HRH SA 2030

Human Resources for Health
South Africa 2030

*Draft HR Strategy for the Health Sector:*
2012/13 – 2016/17

*Consultation Document V5*

August 2011
Acknowledgement

This discussion document for the *Draft HR Strategy: Human Resources for Health SA 2030* was prepared with the funding from UK DFID, programme for *Strengthening South Africa’s Response to HIV and Health*, and management support from HLSP.
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ANNEXURES A AND B
1. PREAMBLE

The future character and culture of the South Africa health sector in 2030 will be determined by decisions and actions taken in the next five years. The claim that human resources are the most critical resource in the delivery of health services has to be borne out in succinct and coherent policy and practice. The investment that has to be made and sustained in developing the human resource capacity for health is substantial and every error or failure to act appropriately can take many years to rectify.

The process of developing a five year strategy, and implementing it, must unleash the huge potential of people working in the health sector. Many health cadres and workers, academics, managers, service practitioners, in the public and private sectors, have ideas on ways to improve Human Resources for Health and health outcomes. It is necessary to harness these ideas and transform them into action and a new ‘Human Resources for Health’ culture and practice for 2030.

There are many existing policy and research documents and plans which provide insight and make recommendations for the way forward for Human Resources for Health in South Africa. This Draft HR Strategy has been developed through reviewing these policy and research reports and consolidating them in consultation with key informants. Health workforce planning is an iterative and complex process and joint decision-making by all stakeholders is essential. The final HR Strategy should be a ‘living document’ which develops and is refined on an ongoing basis, through evidence and experience, and improvements in which are reflected in Annual Performance Plans.

The approach to the HR strategy development process was set by the Director General in the following statement on May 5th 2011 at the National Health Council: “We need to review what we have done and the impact. We need to identify problems, and what to do. We need to be bold and affirmative and provide solutions with an emphasis on strengthening human resources (to meet service demand) for the immediate future, and medium term. The introduction of new financing mechanisms, such as NHI, will demand a strong human resource capacity for the health sector.” The Director General emphasised the need for a strategy and process that would enable the work of the provincial departments of health.

Despite the consultation that has already occurred in reaching this point a range of issues require discussion and decisions before this Draft HR Strategy can be finalised and adopted. These include issues of institutional capacity to scale up and meet future staffing needs, the model of skills mix (nurse based model), the scaling up and strengthening of the teaching and training environment, the need for greater equity and access to health professionals (particularly in rural areas), the need to improve quality (not just clinical knowledge and skills but also attitudes and behaviours which enable delivery with care and compassion), the need to deliver in a more efficient way (more service at a lower cost) and the need to impact on health outcomes and to measure these improvements.
2. EXECUTIVE SUMMARY

2.1. THE PROCESS FOR DEVELOPING THE DRAFT HR STRATEGY

In May 2011, the Director General for Health Ms Malebona Matsoso, initiated a process to develop a Draft HR Strategy. The process involved gathering information from key informants, collecting and reviewing policy documents, research and reports on Human Resources for Health in South Africa. The aim of the process was to develop an HR Strategy which is based on evidence and reflects the views of role players and stakeholders.

The consultation process from May 2011 to July 2011 involved establishing relevant structures in NDoH; consulting with provincial departments of health, structures in the NDoH, National Health Consultative Forum partners, academics involved in education and training, other Government Departments; and reviewing international experience. A number of discussion documents with annexures of detail have been produced as part of this process for the National Health Council.

Issues affecting HRH in South Africa were analysed as themes. These themes included: sectoral analysis by professional category and the costs, skills mix, level of human resources, equity and maldistribution, factors affecting shortages, provincial HR and Service Transformation (STP) plans and their use in workforce planning, the re engineered PHC approach and its impact on HRH, retention and recruitment issues, management and leadership, registrars and specialist nurses, Academic Health Complexes, Community Health Workers and Mid Level Workers, gaps and targets for human resources, professional councils and bodies, research and innovation in the health sciences, and previous policy and evaluations. This Draft HR Strategy provides a distillation of the ideas arising from the review of themes, followed by recommended strategic priorities and interventions, and forecast modeling of the future requirement of the health professions.

2.2. THE ECONOMIC CONTEXT

The development of the Draft HR Strategy is located in an economic context of 3.5% growth, and based on the assumption that the Government fiscus has competing demands and a significant increase in resources is not likely. Proposals to resource the HR Strategy include improved use of resources through changing staff mix for the long term, improving productivity, and investigating collaboration with the private sector. Overall a scaling up in production of health professionals and employment of clinical staff is proposed and this does need to be resourced.

2.3. THE HEALTH POLICY CONTEXT
The health policy context is that the South African health system is failing to meet millennium development goals and has health outcomes much worse that its peers. The Minister of Health announced in his budget speech of May 2011 new policy guidelines that inform the HRH priorities for the short and medium term.

The new policy emphasised the re-engineering of the Primary Health Care System and the overhaul of the health system as a whole. The emphasis for PHC will be according to 3 main streams. The three streams will consolidate PHC as the primary mode of health care delivery focusing on prevention of disease and the promotion of health. The three streams comprise the following:

i. A district-based service delivery model focusing specifically on maternal and child mortality. District teams will be deployed which consist of specialist clinicians and nurses in each district. Specifically the specialist teams will comprise a family physician, an anaesthetist, an obstetrician & gynaecologist, a paediatrician, an advanced midwife and a PHC nurse.

ii. A School Health Programme to deal with basic health issues such as eye care, dental and hearing problems, as well as immunisation programmes in schools. Contraceptive health rights, teenage pregnancy and abortions, HIV and AIDS programmes, and issues of drugs and alcohol in school will be part of this initiative.

iii. A ward based PHC model which will deploy at least 10 well-trained PHC workers per ward, including Community Health Workers.

Improved management of health care institutions and health districts will be essential to facilitate the re-engineering of PHC.

2.4. HRH IN SOUTH AFRICA: THE PROBLEM STATEMENT

Number of professionals and expenditure
In 2010 there were 150,509 health professionals registered with the Health Professions Council of South Africa (HPCSA). There were 231,036 nurses registered with the South African Nursing Council in 2010. In April 2010 the Pharmacy Council had 12,813 pharmacists registered with the Council, and 9071 pharmacist assistants.

From 1996 – 2008 there was a stagnation in growth of health professionals and a decline in key categories such as specialist and specialist nurses. There was a moderate increase after 2006 but this has to be planned and sustained. The slow growth is linked to poor retention of graduates in all health disciplines, unplanned and unfunded public sector posts, and inefficient management and recruitment processes.

In the same period expenditure on health professional salaries has gone up from R60bn in 1998 to R207bn in 2010, indicating a huge increase in expenditure due to salary increases. An evaluation of how this increase has been spent is required.

Attrition and Migration
Attrition from the professions in South Africa is estimated to be about 25% per annum, with further attrition of about 6% due to death, retirement and change of profession. The attrition of Community Service professionals is notable with about 23% annually not remaining to work professionally in South Africa. The primary reason given for this choice is poor working conditions in the public sector, and not personal circumstances. The high level of attrition is contributing to the shortage of health professionals. Tracking of health professional migration and the reasons for it is necessary.

Maldistribution
There is inequity in density of health professionals per 10,000 population between rural and urban areas, and between the public and private sectors. A province like the Eastern Cape has a density of less than half that of the Western Cape and Gauteng.

‘Shortage’ of professionals
Measuring for a ‘shortage’ in health professionals can be done in various ways. ‘Vacancies’ in the public sector are not an accurate method and are an unrealistic indication of need. Filling currently listed public sector vacancies would cost R40 billion. Making ‘vacancies’ realistic and manageable would be an important workforce planning exercise.

Benchmarking with other countries
Benchmarking with other countries is one methodology for assessing whether South Africa has a ‘shortage’ of health professionals, how South Africa performs with its given staff and skills mix, and to determine ‘the gap’. Other means to determine the gap are realistic ‘vacancies’ or staffing requirements based on service plans informed by norms and case load.

It is evident that South Africa has a nurse based health care system with 80% of the major group of health professionals comprising nurses (doctors, pharmacists, nurse and oral health). The evidence is that South Africa’s performance in terms of health outcomes when compared with peer countries is extremely poor, with much higher infant and maternal mortality. This reflects on poor productivity, poor design and poor management of resources and not necessarily only the number of available professionals in the health sector.

It is worth noting however, that South Africa does have considerably less doctors, pharmacists and oral health practitioners per population 10,000 population than the other comparable countries. Benchmarking has limitations as each health system is different. But the results of such comparison should contribute future strategy.

Recruitment of Foreign Health Professionals
Current national policy is to limit recruitment of foreign trained health professionals to government-to-government agreements. The foreign recruitment process is reported to be inefficient and most offers from governments are not pursued. In the short term foreign recruitment will be necessary to ensure an adequate number of health professionals. The policy will need to be rewritten and effective management processes established. Foreign recruitment should be carefully managed with an emphasis on recruiting foreign academic clinicians and professionals willing to work in rural areas.

Education, Training and Research
Education output of most professions has been stagnant for the past fifteen years. Faculty output of MBChB graduates is not a full capacity for all faculties, and varies in quality for all professions.
Budget cuts in the 1990s led to a reduction in academic clinicians and the freezing of academic clinician posts has been sustained. Specialist training in nursing has declined significantly and affects hospital service capacity. Registrar and subspecialist training posts are 30 percent and 75 percent unfilled respectively due largely to lack of funding.

The nursing profession held a Summit in 2011 which identified many strategic issues which need to be addressed to strengthen the nursing profession, especially given the central role they play in the HRH model for South Africa.

The Academy of Science for South Africa reports a decline in clinical research and has initiated a programme to revitalise clinical research and innovation in South Africa.

A constraining factor on education and research growth, and service growth, is the management, financing and organisational arrangements of the Academic Health Complexes and Academic Central Hospitals.

**Public Health Leadership**

The Minister has emphasised the need for a preventative approach to health care. Public Health Specialist training posts are 50 percent unfilled. It is necessary to strengthen the role and career path Public Health Specialists and professionals to develop and implement public health strategies.

**Leadership and Human Resources Management**

The management of the health workforce is central to how health professionals and health workers perform, to quality of care, retention and health workforce development. A review undertaken for the Minister of Health by the Development Bank of South Africa highlighted than many district and facility managers are not adequately competent for the job they occupy. ‘Moonlighting’ and RWOPS have been identified as issues which affect productivity and quality of care. The Occupation Specific Dispensation needs to be reviewed to ensure appropriate incentives are structured into the remuneration package in order to attract and retain health professionals. Provincial Human Resource (HR) Plans vary in relevance of data, and their functionality as tool for improvement in the working lives of the health workforce, and for improving staff planning and utilisation.

**Information and Planning**

There is no national information database for planning the health workforce. All information gathered for the Draft HR Strategy was ‘once off’ data. The data available coupled with limited planning structures and processes, has lead to health workforce planning not being prioritised. Given the central role of human resources in the health sector, workforce planning capacity and processes need to be strengthened. Provincial Strategic Transformation Plans need to be integrated with a national process, including financial and human resource plans.

**HRH requirements for a re engineered health system**

The proposed re engineered PHC approach will require ‘scopes of practice’ of key health professionals to be reviewed, referral patterns detailed, new training and career paths developed. The challenges of the future however require a review of most of the professions for improving both productivity, and delivery of accessible, appropriate, quality care, in the context of limited human and financial resources.
2.5. A STRATEGIC APPROACH FOR 2030

A vision to improve access to health care for all by 2030, makes it is necessary to develop and employ new professionals and cadres to meet policy and health needs, to increase workforce flexibility to achieve this vision, to improve ways of working and productivity of the existing workforce, to improve retention, increase productivity and revitalise aspects of education and training.

Achieving this vision requires the organisational infrastructure for education, training and service development, namely effective and efficient Academic Health Complexes. It also requires improved management of health professionals and cadres and improvement in their working lives.

Realising the vision for 2030 requires firm, accountable and consultative leadership, well informed by information with the planning capacity, processes and tools to deliver.

The thematic areas researched in the process of developing the HR strategy have informed the development of eight strategic priorities, with strategic objectives and interventions. The table below summarises the 8 Strategic priorities and objectives.

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5.4. Five Flagship Academic Central Hospitals being developed

5.5. Nursing Colleges revitalised

6. Human Resource Management

| 6.1. Strengthen HR function at all levels |
| 6.2. Implement compulsory accreditation of HR function |
| 6.3. Performance Management frameworks implemented |
| 6.4. Minister’s ‘Improving the Working Lives of Health Care Workers Initiative’ designed and implemented |
| 6.5. Review and implement remuneration and OSD |

7. Quality Professional Care

| 7.1. Improve and maintain professional standards |
| 7.2. Accredit academic training sites |
| 7.3. Continuing Professional Development |

8. Access to Health Professionals in Rural and Remote Areas

| 8.1. Short term strategies to recruit & retain professionals |
| 8.2. Educational strategy in for rural and remote areas |
| 8.3. Regulatory strategies on scopes of practice |
| 8.4. Financial incentive scheme to attract professionals to rural areas |
| 8.5. Personal and professional support for health professionals in rural areas |

2.6. FORECASTING GROWTH IN THE HEALTH PROFESSIONS

The NDoH Workforce Planning model was developed in 2008. For the HR Strategy planning process the model was updated and used as a tool for planning and forecasting. This model will need to be further developed and indicative projections are made for the Draft HR Strategy. It is proposed that the SA HRH design to improve health outcomes will have six key foundations:

- Community Health Workers (CHWs) at community level
Based on this expected high-level policy and a range of variables a set of prioritised realistic scenarios are presented. They contain timelines for action, short, medium and long term outcome and impact expectations and sequencing proposals to address financial constraints. It must be noted that only Scenario 3 is presented in this Draft HR Strategy document for consultation, and detailed in Annexure B. The NDoH HR Planning Model with the other scenarios is available for review.

The model provides projections for over 100 registerable health professions and is designed to be interactive with the option to adjust baseline data and several assumptions for each profession.1

The scenario assumptions shows that at a constant GDP growth rate, with concerted investment for the next five years (3% to 5% annual growth rate in personnel spending) it is possible to close the gap in the realistic numbers in a fifteen to twenty five year time frame. Operational implications of the targets need to be examined and evaluated. The table below shows the results of planned change towards professional targets over the next fifteen years.

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1Annexure B: NDoH HR Planning Model
3. CONTEXT

3.1. INTRODUCTION

Workforce planning for the health service is challenging and complex. The future workforce is difficult to predict. Social and technological changes mean that some skills will become redundant while demand for others will suddenly increase. Basic staff numbers are hard to forecast and problems are exacerbated by the time required to train staff. It takes at least three years to train for many professions, and up to fifteen or twenty years for some senior doctors.

Nonetheless, workforce planning is a vitally important process. The health workforce comprises about 65% - 70% of expenditure, depending on the service delivery setting, in most countries. This does not include the substantial investment to train and educate health professionals. It is important that this massive investment in training and employment of the health workforce is well planned, appropriately targeted and properly managed if health outcomes are to be improved. South Africa’s health system and its human resource capacity is the product of a complex context which needs to be understood in order to visualise and implement improvements.

Health is all about people. The unique encounter between the health professional and person who needs care is what the health system is about. There is ample evidence that health professional numbers and quality are positively associated with improved immunisation coverage, successful outreach in primary health care, infant, child and maternal survival, impact on communicable diseases and enhancing quality and length of life.

3.2. THE EPIDEMIOLOGICAL CONTEXT

Health indicators pose the challenge for the development of a human resource strategy, and have defined the new policy intervention of the Minister of Health. Data indicates that the under-five mortality, infant mortality and maternal mortality in South Africa are high and increasing. The under-five mortality rate has risen from 59(1998) to 104(2007) per 1000 live births, a far cry from the 2015 target of 20. The infant mortality rate has remained virtually static at 54(2001) to 53(2007) per 1000 live births, which is equally far from the 2015 target of 18. But perhaps most distressing is that the maternal mortality ratio has risen from 369 (2001) to 625 (2007) per 100,000 live births, almost doubling and almost 20 times higher than the 2015 target of 38. Only 43.7% of this figure can be attributed to AIDS.

HIV/AIDS, interpersonal violence, TB and road traffic injuries were the leading causes of people seeking health care in 2000. The multiple burdens of disease are characterised by the co-existence of diseases associated with under-development such as diarrhoea and malnutrition, as well as

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2Third progress report on the Millennium Development Goals (MDGs), StatsSA, UNDP (2010)
chronic non-communicable diseases such as diabetes and stroke. These are compounded by a high injury burden and the HIV/AIDS epidemic.\textsuperscript{3,4}

There has been a \textit{rapid increase in infectious diseases}, with \textit{tuberculosis} becoming the leading registered cause of death, and the proportion of the deaths due to infectious and parasitic causes has increased from 13.1 per cent to 25.5 per cent from 1997 to 2006.

At least 7.3 per cent of the total population are \( \geq 60 \) years\textsuperscript{5}, amongst the highest in Africa, and there is indication that the \textit{population is ageing further}.

The 2000 South African National Burden of Disease Study\textsuperscript{6} and the Comparative Risk Assessment\textsuperscript{7} highlighted the inclusion of \textit{non-fatal outcomes} in the measurement of the burden results, specifically in \textit{mental health problems}, such as \textit{unipolar depression} and \textit{alcohol dependence} ranking amongst the leading causes. In addition, other non-fatal health problems such as \textit{adult-onset hearing loss} and \textit{cataract-related blindness} feature among the leading single causes of health loss.

While the National Burden of Disease Study highlighted the need for the provision of a wide range of health services, it brings into sharp focus the \textit{need to promote health and prevent disease}. The risk factor assessment shows that the loss of health in South Africa is dominated by \textit{sexually transmitted diseases} resulting from unsafe sex. Interpersonal violence and alcohol harm are other risk factors from the social sphere. These are accompanied, on the one hand, by risk factors related to \textit{poverty and under-development}, such as under-nutrition, unsafe water, sanitation and hygiene and indoor smoke from solid fuels, and on the other hand by risk factors associated with an unhealthy lifestyle related to tobacco, diet and physical activity.

\subsection*{3.3. STRATEGIC IMPLICATIONS OF THE BURDEN OF DISEASE}

The extensive and changing burden of disease in South Africa has several implications for human resource development and planning:

\begin{itemize}
  \item[i.] Health professional training and development must provide for a wide spectrum of conditions
  \item[ii.] The priority is to improve maternal and child health and maternal mortality
\end{itemize}


\textsuperscript{5}2001 Population Census


iii. Innovative HR approaches and interventions are needed, in particular for the high AIDS and TB burden, the emerging cardiovascular and diabetes burden and mental health problems

iv. Addressing health inequalities and the social determinants of health needs to be high on the agenda

v. The ageing trend in the population also calls for training and services to meet the needs of older people

vi. Strengthening public health, building the evidence base and improving surveillance data are needed to promote health and prevent disease.

**Figure 1: Proportions of leading categories of causes of death 2010**

Source: D Bradshaw, MRC Burden of Disease Unit, 2010
3.4. MINISTER’S STATEMENT AND COMMITMENT

Indicators above show that South Africa’s health system is failing, but the human resources for health are only a part of the problem. Nonetheless, a change in policy direction needs careful and deliberate redirection of, and investment in, HRH as a part of the whole health system reform.

The Minister of Health has signed a National Service Delivery Agreement ‘for a Long and Healthy Life for All South Africans’ with the President, to realise this strategic objective. In this document the Minister of Health and the NDOH are committed to four strategic outputs that the health sector must achieve:

Output 1: Increased life expectancy
Output 2: Decreased maternal and child mortality
Output 3: Combated HIV and AIDS and decrease in the burden of diseases from Tuberculosis
Output 4: Strengthened Health System Effectiveness

The policy guidelines that inform the HRH priorities for the short to medium term relate to the re-engineering of the Primary Health Care system, in the context of the implementation of National Health Insurance. The Minister, in his Budget Speech in May 2011 announced that the re-engineering will be according to three main streams to consolidate PHC as the primary mode of health care delivery focusing on prevention of disease and the promotion of health. The three main streams are:

A district-based service delivery model focusing specifically on maternal and child mortality.

These teams will consist of four specialist clinicians (paediatrician, family physician, obstetrician & gynaecologist and anaesthetist), an advanced midwife and PHC nurse deployed in each district.

A School Health Programme to deal with basic health issues such as eye care, dental and hearing problems, as well as immunisation programmes in schools. Contraceptive health rights, teenage pregnancy and abortions, HIV and AIDS programmes, and issues of drugs and alcohol in school will be part of this initiative.

A Community Outreach PHC Team which is ward based and will comprise at least 10 well-trained PHC workers per ward.

Improved management of health care institutions and health districts will be essential to facilitate the re-engineering of PHC.

The Minister also has announced the commissioning of five Flagship Academic Hospitals as part of the process to re engineer and strengthen the whole health system, and develop a balanced capacity for health care delivery.

The Human Resource Strategy of NDoH, HRH SA 2030, is directed to meeting these new health goals and service needs.
3.5. NDOH POLICY GUIDELINES

Developments in HRH must also be guided by the Medium Term Strategic Framework (MTSF) for 2009–2014 and the national Department of Health’s 10 Point Plan of priorities. The 10 Point Plan incorporates the priority of human resources, planning, development and management.

i. Strategic leadership and creation of a social compact for better health outcomes;
ii. Implementation of the National Health Insurance;
iii. Improving the quality of health services;
iv. Overhauling the healthcare system;
v. Improving human resources, planning, development and management;
vi. Revitalisation of the infrastructure;
vii. Accelerated implementation of HIV and AIDS, STI and TB and communicable diseases;
viii. Mass mobilisation for better health for the population;
ix. Review of drug policy; and
x. Strengthening research and development.

The fifth point in the 10 point plan, “Improving human resources, planning, development and management” has six documented strategic priorities:

i. Refinement of the HR plan for health
ii. Re-opening of nursing schools and colleges
iii. Recruitment and retention of professionals, including urgent collaboration with countries that have an excess of these professionals
iv. Focus on training of PHC personnel and mid-level health workers
v. Assess and review the role of the Health Professional Training and Development Grant (HPTDG) and the National Tertiary Services Grant (NTSG)
vi. Manage the coherent integration and standardisation of all categories of Community Health Workers

The Human Resource Strategy of NDoH, HRH SA 2030 builds on these priorities.

3.6. THE LEGISLATIVE MANDATE

The development of the HR Strategy for NDoH is governed by The Health Act paragraphs 51 and 52. In terms of the act the Minister:

i. May establish Academic Health Complexes

ii. Must ensure education and training of the health workforce to meet requirements of the health system, and adequate resources for this purpose

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Medium Term Strategic Framework (MTSF) (2009–2014)
iii. Create new categories of health workers and ensure sufficient skills, competencies and expertise
iv. Identify shortages and find ways to fill them through local and foreign recruitment
v. Prescribe strategies for and retention
vi. Ensure human resource planning development and management structures
vii. Ensure institutional capacity at national, provincial and district levels to develop and manage human resources
viii. Ensure clarity on roles and functions of the NDoH, provincial departments and municipalities with regard to planning, production and management of human resources.

A number of other aspects of legislation impact on the management of human resources by the NDoH. These include the Higher Education Act 1997 which defines higher education as a national competence of the Department of Higher Education and Training; and the Public Service Act 1994, and Labour Relations Act 1995, both of which govern conditions of employment for public servants and remuneration.

The legislative and operational framework of developing and managing human resources for the health sector necessitates a close and ongoing working relationship with the relevant Ministries.

3.7. **THE ECONOMIC CONTEXT**

Competing demands on the national fiscus make substantial increases in the 9% of the budget spent on health unlikely. The health sector must demonstrate allocative and operational efficiency (optimal spending between different categories of health workers and productivity of the existing workforce) in the management of human resources before additional spending can be motivated.

The national commitment to the establishment of a National Health Insurance (NHI) delivery model may provide potential positive financing changes for the health sector that may result in an increasing percentage of the GDP being spent on health services over the next 15 years. No commitment to an increase has been formally announced but, if there is any increase, it is not likely to be massive, given the other competing demands in society.

The assumption has to be made in planning for HRH SA 2030 that spending will be aligned to growth in GDP. The percentage of GDP spent (or even the public budget) on human resources for health may be increased, but this implies one or more of the following:

- an increase in health workforce financing as a share of GDP
- revenue generation by the public sector
- a shift in public spending towards health
- a shift in public health spending towards human resources for health
- additional private sector financing towards human resources for health.
4. NATIONAL HR STRATEGY - OVERVIEW

HUMAN RESOURCES FOR HEALTH IN SOUTH AFRICA:
THE PROBLEM STATEMENT

4.1. INTRODUCTION

South Africa has a well-developed hospital and clinic system, is well resourced in terms of technology and medicines, and is internationally recognised for excellence in clinical academic medicine. At a policy level, the first decade post-apartheid has seen numerous policies and legislation enacted and a new health service delivery framework put in place. Opinion of health professionals is that in fact, health outcomes have declined and the capacity of the health system has deteriorated.

The general consensus is that the failure of health services to deliver is due to constraints and bottlenecks in human resources. An integrated set of problems and constraints that affect the capacity of HRH in South Africa have been identified by role players and need to be addressed for HRH to be strengthened and to improve health outcomes.

4.2. HISTORICAL PATTERN IN HRH NUMBERS

In 2010 there were 150,509 health professionals registered with the Health Professions Council of South Africa (HPCSA). There were in addition 231,036 nurses registered with the South African Nursing Council in 2010. In April 2010 the Pharmacy Council had 12,813 pharmacists registered and 9071 pharmacist assistants (see Annexure A Table 1.1 Registered HPCSA Professionals 2010, Annexure A Table 1.2 Nurses Registered/Enrolled with SANC 1996 - 2010, Annexure A Table 1.3 Registered Pharmacists 2011 – 2010, and Annexure A Table 1.4 registered Pharmacists Assistants).

From 1997/8 to 2010/11 the numbers of health care workers in the public sector grew by 60,000, from 228,248 to 284,211, with about three quarters being Community Health Workers. In the same period expenditure on health professional salaries has gone up in nominal terms from R14bn in 1997/8 to R60bn in 2010/11, indicating a huge increase in expenditure due to salary increases. An evaluation of how this increase has been spent is required. The average salary in the health sector went up from R60,000 per annum to R207,000 per annum (see Annexure Tables 1.5, 1.6 and 1.7).
Human resources for health have not been growing at a planned rate to meet health needs. From 1996 – 2008 there was growth of health professionals in the public sector (See Figure 2), but not sufficient to meet clinical and health care needs. Administrative and management personnel expanded at the expense of clinical appointments. Specialist medical staff declined in number by 25%, from 3782 in 1998 to 2928 in 2006. Most of these staff would have left, or been retrenched, as a result of posts frozen in Academic (Central) Hospitals. Nursing numbers declined by 10,000, levelling off just above the 1997 level in 2006. This was due to the closure of Nursing Colleges. There has been a significant decline in nursing specialist staff.

From 2006 the situation improved with a moderate growth in all the professions (see Figure 3).

Figure 2: Health Professionals Employed in the Public Sector 1996 - 2008

Source: NDoH 2008

Figure 3: Health Professionals Employed in the Public Sector 2002 - 2008

Source: National Treasury 2011

4.3. RETENTION AND ATTRACTION IN THE PUBLIC SECTOR

Slow growth of health professionals in the public sector is linked to a number of variables. The first variable is a lack of funded public sector posts. It is evident that the growth of output of graduates significantly exceeds the growth in employment in the public sector. Seventy percent of new graduates produced in the key professions over 10 years were not absorbed into the public sector. Over a ten year time frame, for example, 11,700 MBChB’s were
trained yet only 4403 medical practitioners were employed over the same time in the public sector. In the same period 2104 dentists were trained and only 248 employed in the public sector. Over 80% of Physiotherapists and Occupational Therapists were not retained in the public sector (see Table 2 Annexure A). There is a need to increase the availability of funded public sector posts for all the health cadres, and expansion in output of health professionals from training institutions needs to be carefully managed so as not to exceed absorptive capacity and affordability.

The second variable which is a contributor the lack of growth of health professionals in the public sector is a lack of proactive planning for requirements in the public health sector and management action to achieve planned targets and goals. This includes ensuring sufficient funding for clinical posts.

A third variable, is the poor recruitment management process which fails to attract health professionals to the public sector. The process of mass advertisement of provincial vacancies, lack of a professional website and information about post location, exceedingly slow processing of applications, all lead to a negative employment process and the loss of the potential professional to the public sector. Once employed the negative management process of meeting health professionals working needs and expectations continues, contributing to a negative work environment.

### 4.4. ATTRITION OF COMMUNITY SERVICE PROFESSIONALS

The attrition of Community Service professionals leads to a notable loss of trained professionals to the health system. Surveys report that in 2009 23.1% of medical Community Service Professionals were reported to plan to leave the country. Even though this is less than the 43% of 2001⁹, this is equivalent to the output of one medical school, each year, planning to leave the country.

Another study undertaken by HEARD for the International Migration project 2011, revealed that approximately a third of the student respondents were intending to work or specialise abroad, and that the majority would leave South Africa early on in their careers. These findings highlight the critical period early on in the careers of health professionals during which they are open to the possibility of leaving the country. The reason for leaving was conditions of work in the public sector and not personal circumstances¹⁰. The NDoH and provincial departments of health do not sufficiently value and try to attract the Community Service employee.

### 4.5. MIGRATION

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⁹ Wolvaardt G, A review of doctors experiences over the first 10 years of CS, Foundation for Professional Development, 2010

¹⁰ Reardon C and George G, personal communication
A range of issues affect the \textit{attrition rate} of health professionals from South Africa which is \textit{conservatively estimated at an annual rate of 25\%} \footnote{Econex Notes on Health Reform Number 8, 2010; CMSA Report 2010}. Factors affecting migration are: HIV \& AIDS, working conditions, workload in the public sector, workplace security, relationship with management in the public sector, morale in the workplace, risk of contracting TB, personal safety. Lifestyle and income were not the most significant factors. \footnote{Wade Pendleton et al, The Haemorrhage of Health Professionals from South Africa: Medical Opinions, South African Migration Project, IDASA, 2007} The working environment and management relationships are critical factors affecting why health professionals leave. The high level attrition of health professionals from South Africa is creating a shortage of health professionals in the country, despite the number being trained.

\section*{4.6. Density and Distribution of HRH}

Of the professionals employed in South Africa, it is evident that there is \textit{inequity in density between the public and private sector for each profession, and between 'urban' and 'rural' areas, and wealthier and poorer provinces}. The density per 10,000 population for the 27 key professions for all provinces is detailed in Annexure A Table 3.

While Gauteng had the largest number of HRH in 2010, the Northern Cape had the highest ratio of total HRH per population – as can be seen in the Figure 4 below. The figure shows a large variance between the provinces. For example, the ratio of HRH per 10,000 population (33.06) in the North West is less than half of the ratios in Gauteng, the Northern Cape and the Western Cape. The Eastern Cape has about half the density of health professionals per 10,000 compared to that of Gauteng and the Western Cape.

\textbf{Figure 4: Total (public \& private) HRH per 10,000 population per province, 2010}
4.7. ACCESS TO HEALTH PROFESSIONALS IN RURAL AREAS

Providing health services to rural communities presents complex challenges in every country. In South Africa rural areas, are home to 43.6% of the population but are served by only 12% of the doctors and 19% of nurses. Of the 1200 medical students graduating in the country annually only about 35 end up working in rural areas in the longer term. About 21.3% of households in metropolitan areas belong to a medical aid, but only 5.4% of households in rural districts so access to private care is low. However access to PHC needs to be seriously improved in rural areas because the Infant Mortality Rate is 32.6 urban areas compared to in 52.6 on average in rural areas (some areas are as high as 70 in the Eastern Cape).

There is a need for the health departments to focus on how to recruit, retain and support senior health care professionals in rural hospitals for the long term and the HRH plan needs to be relevant to the rural health care context. National, district and facility level leadership need to be committed to ensuring that rural recruitment and retention strategies work.

4.8. “VACANCIES” IN THE PUBLIC SECTOR

‘Vacancies’ are regularly used as an indicator of the ‘shortage’ of health professionals in South Africa. In Annexure A Table 3 the vacancies for the 27 professional categories are reviewed and the cost of filling the vacancies is detailed, by province. In determining the ‘gap’ between the number of HRH SA currently has and what it should have to achieve reasonable/better health outcomes, this could have been a valuable source. Unfortunately there are various concerns with the public sector vacancy data which make its use problematic. The ‘vacancies’ are not based on a planned balanced health care system. Correcting the ‘vacancy’ situation and making it real and accurate is an important task for the short term in improving the management of the health workforce.

To illustrate the point, Table 2 below shows the population ratio of all filled and vacant positions for doctors (GPs & specialists) in the public sector for each of the provinces in 2010. The implied norms differ greatly between the provinces with that of the Western Cape at almost 9 doctors per 10,000 of the uninsured population, while the North West has an implied benchmark of only 1.91 doctors per 10,000 uninsured population. In Limpopo for instance, more posts are vacant than filled. It is recognised that no adjustment has been made for location of tertiary hospitals. However, there is no coherent strategy or goal between the provinces or nationally to develop a reporting framework for HRH that is informative.

In Annexure A Table 4 the costs of filling the vacancies for the 27 key professions is detailed by province, based on the average cost per professional in the public sector (OSD). As is evident, it would cost almost R 40 billion to fill all listed vacancies for this handful of

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13 Rural Health Advocacy Project Position Paper (2011) and letter to the Minister of Health April 2011
14 See Discussion Document Draft HR Strategy 4th August 2011 Annexure B6 for Rural Health Strategy proposed by the Rural Advocacy Group
positions only. This is clearly not a realistic target and suggests that the establishments are not based on both need and available resources.

Table 2: Total filled and vacant positions per 10,000 uninsured population for doctors in the public sector, by province, 2010

<table>
<thead>
<tr>
<th>Region</th>
<th>Uninsured population</th>
<th>Filled (per 10,000 population)</th>
<th>Vacant (per 10,000 population)</th>
<th>TOTAL (per 10,000 population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Cape</td>
<td>6,611,246</td>
<td>2.43</td>
<td>0.88</td>
<td>3.30</td>
</tr>
<tr>
<td>Free State</td>
<td>2,594,485</td>
<td>3.51</td>
<td>1.23</td>
<td>4.73</td>
</tr>
<tr>
<td>Gauteng</td>
<td>6,921,958</td>
<td>5.99</td>
<td>0.86</td>
<td>6.85</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>8,841,171</td>
<td>4.01</td>
<td>1.27</td>
<td>5.28</td>
</tr>
<tr>
<td>Limpopo</td>
<td>5,314,492</td>
<td>2.01</td>
<td>2.19</td>
<td>4.19</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>2,949,627</td>
<td>2.58</td>
<td>0.40</td>
<td>2.98</td>
</tr>
<tr>
<td>North-West</td>
<td>3,457,127</td>
<td>1.83</td>
<td>0.08</td>
<td>1.91</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>765,716</td>
<td>4.37</td>
<td>0.78</td>
<td>5.16</td>
</tr>
<tr>
<td>Western Cape</td>
<td>3,539,627</td>
<td>7.51</td>
<td>1.21</td>
<td>8.72</td>
</tr>
<tr>
<td>South Africa</td>
<td>40,995,447</td>
<td>3.82</td>
<td>1.08</td>
<td>4.90</td>
</tr>
</tbody>
</table>

Source: National Treasury/ Persal 2010

4.9. BENCHMARKING WITH OTHER COUNTRIES TO DETERMINE ‘SHORTAGE’

Benchmarking with other countries is one methodology for assessing whether South Africa has a ‘shortage’ of health professionals, and how South Africa performs with its given staff and skills mix, and to determine ‘the gap’. Other means to determine the gap are realistic ‘vacancies based on establishments calculated on assessed need not historical standards, or staffing requirements based on service plans informed by realistic assessments of caseload and productivity.

South Africa was compared with peer countries, namely countries similar to South Africa in the following dimensions:

– Population (size of the administrative challenge)
– per capita GDP (available money in the country to spend per person)
– Gini coefficient (economic inequity)
– GDP growth (indication of national productivity)
Six middle income emerging economy peer countries were identified (Brazil, Chile, Costa Rica, Colombia, Thailand, and Argentina). Data on professional numbers (doctors, nurses, pharmacy and oral health) in the whole country (different public/private arrangements were not disaggregated) were compared. The ratio of these four main categories of professionals provides insight into the ‘shape’ of the health systems in these countries. The peer countries were also compared for health outcomes, specifically, IMR (measure of infant mortality) and MMR (measure of maternal mortality).

**Table 3: Comparative benchmarks for staffing per 10,000 population and health outcomes**

<table>
<thead>
<tr>
<th></th>
<th>International benchmarks</th>
<th>SA current</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Brazil</td>
<td>Chile</td>
</tr>
<tr>
<td>Population</td>
<td>193 733 795</td>
<td>16 970 265</td>
</tr>
<tr>
<td>GDP per capita (USD)</td>
<td>4 399</td>
<td>6 083</td>
</tr>
<tr>
<td>%GDP Health</td>
<td>9.05</td>
<td>8.18</td>
</tr>
<tr>
<td>GDP growth (annual %)</td>
<td>-0.64</td>
<td>-1.53</td>
</tr>
<tr>
<td>GINI index</td>
<td>53.9</td>
<td>52.06</td>
</tr>
<tr>
<td>DOCTORS</td>
<td>17.31</td>
<td>17%</td>
</tr>
<tr>
<td>NURSES</td>
<td>65.59</td>
<td>64%</td>
</tr>
<tr>
<td>PHARMACY</td>
<td>5.81</td>
<td>6%</td>
</tr>
<tr>
<td>ORAL HEALTH</td>
<td>13.69</td>
<td>13%</td>
</tr>
<tr>
<td>Total</td>
<td>102.39</td>
<td>37.32</td>
</tr>
<tr>
<td>IMR (per 1,000 live births)</td>
<td>17.3</td>
<td>7.0</td>
</tr>
<tr>
<td>MMR (per 100,000 live births)</td>
<td>75</td>
<td>18.2</td>
</tr>
</tbody>
</table>

It is evident that South Africa has a nurse based health care system, similar to Thailand and Brazil in shape while Colombia and Argentina have a doctor based system and Chile and Costa Rica have more balanced doctor/nurse design.

**Table 4: Comparison of South Africa with Colombia, Brazil and Thailand, staff, IMR & MMR**