, especially as it relates to equity. It may be particularly useful to link such an exercise with an assessment of the combined impact of the various policy initiatives which have been introduced to boost equity through delivering PHC (such as the free PHC policy and the Clinic Upgrading and Building Project). Such an evaluation would provide an important foundation for furthering the government's PHC approach and renewing the attack on inequity.