HUMAN RESOURCE REQUIREMENTS FOR NATIONAL HEALTH INSURANCE

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In 2007, at its 52nd Conference in Polokwane, the African National Congress called for the implementation of a National Health Insurance (NHI) scheme. The proposed NHI scheme will potentially significantly increase funds available for health and restructure health service delivery. However, the success or failure of a NHI scheme will rely on the availability, skills and motivation of health workers.

This chapter will summarise key human resource (HR) challenges in South Africa and sketch important requirements to support the implementation of a NHI-funded health system. Transformation of the health system has been hampered by inadequate numbers and inequitable distribution of health workers between private and public sectors and urban and rural areas, lack of appropriate skills throughout the system, and poor planning and management. Clinic based services are limited in their ability to reach community level and, being focused on curative aspects, are often inadequate with regard to prevention, health promotion and rehabilitation services. There are a large number of community health workers in the country, yet they remain disorganised and peripheral to the public health system and the mid-level worker category has not been fully explored. Finally, there are no clear strategies for recruitment and retention of health workers in rural and under-resourced areas.

Using available evidence and information from interviews conducted with a number of key informants, the authors make recommendations on HR requirements for implementation of an effective and equitable health system funded by a NHI, including skills mix and projected numbers of health workers, and propose ways to improve the deficient HR situation.
Introduction

“Without influencing the bigger picture, it is unlikely that we will get anything done differently”. (Key informant 1)

The gazetted statement on the National Health Insurance (NHI) Ministerial Advisory Committee states that there are three principles on which the NHI is founded, namely the constitutional right to quality health services; the government’s obligation to deliver progressive realisation of the right to health (universal access); and equity in funding to promote social solidarity.¹

Yet despite the expressed commitment to these principles, i.e. health equity and a comprehensive primary health care (PHC) approach structured within a district health system, the overwhelmingly hospital-based model of health service delivery, primarily utilising doctors and nurses, has continued to dominate health-care delivery in South Africa, with first-level hospitals often being poorly staffed and poorly equipped. The clinic-based services are also primarily curative in emphasis and often inadequate with regard to prevention, health promotion and rehabilitation services and limited in their ability to reach community level. Essential community-based health services, such as home-based care of terminally ill patients, HIV counselling and tuberculosis (TB) support, have been outsourced to non-governmental organisations (NGOs), with limited and unreliable financial and logistical support. It is against this background that in August 2009, the Minister of Health called for an extensive overhaul of the system which had “pedalled backwards for ten years”.²

The proposed NHI scheme, a mechanism for the pooling of public and private resources for health to achieve universal health-care coverage, will potentially significantly increase funds available for health and restructured health service delivery. According to the 2009 African National Congress (ANC) NHI Policy Proposal, the NHI in South Africa will include primary care and prevention, in- and outpatient care, diagnosis and treatment, emergency services, prescription medicines, rehabilitation, mental health services, dental services, treatment for substance abuse, chiropractic services, basic vision care and hearing services, and promotion and rehabilitation services.³

The success or failure of a NHI scheme will rely on the availability, skills and motivation of health workers. The past sixteen years have shown that health sector reform and innovation is destined to fail without very careful attention to human resource (HR) needs and requirements. Planning for the NHI, therefore, must urgently address the existing undersupply and maldistribution of health workers and enable the development of competent teams at all levels of the health system, as well as addressing improved management and better motivation.

This chapter will summarise key HR challenges in South Africa and sketch important HR requirements, based on existing evidence and engagement with a number of key informants. As part of research undertaken for the National Education Health and Allied Workers Union (NEHAWU), interviews were conducted with 14 health professionals and health managers known to be supportive of a universal and equitable health system as proposed for the NHI. People interviewed were selected purposively from a national sample and included those working in academia, the public health sector, national, provincial and local government and the NGO sector. Their skills and experience include involvement in PHC, health systems, rural health and practice in resource-poor settings, community health workers (CHWs) and mid-level workers. Face-to-face or telephonic interviews were conducted. The interviews were semi-structured and the questionnaire was adapted according to the informant’s area of expertise. This chapter draws heavily on this research. A limitation of the research is that the sample of interviewees excluded other stakeholders, e.g. proponents of private sector health care who are, nonetheless, covered in another chapter in this Review.

Availability and distribution of human resources

“The assumption that we have enough nurses and doctors to build the health system is a fallacy.” (Key informant 2)

The record of HR planning and management in the country is not good. Transformation of the health system has been hampered by inadequate numbers and inequitable distribution of health workers between private and public sectors and rural and urban areas, lack of appropriate skills throughout the system and poor planning and monitoring. Key weaknesses are the failure to produce adequate numbers of health professionals and the extreme maldistribution of personnel. The lack of incentives to stay in the public health system, and the ease with which health workers can migrate, has resulted in many health professionals emigrating to Northern countries or moving to the more lucrative and well-funded private sector. In the short and medium-term the persistence of a doctor-centred curative model will insufficiently address the broader health needs of the majority of the population, since extreme maldistribution of all categories of health professionals results in large sections of the population being unable to access their services. Even if a NHI scheme could enrol the services of doctors currently working in the private sector, it is unlikely that they would relocate to currently underserved rural or peri-urban areas and be available to those who currently reside in those areas.
Approximately 70% of public sector recurrent spending on health is on HR, making this the most expensive component of our health system. Although on paper South Africa has a respectable number of doctors and nurses, extreme geographical and public-private maldistribution results in ratios that are not dissimilar to those in much poorer countries. For example, the latest figures on the website of the Health Professions Council of South Africa (HPCSA) show that at the end of 2008, 33 534 medical practitioners were registered. But latest PERSAL (Personnel and Salary System) figures, as compiled by Health Systems Trust, reflect 11 309 medical practitioners in the public service at the end of March 2010. This means that only 30% of doctors work in the public sector, the remainder serving the 16% of the population with private medical insurance and another uninsured 16% who pay out-of-pocket, mainly for visits to their general practitioner or pharmacy.

Vacancies in the public sector remain high and, even more concerning, appear to be on the rise again: in 2010, 42.5% of health professionals’ posts in the public sector were unfilled, up from 33% in 2009 and 27% in 2005. As always, these composite figures mask substantial provincial differences. According to PERSAL figures, more than two-thirds of professional nurse posts and over 80% of medical practitioner posts in Limpopo remain unfilled.

A study of the HR requirements for PHC in South Africa in six of the poorest districts found only 7% of required doctors at clinics and community health centres (CHCs). Furthermore, the country’s nurse population, the backbone of health service delivery, is ageing fast. Figure 2 below shows that only 3% of nurses are 30 years old and younger, while more than 40% are older than 50 and thus approaching retirement. These figures also reflect inadequate levels of nurse training, particularly in the country’s nursing colleges, as shown in Figure 3. The rationalisation of nursing colleges has reduced the output of nurses, with the loss of nurse tutors further hampering production.

**Figure 1: Filled and vacant health professionals posts in the public service, 2010**

**Source:** Compiled from data provided by Health Systems Trust.

**Figure 2: Age distribution – registered nurses and midwives, 2009**

**Source:** South African Nursing Council.

**Figure 3: South African nursing colleges’ output from the four-year training programme, (2000-2009)**

**Source:** South African Nursing Council.
Production is not catching up with requirements. Lehmann showed that training of doctors and nurses has increased very slowly, and this after years of decrease. If the Minister’s call for a doubling of graduates from medical schools is to be followed, health sciences faculties will need dramatic increases in funding and facilities.

**Developing a NHI human resource strategy**

In addition to the urgent need to increase the production of health professionals, and to address issues of maldistribution, productivity, motivation and poor management, alternative models of service delivery and HR provisioning need to be explored, drawing on approaches used in other low or middle-income countries that appear to operate successfully and where impressive advances in health care and improved health outcomes have occurred. In the remainder of the chapter we sketch some of the main elements considered by the key informants to be essential for a successful NHI implementation.

**Staffing the revitalisation of primary health care**

“We have the basic framework, but we are working on the wrong model”. (Key informant 1)

The revitalisation of primary health care, as presently being discussed by the National Department of Health (NDoH), will be at the centre of any successful NHI implementation, while the reconfiguration and strengthening of PHC teams to render comprehensive and seamless care will become the acid test of the revitalisation project. In developing a South African NHI model, grounded in a primary health care approach, we can learn from experiences of other southern middle-income countries.

One such example is Brazil where health (and welfare) reforms implemented since the early 1990s have contributed to large reductions in child mortality, improvements in nutritional status and increased life expectancy, with an accompanying reduction in health inequalities. Brazil resembles South Africa in many ways (middle-income, high disease burden; dual disease pattern; large disparities between social groups; and a large and expensive private sector). Brazil is acknowledged to be one of the best ‘performers’ amongst Low Middle Income Countries (LMIC) health systems.

Central to Brazil’s success are major funding shifts, a population-based approach to health service delivery, the introduction of Family Health Teams, the integration of CHWs into these teams and large investment in training and capacity development.

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**Box 1: Primary health care in Brazil**

Since the early 1990s Brazil has developed a Unified Health System (SUS) to provide “all Brazilians with universal, integral and equal access to health promotion, prevention, treatment and rehabilitation”. Decentralisation of health services, with social participation in planning and monitoring of services and inter-sectoral action, are core components of the SUS, reflecting its alignment to comprehensive PHC. Family Health, which has been used as a strategy to reorient the health-care model, has received dramatically increased funding – between 2000 and 2007 funding allocations for PHC more than tripled – and this is showing improved access and health outcomes.

Family health teams (multi-professional teams) form the core of the health system and each is responsible for a defined geographical community. Each team consists of at least a doctor, nurses, assistant nurses and six community health workers (CHWs) and, sometimes, a dentist. Between 1 000 and 2 000 families (4 000 to 10 000 people) are assisted by each team. Services either take place in PHC clinics or within the community, as required. The work of the CHWs is seen as essential as they form the link to the communities. CHWs are supported and guided by a nurse supervisor. There are approximately 250 000 CHWs employed within the Brazilian health system.

The Human Resources for Health policy in Brazil is deliberately tailored to support the implementation of the SUS. Of note is that there is a government-funded School of Public Health in almost every state whose primary (and funded) function is to train and re-train health personnel for the priority programmes.

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**Community level**

One important feature of Brazil’s Family Health Programme is the inclusion and integration of CHWs as key members of the family health team. Policy makers in Brazil emphasize the importance of their integration and recognition for the success of the programme.

In South Africa various categories of CHWs currently exist, from generalist CHWs to the various categories of single issue workers. At present there are estimated to be 65 000 CHWs operating in the country, the great majority of whom undertake a limited set of activities, mainly in HIV and TB programmes. Both the NDoH and Department of Social Development provide stipends or payments for CHWs via NGOs. For the health sector alone there are well over 1 600 NGOs contracted to provincial departments to render community-based services. Stipends to CHWs, who are mainly women from impoverished communities, vary widely from as little as R500 to R2500 and more. CHWs currently do not enjoy any protection under labour legislation. Many NGOs employing CHWs are subject to irregular and inadequate payment by government, with serious impacts on health service delivery when CHWs are not paid and therefore do not work.

There is growing awareness and agreement that, as CHWs are increasingly expected to render essential health services,
albeit often by default rather than by plan, much needs to be done to restructure the sector, clarify roles and expectations, provide sustainable funding and resourcing and to dramatically improve training provision, supervision and career opportunities and progression. Stakeholder consultations held by South African National AIDS Council and the Universities of the Western Cape and Cape Town in the first half of 2010 emphasized the need for both generalist and specialist CHW cadres who are integrated into and resourced as part of PHC teams. Role clarification, followed by the development and standardisation of training programmes and career paths, were identified as policy priorities.

**Primary level**

Primary level skills and staffing mixes of restructured service packages that will be funded under a NHI need to be carefully planned for and resourced. In addition to their clinical activities, clinics and health centres should have responsibility for supporting comprehensive services in their catchment areas. This includes supervising CHWs. Each clinic or health centre should be staffed by a team of health workers, differing in their composition according to rural or urban location and size of the facility’s catchment population. Typically, a clinic serving approximately 10,000 people should have a doctor visiting on a regular and dependable basis; between four and eight nurses (the number depending on catchment population and comprising a clinical nurse practitioner, professional nurses, enrolled nurses and enrolled nursing assistants); a number of CHWs, a mid-level worker (MLW), e.g. pharmacist assistant and Community Rehabilitation Workers (CRWs).

“...In KZN the doctor’s weekly visits to some of the clinics works well. A good example is Umkhanyakude health district, where ARVs are being dispensed at clinic level. The district health team piloted the introduction of treatment at clinic level, organised regular doctor visits and started more than half the patients on ARVs without a visit to the hospital. Examples like this illustrate that an ARV treatment initiative can strengthen the whole PHC system.” (Key informant 1)

**Mid-level workers**

Experience in other countries has demonstrated the value of using MLWs. In South Africa nurse and pharmacist MLWs are already in place. Clinical Associates (CAs) are being trained, but currently in very small numbers. It is extremely worrying that to date no posts for this new cadre have been created in the public service, raising the possibility of a new cadre of urgently needed health workers remaining unemployed or seeking employment outside the public health sector. Generally there have been delays in implementation of MLW programmes. The proposed development of MLWs appears to have brought about insecurity in a number of professions, resulting in delayed implementation.

“There was momentum to develop a mid-level community-based rehabilitation worker. This was then ‘scuttled’ by profession-specific rehabilitation workers, so these have not been trained despite the standards and curriculum being developed. Policy has to be taken through the Health Professions Council of South Africa. Occupational Therapy have developed a long document outlining the mid-level workers scope of practice for two levels. But progress on this seems to have stalled.” (Key informant 2)

Against the background of persistent staff shortages, roles and curricula for different MLW should be clarified, training providers accredited and training expedited. The CA positions should be evaluated in relation to needs and to experiences in other countries. The roles and salary scales of CA and Clinical Nurse practitioners should be clarified. The potential for increased ‘task-shifting’ to nurses should also be explored.

There are a number of other categories of MLW, namely community liaison officers and specialised auxiliary service officers (SASOs). Many of these positions date from pre-1994, and some have fairly small numbers. There is lack of clarity concerning the standards and scope of practice of these categories of workers that include nutrition advisors, family planning and health promotion advisors. These different sub-categories should be offered generalist training, following which they can specialise as part of career progression. For nutrition advisors it has been suggested that priority be given to areas where there is a high burden of disease related to nutrition and, in the long term, there should be at least one nutrition advisor per clinic.

**Box 2: Proposed model for nutrition to demonstrate progression from nutrition advisor to nutritionist**

There are currently nutrition advisors working who have no specific accredited training and fulfill differing roles depending on their line function managers. Many have been working in nutrition for many years but have limited skills, as well as roles, because they have no formal training or scope of practice.

As an example of skills upgrading and how career progression could be planned for existing workers we propose, using nutrition as an example, the following model for this and other professional health workers:

- Assess current skills and training requirements in terms of the proposed career progression
- Apply Recognition of Prior Learning (RPL) and recognise additional training by recognised training institutions so as to bring the workers up to National Qualification Framework (NQF) level 4 (according to needs)
- Arrange training to enable career progression to NQF level 5, the level of a nutritionist

[Diagram showing the progression from nutrition advisor to nutritionist]
The shortage of health professionals throughout the public service, but particularly in rural areas, is well documented and uncontested and Minister Mosoaloedi has referred to it on many occasions. There have been calls to double the output of medical graduates, an endeavour which would require dramatically increased resources in training institutions.

The proposal that a NHI should contract private sector professionals to work part-time in the public sector needs to be examined carefully. It is clear, however, that it may be difficult to attract significant participation unless payment is adequate.

Urgent attention should be given to creating more provincial and regional specialist and specialist training positions that encompass both clinical responsibilities (in provincial and regional hospitals) and a supportive/supervisory role in strengthening services in district hospitals. Specialists would be expected to spend a significant percentage of their time visiting hospitals in their region.

A dramatic increase in the training of professional, enrolled and assistant nurses is one of the most urgent priorities.

Re-opening nursing colleges, and the use of incentives to encourage nurse tutors and experienced clinical nurse supervisors (retired or working in another field) to return to the profession, must be explored. But beyond this, an audit of training capacity and the quality of training in nursing colleges is necessary as many nursing colleges appear to be in a state of turmoil and severely under-capacitated.

In addition to the need to increase numbers of many categories of health professionals, progress in developing new models of recruitment and training of health professionals must be accelerated.

The clinical training platform is currently mainly restricted to secondary and tertiary facilities, with a limited number of primary care facilities. Great potential exists for district hospitals to host medical and health science students. For example, KwaZulu-Natal has 44 district hospitals – only eight are used for training purposes. This could easily be increased, albeit with additional resources for transport, accommodation of students and lecturers and for teaching facilities. An excellent example is the University of the Witwatersrand’s Centre for Rural Health which trains doctors in rural hospitals. Twenty-five per cent of medical students at the University of the Witwatersrand now choose rural electives, giving them rural exposure in their third to sixth years of training. An expansion of such programmes and an increase in resourcing would assist in changing the focus of training and in upgrading practice at these facilities.

Furthermore, there is growing evidence that students from rural areas are more likely to return to the rural area to work. In 2003, for example, a study found that 38% of rural origin doctors were practicing in rural areas at that time as opposed to 12% of urban origin. There are examples of government policies encouraging recruitment from rural areas: in Australia, for example, there is a government decree that 25% of students must be of rural origin if the university is to receive bursaries. De Vries and Reid recommended as early as 2003 that the NDoH should provide incentives to universities to enrol rural students; medical school selection criteria should preferentially include students of rural origin and those who aspire to a career in rural health, primary care or general practice (since the latter are more likely to practice in a rural area). Additional recommendations are for government to focus more on identifying and preparing rural and other students from disadvantaged education systems for university; provide bursaries for students from rural and disadvantaged communities; and run programmes in universities to assist students who are struggling academically.

Community service provides an opportunity to strengthen availability and utilisation of new professionals in rural and underserved areas. If managed well, it can encourage health
professionals to stay in the public health system. Rural doctors have stated, however, that the community service programme has been “very effective as a recruitment tool, but useless as a retention tool” (Key informant 4). It has been in place for 10 years and the ratio of South African to foreign doctors has changed as a result of community service. A study on rural retention of community service doctors has shown that the level of support, orientation, mentoring and career and professional development influences whether doctors remain in rural practice.22 For example, according to key informant 1, Murchison hospital near Port Shepstone, KwaZulu-Natal, has retained all its community service officers. Staff there are well looked after and part of a productive team, as a result of which community service officers are requesting to remain on the staff. Improved clinical support and governance could further improve the utilisation and supervision of community service professionals and should include the employment of senior medical officers and rotating specialist visits. In many countries, for example Pakistan, doctors are required to work in rural practice before being accepted as registrars for post-graduate training. This option could be explored for South Africa.23

Furthermore, training institutions and examining bodies (e.g. Colleges of Medicine) need to be strongly encouraged and incentivised to ensure that regional/rural service becomes a compulsory rotation in specialist training and that sub-specialities in disciplines such as community paediatrics and obstetrics are created.

**Strengthening management skills**

Research has shown that, with some exceptions, management skills are weak and the workplace environment does not encourage innovation, creativity and change.9

There are now a number of initiatives aimed at supporting the transformation of the health sector through continuing education including the Oliver Tambo Fellowship programme at the University of Cape Town; the Summer and Winter school programmes at the University of the Western Cape; and Masters in Public Health programmes at a number of Schools of Public Health. However, to effectively transform the public health sector there needs to be a substantial expansion and standardisation of management and public health training for health system development, with the NDoH incentivising this through contracting training institutions with proven track records.

**Conclusion**

While many HR plans have been developed, these are not fully implemented and new plans are developed without reference to existing plans. The NHI planning process should draw on existing plans and learn from these previous processes. There needs to be closer links between education and health departments in terms of HR training and targets. HR plans should identify projected training needs and provide a phased strategy to link training to needs.24 Plans, budgets, monitoring and evaluation and implementation all need to be linked.

Despite the government’s expressed commitment to PHC, the NDoH has continued to support and sustain a clinical model of health service delivery, primarily utilising doctors and nurses.25 The clinic-based services are limited in their ability to reach community level and, being focused on curative aspects, are often inadequate with regard to prevention, health promotion and rehabilitation services. While the curricula of health professionals have undergone some changes, the training has continued to be curative in focus and the clinical training platform has not been significantly expanded to include peripheral sites. While there are many CHWs in the country, they remain unorganised and peripheral to the public health system and the MLW category has not been fully explored.

In addition, transformation of the health system has been hampered by inadequate numbers of health workers, particularly in rural and peri-urban townships and informal settlements. There is no clear strategy for addressing this critical health worker shortage.

The health system is currently segmented along socio-economic lines, with the minority wealthy and employed having access to private medical care and the remaining majority of the population having access to the poorly-resourced, publicly-funded health system.26 Although the country’s health and health care situation is extremely challenging, the NHI proposal offers an opportunity for fresh thinking and a revitalisation of the health system. A new model for human resources, as outlined in this chapter, that includes sufficient numbers and an appropriate skills mix of personnel is urgently required if a NHI scheme is to improve health care for South Africa’s people.
References


