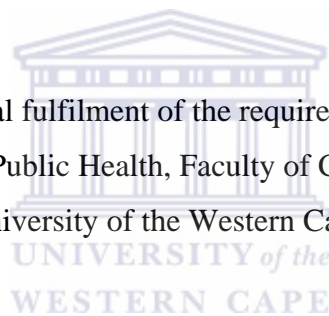


**STAKEHOLDER PERCEPTIONS OF HUMAN RESOURCE REQUIREMENTS FOR
HEALTH SERVICES BASED ON PRIMARY HEALTH CARE AND
IMPLEMENTED THROUGH A NATIONAL HEALTH INSURANCE SCHEME.**

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A mini-thesis submitted in partial fulfilment of the requirements for the degree of Master in
Public Health in the School of Public Health, Faculty of Community and Health Sciences,
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KEY WORDS

- Human resources for health
- National Health Insurance
- Alternative models
- Community health workers
- Mid-level workers
- Task Shifting
- Rural
- Primary health care
- Equity
- South Africa



Abstract:

In 2007, at its 52nd Conference in Polokwane, the African National Congress (ANC) called for the implementation of a National Health Insurance (NHI) scheme. The announcement resulted in much debate, with critics voicing concerns about the state of the public health system, lack of consultation and the expense of a NHI scheme. However, little attention has been paid to the human resource (HR) needs, despite the fact that 57% of recurrent expenditure on health¹ is on HR.

This research aimed to identify the HR requirements to support the implementation of an effective and equitable health system funded by a NHI in South Africa. An overview of the current burden of disease and distribution of HR is provided. Through interviewing key stakeholders the study attempted to elicit information about factors which will hamper or assist in developing such a health system, specifically looking at the HR situation and needs.

The research explores HR models and proposes key HR requirements for implementation of a health system funded by a NHI in South Africa, including skills mix and projected numbers of health workers and proposes ways to improve the deficient HR situation. Exploratory qualitative research methods were used comprising in-depth individual interviews, with a purposive sample of key informants, including: public health professionals and health managers (working in rural and urban areas); researchers; academics and NGO managers. The contents of the interviews were analysed to identify common responses about and suggestions for HR requirements within the framework of a NHI.

¹ Personal communication Dr Mark Blecher, Director Social Services (Health), National Treasury, 17 July 2009

The literature review includes policy documents, position papers and articles from journals and bulletins. Key informants were asked to identify literature and research material to support recommendations.

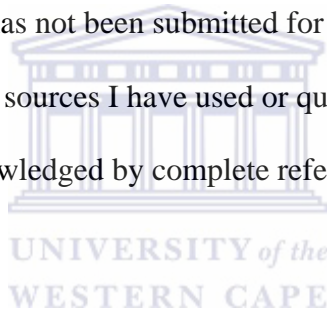
The research findings indicate that despite the South African Government's expressed commitment to Primary Health Care (PHC), the National Department of Health has continued to support and sustain a clinical model of health service delivery (Motsoaledi, 2010), primarily utilising doctors and nurses. 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 been through some changes, the training has continued to be curative in focus and the clinical training sites have not been significantly expanded to include peripheral sites. While there are many Community Health Workers in the country, they remain disorganised and peripheral to the public health system. 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.

In addition to the continued use of a clinical model, transformation of the health system has been hampered by inadequate numbers of health workers, particularly in the rural and peri-urban townships and informal settlements. There is no clear strategy for addressing the critical health worker shortage in under-resourced areas, particularly rural areas.

The last section makes recommendations, which will be submitted to the relevant task teams working on the NHI. It is intended that recommendations arising out of the research will influence the process and decisions about HRH within a NHI funded health system.

DECLARATION

I declare that *Stakeholder perceptions of human resource requirements for health services based on Primary Health Care and implemented through a National Health Insurance scheme* is my own work, that it has not been submitted for any degree or examination in any other university, and that all sources I have used or quoted have been indicated and acknowledged by complete references.



Full Name: Bridget Mary Lindley Lloyd: 15 December 2010

Signed:

ACKNOWLEDGEMENTS:

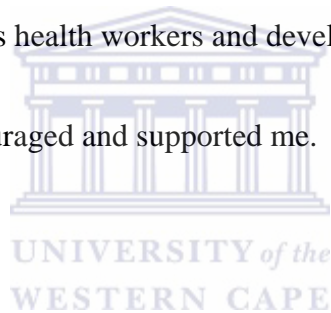
Prof David Sanders, my supervisor, who I have been privileged to have worked with for a number of years. His vast knowledge and understanding of health in the broadest sense has helped to shape and inspire my thinking.

All the others from the School of Public Health who have supported, encouraged and been extremely patient.

The key informants who all shared their knowledge and gave freely of their time.

The community health workers I have worked with over the years, who have demonstrated to me the value of their work both as health workers and development practitioners.

My family and friends who encouraged and supported me.



ACRONYMS:

AIDS	Acquired Immune Deficiency Syndrome
ANC	African National Congress
ARV	Anti retroviral
CA	Clinical Associate
CHC	Community Health Centre
CHW	Community Health Worker
CRW	Community Rehabilitation Worker
DH	District Hospital
DHS	District Health System
DoH	Department of Health
EN	Enrolled Nurse
HIV	Human immunodeficiency virus
HPCSA	Health Professions Council of South Africa
HR	Human resource
HRH	Human resources for health
HSF	Health Science Faculty
KI	Key informant
KZN	Kwa Zulu Natal
MLW	Mid Level worker
NGO	non-governmental organisations
NHI	National Health Insurance
NQF	National Qualifications Framework
PHC	Primary Health Care
RuDASA	Rural Doctors Association of South Africa
SAHR	South African Health Review
SASO	Specialised Auxiliary Service Officer
TB	Tuberculosis
WHO	World Health Organisation
WHR	World Health Report



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CHAPTER 1: STUDY DESCRIPTION

1.1 Introduction²:

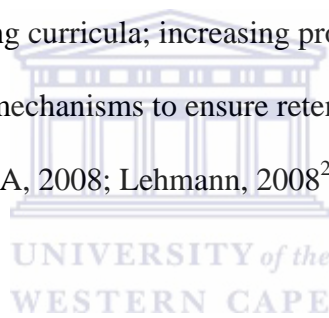
The National Health Insurance (NHI) scheme, or the pooling of public and private resources for health, will potentially increase significantly funds available for health. However, human resources (HR) are at the core of any NHI system (Lehmann, 2008², Van Niekerk, 2010) and unless the NHI can affect very significantly the undersupply and maldistribution of health workers, and enable the development of improved management and competent teams at all levels of the health system, it is unlikely to provide increased access to health services, improved quality of care or improved health outcomes (WHR, 2006).

In late 2007, the African National Congress (ANC) committed itself to implementation of a NHI system (ANC, 2007). In 2009, Aaron Motsoeledi the National Minister of Health (MoH) announced the appointment of a Ministerial Advisory Committee on the NHI to “provide advice on the development of policy, legislation and the implementation of a NHI”. The 25 member committee is chaired by Dr Olive Shisana, who chaired the ANC technical task team on the NHI (MoH, 2009).

The gazetted statement on the Advisory Committee states that there are 3 principles on which the NHI is founded namely our constitutional right to quality health services; the government’s obligation to progressive realisation of the right to health (universal access) and equity in funding to promote social solidarity (DoH, 2009).

² This research was part funded by NEHAWU and has informed the NEHAWU position on human resources for a NHI funded health system.

At 57% of public sector recurrent spending on health, expenditure on HR is high³. According to the personnel administration system (Day and Gray, 2008), 34.9% of medical practitioner positions remain vacant in the public sector, and 40.3% of professional nurse positions were vacant in 2008. Rural areas are worst affected by staff shortages (DoH, 2009), with little infrastructure for services in the public or private sector. This situation is likely to remain if a NHI is implemented with our current model of health care. Transforming the health system to provide comprehensive care at all levels will require new and innovative thinking about the health system in general and specifically human resources for health (HRH) (Lehmann, 2008²). It will require defining a system that is more responsive to the country's needs with a priority focus on: 'task shifting'; redefining the scope of practice for new and existing cadres of health workers; revising training curricula; increasing production of all categories of health workers; and initiating effective mechanisms to ensure retention of health professionals in the public sector (WHR, 2006; GHWA, 2008; Lehmann, 2008²).



1.2 Problem statement:

South Africa is faced with an increasing burden of disease, placing additional demands on the health system and health professionals. There are frequent newspaper articles about the crisis in the health sector and poor responses to patients. Even the Minister of Health in his 2010 budget speech, cited the poor quality of health services resulting in loss of faith in the public sector (Motsoaledi, 2010). 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 (McIntyre et al, 2007). Approximately 60% of health resources are used on 14% of people using the private sector (Mooney and McIntyre, 2008).

³ Personal communication Dr Mark Blecher, Director Social Services (Health), National Treasury, 17 July 2009

The 2009 doctors' strike and unhappiness about salaries and conditions in the public sector gained much press coverage. The reality is that we will continue to lose our doctors and nurses to other countries and to the private sector as long as we do not pay decent wages and ensure more conducive and supportive working conditions (Sanders and Lloyd, 2005).

For many years South Africa has expressed support for the 1978 Alma Ata Declaration and committed itself to implementing a comprehensive Primary Health Care (PHC) approach within the framework of a District Health System (DHS). Yet despite the expressed commitment to PHC, and the development of many good policy documents, the National Department of Health (DoH) has continued to support and sustain an overwhelmingly curative model of health service delivery (Motsoaledi, 2010), primarily utilising doctors and nurses.



The clinic based services are limited in their ability to reach community level, and are often inadequate with regard to prevention, health promotion and rehabilitation services. Essential community based health services, such as home-based care have been outsourced to non-governmental organisations (NGOs), with few systems to ensure continuity of care.

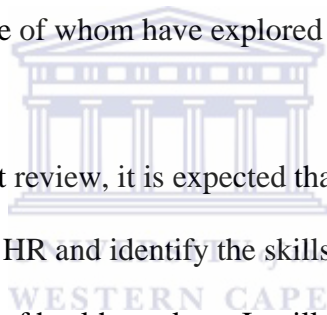
In addition to the continued use of a doctor-centred, curative model, transformation of the health system has been hampered by inadequate numbers and inequitable distribution (private and public; rural and urban) of health workers (DoH, 2009). The lack of incentives to stay in the public health system, and the ease with which health workers can migrate has resulted in many health professionals emigrating to Northern countries (Mooney and McIntyre, 2008). Others have chosen to work in the more lucrative and well funded private health care sector

(Sanders and Lloyd, 2005). For example, on average, a specialist in the private sector serves less than 500 people, while a specialist in the public sector serves nearly 11,000 people (McIntyre et al, 2007).

1.3 Purpose:

This research aims to provide an overview of the current health and HR situation in South Africa and highlight the critical importance of urgently addressing the HR crisis. It will briefly examine two different models of health service provision and explore which would work in the South African context. It will elicit the recommendations and opinions of health managers and academics, who are informed on the health needs and HR requirements of rural and under serviced areas and some of whom have explored alternative models for HRH.

Through interviews and document review, it is expected that the research will result in recommendations for a model for HR and identify the skills mix required at each level of health care, including new cadres of health workers. It will project broadly the numbers of health workers required and propose major initiatives to improve the HRH situation, to attain the required numbers and improve skills.



CHAPTER 2 LITERATURE REVIEW

2.1 Rationale for a National Health Insurance (NHI) funded system:

In late 2007, the African National Congress (ANC) committed itself to implementation of a NHI system (ANC, 2007). The ANC NHI Policy Proposal (2009) highlights problems in the current health system including inequities in funding and distribution of resources, failure to reach the MDG's, and stagnation / deterioration of mortality rates and life expectancy. The document states that the rationale for introducing a NHI includes providing for improved cross-subsidization in the overall health system, thereby providing a mechanism to address imbalances in access and utilisation of health services as well as health outcomes and to achieve universal health coverage. The policy document also states that an integrated, pre-payment based system will ensure the realisation of the right to health (ANC, 2009).

2.2 Health situation and burden of disease.

As highlighted in the South African Health Review (SAHR) (Day and Gray, 2008), South Africa has progressed well in developing health policy, but implementation of policy is inadequate and further hampered by inadequate and maldistribution of HRH, perpetuating inequality in health care provision.

Between 1996 and 2004, life expectancy at birth is estimated to have declined from 57 to 49.9. In 2004, life expectancy showed significant racial differences - the lowest life expectancy was for African males (47.8) and highest was for Indian females (66), followed by white females (65.6) (Day and Gray, 2008). The disease profile and life expectancy reflects the socio-economic situation in the country, where the more affluent live a healthier and longer life, and the economically disadvantaged have a lower life expectancy.

Despite being a middle income country, South Africa has health outcomes worse than some lower income countries. It has one of the highest burdens of HIV and AIDS and TB (Matjila et al, 2008) and the greatest number of people (estimated between 4.9 to 5.7 million) living with HIV infection worldwide (UNAIDS, 2008). Maternal mortality which is cited as being 150 per 100,000 live births is high (Blaauw and Penn-Kekana, 2010). Similarly, under five mortality, which is cited as 69 per 1,000 by the national Department of Health, is extremely high for a middle income country. Nutritional deficiencies and maternal and child health problems continue to affect large numbers of poor people (Day and Gray, 2008) We are also facing an increase in non-communicable disease, affecting both rich and poor, and high levels of homicide and violent trauma, predominantly affecting poorer communities.

2.3 Categories and distribution of Human Resources

Much of the information on HRH is inadequate: for example, one can obtain provincial information, but not HR distribution within a Province, which will ultimately identify rural /urban imbalances. It is also difficult to obtain information according to level of care and sector (public/private) (Day and Gray, 2008). We do however know that health workers in South Africa are inadequate in number, and poorly distributed, particularly in rural areas.

In terms of numbers and distribution of health workers, there are large differences between those registered with the Health Professions Council of South Africa (HPCSA) and those working in the public sector (Day and Gray, 2008). For example, there are 34,687 medical practitioners registered with the HPCSA of which only 10,653 (less than 1/3rd) work in the public sector. In the Western Cape, there are 7,396 medical practitioners registered, of whom only 1,418 are working in the public sector. The Free State has 1,714 registered, yet only 609

work in the public sector. The differences are accounted for by doctors working within the private sector, abroad or in non clinical positions (academia, research, etc).

WHO has suggested a minimum of 200 nurses per 100,000 (SRI, 2009), and that countries with less than 230 health care providers (physicians, nurses and midwives) per 100,000 are likely to fail in achieving the health related Millennium Development Goals (WHR, 2006). Based on the Stats SA estimate of 48.7 million people, and the WHO suggested minimum, we should have at least 97,400 nurses in the country. According to the SAHR (Day and Gray, 2008), SA has a total of 178,404 nurses (professional, enrolled and nursing assistants), so is well above the minimum recommended by WHO. According to the personnel salary administrative system, 104,571 of these nurses were working in the public sector and approximately 85% of people use the public health system (Day and Gray 2008). The number of nurses estimated to be working in the public sector is however likely to be an overestimate due to nurses not working because of illness; nurses registered but not employed, etc. High absenteeism is likely to be mainly as a result of the high HIV/AIDS prevalence in health workers. A national survey found that prevalence of HIV/AIDS in health workers was 15.7% (Shisana et al, 2002). We also have to take account of maldistribution between provinces, within provinces (rural/urban) and between levels of care (tertiary to primary). Thus, using the WHO suggested minimum of 200 nurses per 100,000 (SRI, 2009), SA probably has the minimum required number of nurses, but the greater problem is their distribution and functioning.

South Africa faces an ageing population of nurses, with a large percentage of nurses expected to retire within the next 5 - 10 years (Lehmann, 2008²). Forty percent (40%) of registered nurses or 70,000 (almost 1/3rd) of all categories of nurses may retire in the next 5 – 10 years.

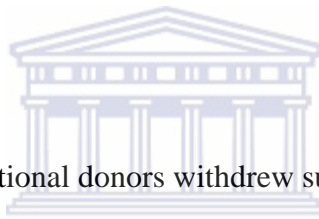
Since 1998, there has been a decrease in the ratio of nurses to population. In 1998, there was an average of 149 nurses/100,000, and in 2008 the ratio had decreased to 110/100,000 (Coovadia et al, 2009). According to a Democratic Alliance press release in late 2009, nurse vacancy rates in 5 Provinces increased by 40.5% and doctor vacancy rates by 4.1% in 2008/2009 (Waters, 2009). South Africa urgently needs to step up production of nurses to maintain and improve on current staffing levels.

A study investigating the HR requirements for PHC in South Africa (Daviaud and Chopra, 2008), focussing on six of the poorest districts, found that only 7% of the required doctors were present at clinics and community health centres (CHC). So while the national figures for health workers appear relatively good, their distribution remains a problem.

While experience in other developing countries has demonstrated the value of using Mid Level Workers (MLWs) (Bolton-Moore et al, 2007; Steinlechner et al, 2006; Chilopora et al, 2007; Pereira et al, 2007), South Africa has lagged behind (Lehmann, 2008²). Clinical Associates (CA) in Malawi undertake duties that include a range of surgical procedures including caesarean section; hernia repair, fracture management and management of an ectopic pregnancy (Thetard and Macheso, 2004).

Similarly, research has shown that work done by Community Health Workers (CHWs) in the community and people's homes, would ultimately free the clinic of many minor cases (Lehmann and Sanders, 2007). Yet the CHW programme in South Africa remains marginalised and non-standardised, has not been comprehensively evaluated and there is lack of clarity regarding roles, training, career pathways and payment (Lehmann, 2008²).

CHW programmes were initiated in South Africa in the 1970's, and were primarily run by non-governmental organisations and funded by international donor agencies. They worked in areas with inadequate state health services and utilised a comprehensive primary health care approach and provided basic curative services, health promotion and rehabilitation as well as being involved with health advocacy, (Moodley, 2000; Friedman, 2002; van Ginneken, 2010). Initial drafts of the ANC health plans developed pre 1994 elections, showed strong support for the utilisation of CHW's, especially with regards to PHC and expansion of services (Friedman, 2002). However, the final ANC health plan released shortly after elections contained a greatly diminished role for CHW's and over the years it became clear that there were no plans to incorporate CHW's within the national health system (Moodley, 2000; van Ginneken, 2010).



Post 1994 elections, many international donors withdrew support or re-directed their funding through government. As a result many CHW programmes collapsed (van Ginneken, 2010). Various attempts to develop CHW policies, for example the CHW Lekgotla in 2003 and the Community Health Worker Policy Framework (2004), failed to make any significant change in the utilisation of CHW. In more recent years there has been the emergence of various uncoordinated CHW programmes, with most being focussed on HIV related care (Friedman, 2005; van Ginneken, 2010).

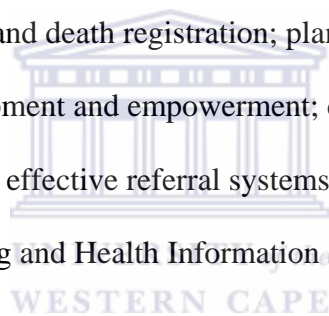
2.4 Skills Requirements

A comprehensive package of health care should include prevention, promotion and rehabilitation services, in addition to curative services. To define what skills are needed within the health system, the services to be rendered need to be identified, and thereafter their

level of provision within the health system defined. According to the ANC NHI Policy Proposal (2009), 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.

Broadly speaking, within a district, the following services, *inter alia*, should be provided:

health promotion; health education; environmental and industrial health; comprehensive PHC services; non-specialist hospital services; basic laboratory and diagnostic services; dispensing of essential drugs; emergency patient transportation; health status and health service monitoring and evaluation; birth and death registration; planning and management; community participation, development and empowerment; co-ordination of other district based services, including NGO's; effective referral systems; in-service training; research; revenue collection; record keeping and Health Information Systems. (Sanders, undated)



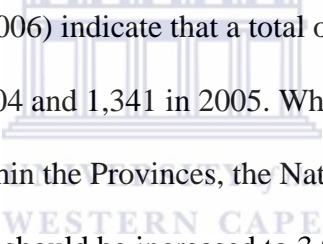
There are various documents describing the “essential services package” at different levels of the health system. “A comprehensive service package for Primary Health Care” was released in 2001 and defines the package of services to be provided by community based services, clinics and mobile clinics and CHC (DoH, 2001).

PHC services should include prevention, control and treatment of communicable and non communicable diseases; treatment of common illnesses and injuries; basic emergency services; nutrition services; contraception services; women’s health; child health (including growth monitoring and immunisation); school health; mental health; elderly care; care of

terminally ill; community nursing and home care; oral health; rehabilitation services; optometry; occupational health; social work services.

The package of services to be funded by the NHI will need to be clearly articulated and made available to both service providers and users of the service. A comprehensive package needs to ensure that out-of-pocket expenditure for essential services become unnecessary. While services available need to be articulated for each level, any plans will need to be cognisant of the differences in areas served (rural/urban; population density; infrastructure, transport systems, etc.)

2.5 Production/Training:



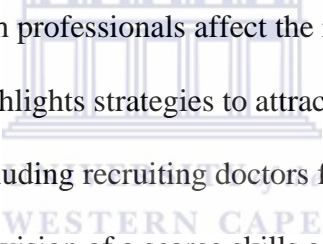
Figures from the DoH HR plan (2006) indicate that a total of 1,327 medical students were admitted to medical schools in 2004 and 1,341 in 2005. While the training of nurses and decision around numbers falls within the Provinces, the National DoH has recommended that the training of professional nurses should be increased to 3,000/annum by 2011 (DoH, 2006). Less than 2,000 per annum are currently being trained (Lehmann, 2008²). There are difficulties accessing information on nurses practicing, as all the SA Nursing Council statistics only list nurses registered; for example, records show that there have been a total of 1,033 nurses trained in clinical nursing science, but there is no record of how many are using these skills as clinical nurse practitioners (DoH, 2006). It is however clear that there is a serious underproduction of nurses, especially given the average age of nurses where up to 40% could retire in the next 10 years (Lehmann, 2008²).

District development as a means to transform the health system requires re-orientation of health workers to the PHC approach as well as technical and management skills to effectively

manage the transformation. However, research has shown that, with some exceptions, management skills are weak and the workplace environment is not encouraging the change required (Lehmann, 2008²).

2.6 Selection and management:

The doctors' strike has highlighted the poor salaries of health professionals; and made public the poor working conditions and functioning of our public health system. It is clear that salaries, leadership and management of public health facilities all need to be addressed and that health workers working in difficult conditions need adequate support and supervision (Wolvaardt et al, 2008).



The shortfalls in numbers of health professionals affect the rural more than urban areas. The National DoH HR plan (2006) highlights strategies to attract and 'distribute' health workers in underserved and rural areas including recruiting doctors from other countries; introduction of community service; and the provision of a scarce skills and rural allowance. The document highlighted that the scarce skills allowance should be re-assessed. A number of factors contribute to retention of health workers in rural areas: internationally and in South Africa it has been demonstrated that students of rural origin are more likely to work in rural areas after graduating (De Vries and Reid, 2003). The study found that of students graduating in 1991 and 1992, 38.4% who were of rural origin were practicing in rural areas, compared to 12.4% of urban origin graduates.

2.7 Selected models of health care provision and different human resource models

The HR requirements of a NHI funded health system would differ according to income of the country. A high income country like Sweden for example, has a single payer system, funded

and run by government, which provides doctor-centred services with availability of specialists, nurses and allied professionals (physiotherapists, occupational therapists; speech therapists, etc) providing primarily curative services. A person seen by a health centre physician may be referred to a specialist, who may recommend further treatment. While the Swedish health system provides a comprehensive service, the main problem is the long waiting times. Even the Prime Minister Görrann Persson had to wait 8 months for a hip replacement in 2003, despite a commitment that all cases should be treated within 3 months. Other criticisms are that the health system is too conservative with expensive testing and treatment (Hogberg, 2007; Sweden.se.).

Brazil, a Low Middle Income Countries (LMIC) like South Africa, started working towards the Alma Ata declaration goal of achieving 'health for all', towards the end of a period of military dictatorship. A period of struggle ended in 1988 with adoption of a new constitution, which enshrined health as a right and held the government responsible for provision of universal access to health care (WHO Bulletin, 2004).

In 1996, Brazil, established a "Unified Health System" (SUS) which includes free access to health promotion, prevention, treatment and rehabilitation. Decentralisation of health services with social participation in planning and monitoring of services are core factors of the SUS. Health promotion is given a high priority. The SUS has developed a family health programme that has an emphasis on community services and family health teams responsible for promotion of health and prevention of disease in a defined geographical area. The family health team consists of at least a doctor, nurses and assistant nurses, 6 CHWs and sometimes a dentist. Each team assists between 1,000-2,000 families (4,000-10,000 people), depending on whether they are serving a rural or urban population (population density). The scope of

practice of each professional is defined in policy. The work of the CHWs is seen as essential as they form the link to the community. There are approximately 250,000 CHWs employed within the Brazilian system. HRH policies and plans in Brazil are deliberately tailored to support implementation of the SUS. Of note is that there is a publicly funded school of public health in almost every state whose primary function is to train and re train health personnel for the priority programmes (WHO Bulletin, 2004; Ministry of Health, Brazil, undated).

Brazil is acknowledged as being one of the best ‘performers’ amongst health systems (Rohde et al, 2008). Apart from long waiting times, the doctor-centred curative services in Sweden offer a good service. Sweden however, is a developed country, and the health system caters for a relatively small population of 9 million (Hogberg, 2007). Implementation of the Swedish model would cost significantly more than the family health team model of Brazil.

Given South Africa’s situation, where a relatively small number of people would be contributing to the NHI fund in relation to the number of people utilising it, it is likely that a doctor-centred predominantly curative model would not be able to address the broader health needs of the majority of the population. Furthermore, even if a NHI scheme could enrol services of doctors currently working in the private sector, it is highly unlikely that they would relocate to rural or peri-urban undeveloped areas: this would mean the persistence of geographical inequities in access to health care.

CHAPTER 3: METHODOLOGY:

3.1. Aim and objectives

This study aims to identify the human resource requirements to support the effective and equitable implementation of a health service funded by National Health Insurance in South Africa.

The **objectives** of the study are:

1. To explore with key stakeholders the human resource skills mix required at each level of care and different contexts (rural and urban).
2. To synthesise perceptions, opinions and experiences of key informants with regard to key challenges to and prerequisites for an equitable and appropriate NHI funded health scheme;
3. To identify human resource needs and propose a model of human resources for implementation of a NHI scheme.

3.2 Study Design:

The research is a descriptive study, which utilises qualitative research methods to explore and understand different key stakeholders' experiences and perceptions with regard to HR requirements for implementation of a NHI-funded health service in South Africa. Purposive sampling of key informants with a variety of experiences and levels of expertise were undertaken to enable the researcher to obtain a thorough understanding of the current problems experienced in rural and other resource constrained settings, and to identify interventions that could assist in addressing the HR needs. A qualitative research paradigm

allowed the researcher more flexibility in questioning, thus capturing the perceptions of different stakeholders and drawing upon their specific expertise and experiences.

3.3 Sampling:

Individual interviews were conducted with a total of 14 key informants who were selected purposively from a national sample. This non random sample included health professionals and health managers working in academia, the public health sector, national, provincial and local government and the NGO sector, with some degree of overlap between these categories.

Informants were selected according to the following criteria: (1) a belief in the principles on which the NHI is founded, namely the constitutional right to health, universal access and equity in funding to promote social solidarity (DoH, 2009); and (2) experience in HR in one or more of the following areas: public health; health systems; resource poor settings, rural areas; health management; MLWs; CHWs; training; curriculum development; policy.

Additional criteria, not common to the global sample included either: research into, or running successful programmes, which could feed into policy or possibly be replicated on a larger scale. For example, one of the informants developed a regional model for paediatrics.

3.4. The Key informants:

The key informants included:

- Five senior academics with understanding and experience of rural health systems, CHWs, MLWs, medical students and/or nurse training;
- An independent consultant with years of experience working in NGOs on health systems development and district health systems;
- A senior NGO manager with interest and experience in CHW programmes;

- Dean of a health science faculty;
- A senior academic with expertise in HRH including CHWs and MLWs;
- Director from National Department of Health;
- Chief specialist and head of paediatrics and child health who has designed an innovative regional model for paediatric services;
- A paediatrician who has been developing a model for community paediatrics and rotation of specialist skills;
- Two health managers who have worked with community based health workers and explored the use of mid level workers;

3.5 Data collection methods

Either face to face or telephonic interviews were conducted with key informants. The interviews were semi-structured and the questionnaire was adapted according to the informant's area of expertise. The researcher contacted all the key informants by email or telephonically, giving a written explanation of the purpose and process of the research, and asking whether they were willing to participate in the research. All agreed to participate in the research. All interviews were conducted individually and in English. Written records were made of all interviews. The question guidelines for interviews is attached as Appendix 4.

3.6 Trustworthiness / Credibility

The research study addresses the HR requirements within a NHI funded scheme, and is thus necessarily biased towards the HR models based in the researcher's conceptual framework of health service delivery. Through her belief in a comprehensive PHC approach, her work experience and previous work relationship with some of the participants, the researcher may have influenced the direction of the interview and interview questions. However, the

researcher was aware of such possible influence and took care to encourage informants to express themselves freely and to elaborate beyond the specific questions asked.

The researcher verified the accuracy of perceptions of interview data with the informants during the course of the interviews. Triangulation increased the validity of the research, since findings from interviews were checked against information from other sources, including journal articles and unpublished research. The researcher also communicated to informants from other interviews as a means of testing their appropriateness. Some of the key informants provided documentation or referred the interviewer to journal articles and research to support their information. The researcher thus extracted common themes and trends emerging from the data.



The researcher verified the relevance of research questions and, interview findings and interpretation with her supervisor, therefore avoiding the potential bias of a single researcher's viewpoint. Process notes were recorded throughout the interview process.

3.7 Data Analysis

The interviews conducted with informants were typed up and then collated according to themes falling within three broad categories: of planning, production and management. The content of the interviews was analysed, with the researcher identifying common themes and quotations emerging from the different interviews. The key themes emerging were classified and presented back to the key informants for validation. The key findings were also shared with the researcher's supervisor for further verification. Following preliminary analysis and validation, the researcher conducted a more in depth analysis and developed

recommendations with regard to skills mix, training/production, management and legislative changes and advocacy required.

3.8 Ethical considerations

Participation by all key informants was voluntary. All informants were given a written explanation about the research, and asked whether they were willing to participate in the research. While it was not anticipated that the research would have sensitive outcomes, or any detrimental effects on participants, all informants were informed that they would remain anonymous and their identities would remain confidential. Specific quotes and information are not directly attributed to informants. Key informants were allocated a number from 1 to 14, and any quotes or statements are labelled as such. Similarly, the different health science faculties and provinces were given codes for example University A and University B, except in cases where the information was general or did not link to a key informant. A written participant information sheet was sent to each informant (Appendix 5) and signed consent was obtained (Appendix 6). All records of interviews are being kept securely locked away, and will be destroyed on completion of the research. Participants were told that they could withdraw at any time, and could choose not to answer questions.

CHAPTER 4 RESULTS

4.1 Introduction:

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

The study focussed primarily, but not exclusively, on the HR requirements at the community and primary levels, and each of the key informants was asked questions relevant to their expertise. They were asked about what they thought the optimum minimum skills mix should be, and the interviewer explored further their perceptions and experience with Community Health Workers (CHWs), Mid Level Workers (MLWs) and other categories of community based workers such as health promoters.

The study explored the capacity of the health science faculties (HSF) and training institutions to increase production (under-graduate and post-graduate training) of health professionals. Informants were asked about rural needs, foreign doctors and community service in terms of addressing the inequitable distribution of human resources.

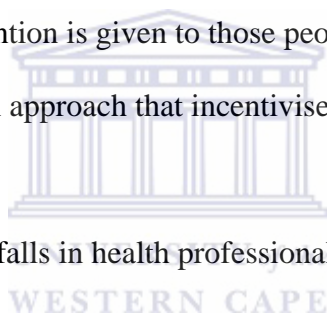
4.2 Human resource model

KI 2 mapped out what he thought was needed broadly for the NHI:

You can't look at NHI in terms of financing, but as a service delivery model. First look at community based interventions, then PHC, then hospital. We need to look at “Packages of care” at each level and then what input is needed to deliver.

Factors contributing to the poor functioning of the public health system emerged throughout the interviews. KI 1 highlighted the lack of motivating incentives as more inhibiting to the effective functioning of health workers than the current skills mix:

Health workers are not recognised or rewarded for using innovation. Health promotion, talks or campaigns are not recognised. If a sister does school talks/education, they will not get recognition. They don't get a pay rise or promotion to acknowledge good programmes. So nurses only see the patients that come into the clinic. The skills mix is not the problem, it is the system. We need to look at how health workers are monitored and evaluated. Currently they look at head counts, it's a curative model. Little attention is given to those people that don't arrive for appointments. We need an approach that incentivises; monitors and evaluates.



KI 3 highlighted the current shortfalls in health professionals:

Looking at trends and figures in Africa – there will never be enough doctors and nurses to build the health services. The assumption that we have enough nurses and doctors to build the health system is a fallacy.

The need for 'task-shifting' was highlighted by a number of informants, with particular mention made for the need to better utilise CHWs and MLWs, and increased task shifting to nurses. KI 2 said:

Each profession should review and rationalise what needs to be done at which level and by who. The dental profession has already done this. This needs to extend to other categories of health professionals.

Task shifting is discussed more in each of the relevant sections.

4.3 Community level

The majority of informants spoke of the problems with government following a medical or clinical model at the community and primary levels. As KI 1 said:

We have the basic framework, but we are working with the wrong model. There is a push to have the primary/community model following the curative model. We have failed to implement the PHC approach with substantive community participation. Community level workers are not supported to implement a community based PHC approach.

He went further to speak of medical training feeding into the medical orientation of health professionals:

PHC has been undermined by clinical education. We follow a medical model and give lip service to PHC. The theory of PHC is known, but there is little understanding in practice. The educational pipeline has not changed in orientation.

It was recognised by all people interviewed that CHWs are essential at the community level. However problems in terms of the lack of standards, the power relations and the lack of recognition of CHWs were highlighted:

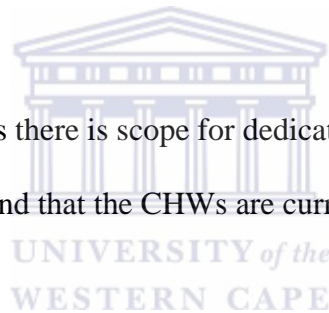
KI 1: There are power relations in the District and Community level – what the doctor and sister says carries more weight than what the CHW says. Sociological and power relations underpin the health system functioning.

Another key respondent puts CHWs at the centre of the community level:

KI 4: CHWs working at home level, focussing on health promotion, prevention and a small amount of curative, facilitating further access through referral to facilities.

CHWs should be supported by community based health professionals. So, outside the health institutions, there would need to be comprehensively trained CHWs, that would facilitate community access to the health services.

The same key respondent believes there is scope for dedicated maternal and child health workers, with appropriate focus and that the CHWs are currently too focussed on HIV.



4.3.1 Community Health Workers

CHWs are clearly an important component of the health system, and their role in health service delivery and connecting the health services with communities was emphasised by all informants. However, the current lack of standards or policies to guide programmes, was highlighted as a reason for CHWs not being properly utilised:

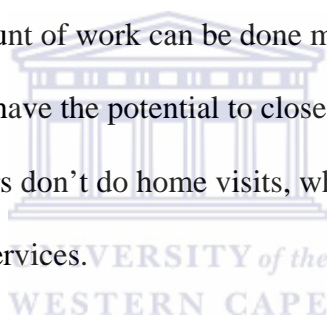
They are the most numerous health worker, yet not organised. There is a policy document in the pipeline, but there still needs to be a properly formalised proposal and policy. (KI 1)

KI 2 highlighted:

There is no consolidated home and community based package. There is a lot of activity, but it is totally chaotic.

It is clear that the CHW could play an important role in linking clinics to communities, and ensuring that the work of primary care clinics goes beyond the confines of the clinics. KI 3 highlighted:

CHWs are a resource that is there in large numbers. The one thing that can turn around health care in the country would be an innovative and well planned CHW programme. A large amount of work can be done more appropriately in people's homes by CHWs. CHWs have the potential to close circles not closed by the health system. Nurses and doctors don't do home visits, which should actually be an integrated part of health services.



A number of informants highlighted the need for generalist CHWs because of the broad scope of their work. Concerns about single issue CHWs included limited scope of practice, sustainability and proper utilisation; cost effectiveness. As KI 5 highlighted:

CHWs are the first point of contact to a household. The person is representing health workers in general and needs to be able to assess the household quite broadly, and with some very basic things for example social problems and eligibility for support grants; identify people on anti retroviral therapy and other chronic medication and whether there are defaulters of treatment, etc. They need to be able to refer appropriately.

Another informant (KI 6) highlighted the problems in Province B:

The programme is not working. You have home based carers (HBC) looking after bed ridden patients, and social agents (Department of Social Development) seeing to the rest of the family. There should be one CHW looking after the whole family. The ideal would be to go back to the old model of a comprehensively trained, generalist CHW and a Community Rehabilitation Worker (CRW) working with all rehab related functions.

The overall consensus of all people interviewed was that CHWs should initially be trained as multi-skilled generalists, and there was scope for specialisation as a career progression. There should be co-ordinated training blocks to add to the initial training until full training is completed. General training should include health promotion and prevention. Possible specialisations proposed were post natal, HIV/AIDS; cancer; counselling, etc.

Concerns were expressed about donor sponsored programmes pushing vertical disease-based approaches, KI 1 elaborated:

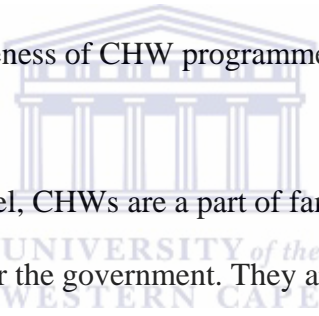
In [province A], there are malaria fieldworkers paid through a separate system. Then there are TB workers, ARV supporters, CRWs, ophthalmologist workers who go out and find people needing cataracts removed, etc. There are many specialised disease specific CHWs, it's a real problem.

It was felt that the scope of practice of single issue workers should be expanded. For example, lay counsellors could have their scope of practice expanded to include health promotion activities. KI 3 stated:

Specialist CHWs are like vertical programmes. They are like the blue gum tree – looks beautiful, but nothing grows around it.

4.3.1.1 Relationship with the State

The Brazilian model of using CHWs as part of a family health team, employed by government, should be further explored. Nearly all people interviewed highlighted the importance of CHWs being employed by government rather than NGOs, and through this, improving utilisation and effectiveness of CHW programmes:



KI 5: In the Brazilian model, CHWs are a part of family health teams, rendering essential health services for the government. They are not employed by NGOs but by government and as a result, there is a close interaction between nurses and CHW's. Nurses play a supervisory role. The CHWs are the link between the community and the facility.

KI 3 stressed:

CHWs should be a normal part of the health team. Outsourcing to NGOs is currently a way for government to dodge the issue and responsibility. Partnerships should be developed around service delivery.

However some informants expressed concerns about the South African health facilities having the capacity to employ CHWs:

KI 6: CHWs should be employed by NGOs. Support could come from government, but we need to make sure the support professionals are not clinic-based. A possible solution would be for government to employ a dedicated district based nurse, whose responsibility is outreach and working with the nurses supporting and supervising the CHWs in NGOs. They need to make sure that referrals to NGOs happen.

KI 1 expressed similar views:

The more the CHWs are aligned to the health services, the less they are aligned to the community.



A number of interviewees emphasised the importance of government funding for CHW programmes, in terms of sustainability, as well as improving the utilisation and referral system between clinics and CHWs:

KI 7: Central treasury needs to dedicate specific budgets for CHW programmes. There is no role for community financing as CHWs usually serve the poorest communities. It is important that CHWs are recognised as part of the service. There are strong cost arguments for this.

While there are large numbers of different categories of CHWs working, most are employed by NGOs. Many key informants reported problems in the relationship and referral system

with government services, even when the CHWs salary or stipend is paid using government funds. KI 6 explained:

The current model with home-based care (HBC) is not working. The Technical Advisors were supposed to be responsible for the liaison between government and HBC, but have ended up being more clerical. The Technical Advisors were supposed to facilitate referral between facilities and HBC on the ground, but this has not worked.

KI 1 told an anecdotal story of a study 20 years ago, looking at the relationship between clinic sisters and the communities:



There was one clear thinking sister who used to bring together the CHWs in her area once per week. The day started with immunisation and family planning; then sharing information and case studies. The sessions were structured and seemed to work. The sister said she saw the CHWs as her hands and feet. The CHW cadre was seen as part of the health system and the system therefore worked.

4.3.1.2 Support and supervision

“Without adequate supervision, CHWs are firing in the dark”. KI 7

All respondents agreed that a registered nurse should supervise the CHWs, and that the supervisor’s work should be community and not facility-based. Two key informants were more specific about the skills required by the nurse supervisor, and not supportive of enrolled nurse supervision:

KI 7: Staff nurses and enrolled nurses could not take on supervision as they have no idea of current trends or the complexity of the CHWs work and community needs.

The supervision is complex and needs a nurse with specific community skills.

A number of key informants also spoke of the CHW supervisors needing some form of transport as they often have to travel great distances, especially in rural areas.

5.4.1.3 Training and career pathways

While all key informants agreed that a standardised curriculum is needed, one highlighted that there may need to be different emphasis in the training of urban and rural CHW.

Currently, training is being done in a non standardised fashion, but some training providers try to comply with national policy. CHW training will need to be National Qualifications Framework (NQF) aligned to allow for career progression.

There was agreement that the National Department of Health (DoH) should accredit training facilities and that training should not be done by organisations experienced in service delivery and CHW projects, and by trainers who understand the community context.

One key informant suggested the curriculum should be developed by the DoH, while another said the training organisations may need assistance in getting courses accredited as the process is complicated.

Some informants spoke of the training of CHWs which would allow for a career pathway. For example, initial training would be basic, and it would require a series of courses to become a fully qualified generalist. Thereafter CHW with leadership qualities could progress to becoming a CHW co-ordinator or manager. Others spoke of the CHWs' progression in a certain area of specialisation e.g. mental health, maternal health, etc. Everyone was in agreement that initial training should be as a generalist, and that any career progression or specialisation would come after this.

The majority, but not all key informants, were in agreement that CHWs should be recognised as an entry level to health, social services and related professions e.g. enrolled nurse, professional nurse, medicine, community development, social work, etc. There should also be clear career pathways with recognition of prior learning for fast tracking career progression.

KI 1 differed slightly:



The province abolished CHW posts and changed them to Nursing Assistant posts, justifying this as the bottom rung of career pathway to enter the nursing profession. But this is not necessarily the correct pathway for all CHWs to follow. We need to look for opportunities within the system e.g. in countries such as UK, health visitors are a recognised and valued health member. If the CHW were a valued cadre, many may want to remain CHWs.

Two informants mapped out a career progression from volunteer to generalist CHW to specialised and/or supervisory role; or MLW (e.g. EN) and thereafter to professional nurse.

4.3.1.4 Funding and accountability:

All key informants agreed that CHWs should be formally employed and receive a salary, not a stipend. KI 6 expanded further:

CHWs should be paid a minimum reasonable wage, and be employed full time with payment for development work, health promotion and prevention activities.

It was clear that very different funding models are currently followed. In Province B, the Department of Social Development pays R750 stipend/month and DoH pays R990. In Province A, CHWs are paid through the health budget. No one supported the idea of asking CHW's to volunteer, except for a very limited period:

KI 7: The only way we should use volunteers is for a short, limited and time bound period to assess commitment and suitability as a CHW. Volunteer programmes are not sustainable.

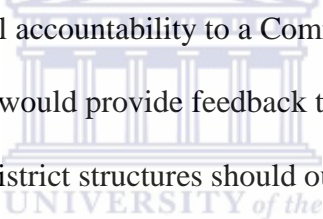
KI 6 highlighted problems with the funding model:

Organisational processes, supervision, admin, financial management and general management are not covered adequately; neither is training and transport. The relationship is very bureaucratic, and government only pays the 4 hours spent doing home-based care. Community development work is not covered and the connection to the community is lost; prevention and promotion is not acknowledged or paid for. CHWs are now technical assistants to government way of working. They are task doers and number crunchers; they are no longer development workers.

KI 7 highlighted how different departments view volunteers:

Department of Labour is pushing that CHWs should be employed and paid a salary with Conditions of Service and covered by labour legislation. People are being exploited in the name of volunteerism. DoH is clear they do not want to pay ‘stipends’ and work with volunteers. Dept Social Development is still digging in their heels.

There were mixed views about CHWs accountability and as to whether CHWs should be employed by the local government or NGOs.



KI 7: There should be local accountability to a Community Health Committee or District committee, which would provide feedback to the Department. CHWs should be employed by NGOs. District structures should outsource CHW programmes and management to NGOs. Ultimately the whole health service should be accountable to the community.

A number of other key informants spoke about the Brazilian model, and felt strongly that the only way to develop a closer working relationship with health facilities would be a model such as Brazil, where the CHW are employed and paid by government, but work in the community.

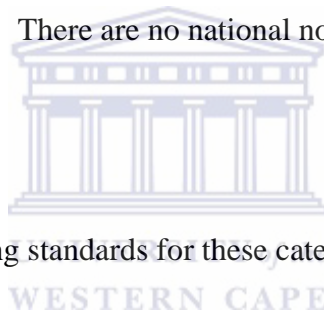
The CHWs role should mainly be in the community, but it was felt that they could be used for health promotion and talks in clinics. Their teaching could also be enhanced through clinic rotation e.g. witness deliveries; learning wound dressings, etc. KI 6 felt they should not

however be part of service delivery in clinics due to what happened in Mamre, where they now no longer function as CHW's.

4.3.2 Other categories of community based health workers:

Over the years, there have been many different categories of CHW that have developed. KI 8 highlighted a few health promotion categories in Province B:

Community Liaison Officers (CLOs) are few and were mainly employed prior to 1990 originally as Family Planning practitioners. As they resign or retire, they are not replaced. Then the Specialised Auxiliary Service Officer (SASO). In rural areas they have been replaced with assistant nurses. There are no national norms, standards or scope of practice.



In talking about the lack of training standards for these categories of workers, the same respondent said:

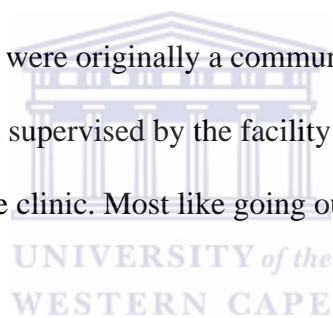
The expanded public works does some generic training on health promotion. But there are currently no standardized modules for health promoters. Different models are being followed. For example, the West Coast does training over 6 months, 8 sessions in total. They need to do community diagnosis; problem identification, etc. The metro replicated this. Different modules are organised with different trainers, e.g. sports science institute does a module on physical exercise. And groups with specific expertise would be brought in e.g. alcohol or drugs. Some attend winter and summer school, but it is up to individual to organise and motivate. (KI 8)

KI 8 proposed that existing health promoters could be trained to carry out supervisory functions and take responsibility for overall co-ordination:

We have been arguing for another level of person/more senior health promoters, to assist with supervision, support and co-ordination of activities. Currently there is no model for supervision, everyone does it differently.

She cautioned about placing community based workers within a clinic for supervision:

Health promotion officers were originally a community based function. They were then placed in a clinic and supervised by the facility manager. This resulted in them being more locked into the clinic. Most like going out, but are now restricted.



As with other categories of CHW, there was agreement that they should be part of a health team, supervision should be done by nursing sisters and supervision and services should be in the community and the facility.

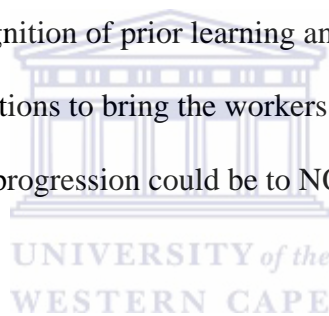
It was felt that the health promotion programme does not have the capacity or resources to increase production significantly, but if the Department could assist with curriculum development, NGOs/training institutes could carry out training (KI 8).

In the nutrition programme in Province B, the nutrition advisers do not have specific accredited training and their roles differ depending on their line-function managers. KI 9 stated:

Many have been working for many years in nutrition, but have limited skills as well as functioning because they have no formal training or scope of practice.

The programme has however done some work on career progression and recognition of prior learning for existing workers:

The model proposes recognition of prior learning and additional training by recognised training institutions to bring the workers up to NQF level 4 (according to needs). Thereafter career progression could be to NQF level 5 which is the level of a nutritionist. (KI 9)



The proposed career progression would need to assess current skills and training requirements of nutrition advisers.

4.4 Primary Care level:

A number of key informants spoke of the PHC level operating clinic based services, rather than services and programmes informed by needs of the catchment area, that are clinic, geographic and population based. As KI 7 expressed:

PHC clinics deliver clinic-based services, and are not informed by what services are needed for a particular catchment area. Clinics should have a responsibility to the whole catchment area and visit households and do follow ups.

4.4.1 Clinics

A standard PHC clinic serving 10,000 people should have 3 or 4 professional nurses with PHC training. Doctors visiting the clinic regularly enable additional services at this level. As KI 1 explained:

In KZN, they have got right the doctor's weekly visits to the clinics, for example, the Umkhanyakude health ward dispenses ARVs at the clinic level. They piloted the initiation of treatment at clinic level and as ARVs require a doctors' signature, they have organised regular doctors visits and started more than half the patients on ARVs, without a visit to the hospital. So an ARV initiative can strengthen the whole PHC system. But there are a lot of examples where doctors don't leave the hospital at all. We need medical input at the clinic level, on a regular and dependable basis.

4.4.2 Community Health Centre (CHC)

One CHC would support 6 clinics/60,000 people.

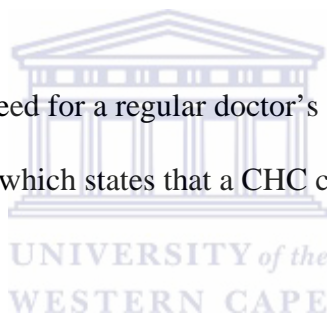
Key informants stressed that clinicians need to be involved in population based activities and should share in community wide programme. As KI 4 expressed:

The relationship with the clinic needs to be recognised and extended. All staff at the CHC level should be generalists/multi-skilled.

He went on to highlight the paediatric requirements at the CHC level:

There will be deliveries and neonatal resuscitation needed at this level and staffing should include a medical practitioner, professional and enrolled nurses, with access to supplementary health services and administration. If HIV services are offered, then Lay Counsellors are required. In addition, social workers, dietician and CRWs working at the household level as well as other non medical appropriate support staff. There should be staff allocated specifically for children. CHC needs dedicated areas for children, and a children's outpatient facility.

Respondents again spoke of the need for a regular doctor's visit. KI 1 spoke of a paper to be published in SA Family Practice, which states that a CHC can deal with 80-90% of patients without referring to the DH.



4.4.3 Mid level workers:

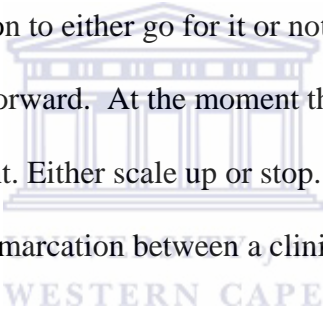
It was felt that Mid Level Workers (MLW) have an important role, but it needs to be clearly stipulated and standardised.

All key informants agreed that it would be most useful to have a generalist MLW, and have specialisation in addition to that. This was stressed by people working in rural areas where it was said there may only be the need, for example, for a rehabilitation MLW one or two days per week. If they were generically trained they could use other skills for the remainder of their time. Even with specialist MLWs it was thought they should first be generalists:

In the US there are physician assistants. They are trained as generalists, however once they have worked for many years in a specific setting, they often develop more specialised skills in that area. For example a MLW trained as a generalist, and working in the paediatric cardio-thoracic unit would after many years work in the unit, develop specific skills in paediatric cardio-thoracic. Specialisation should develop in practice and not through training. (KI 3)

A number of informants expressed concern at the lack of progress in identifying and finalising scope of practice and training for MLWs. KI 10 stated:

There needs to be a decision to either go for it or not. Cut the red tape and make this easy and simple to move forward. At the moment the numbers being trained [Clinical associates] are insignificant. Either scale up or stop. There needs to be role clarification and a clear demarcation between a clinical associate and nurse practitioner.



KI 3 motivated the use of MLW:

The CAs are being taught skills rather than reasoning and problem solving. If CAs are added to a team, they can take the standard procedures away from doctors, freeing doctors to focus on reasoning and decision making. CAs should be available at all levels, but particularly where doctors are working. CAs can do the interview; gather lab results, do physical examination and present to doctor for decision making. The CAs are freeing doctors to focus where skills can be properly utilised. There is a very strong lobby against the CA programme, which is related to protection of turf. Yet it

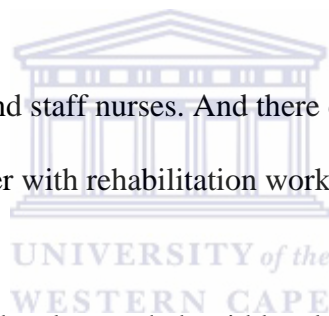
is the nature of MLWs that they work with someone (e.g. doctor, nurse, specialist).

They will be carrying out standard procedures, rather than making decisions.

However, some key informants were not convinced about the CA programme and KI 11 motivated that appropriately trained nurses could do much of what CAs will do:

I'm not convinced we need a new category, rather add skills to nurses. In paediatrics we had the PHC paediatric nurses – the course that used to be run at Red Cross; Advanced Paediatric nurses almost function as medical officers. If this can be done with paediatrics, there is no reason it cannot be done with other areas.

Nurse MLWs are both enrolled and staff nurses. And there does not appear to be resistance to the pharmacist assistant. However with rehabilitation workers, it was less clear:



There was momentum to develop a rehab mid level community rehabilitation worker (CRW). This was then 'scuttled' by professional specific rehabilitation workers, but these have not been trained despite the standards and curriculum being developed. It is unfortunate that they are doing away with the generalist CRW. Without a CRW, rehabilitation services will not reach poorer communities. (KI 3)

Policy on MLWs has to be taken through the HPCSA. Occupational therapy had a developed a document outlining the MLW scope of practice for 2 levels, but according to KI 3, it is unclear what has happened thereafter, and he believes it to be a disconnection between policy formulation and training.

KI 5 highlighted where she thought the needs were for MLWs, highlighting mental health:

In addition to nurses, there need to be social workers; rehabilitation workers; nutrition workers, etc. There is a huge need for mental health MLW.

Two key informants spoke in favour of specialist MLWs, as they have in the United States.

KI 3 highlighted the cost benefits:

Tertiary level specialists are a cost driver on procedures. If procedures are done by lesser trained Clinical Associates, this would save the DoH. Specialists would still take decisions, but teams of people would be doing the standard procedures.

However KI 4 felt that specialists in the USA, and in particular paediatricians are not at the level of our specialists, and that specialist MLWs may take too much supervision:



In USA paediatricians are not on par with our paediatricians, they are more like MOs, running paediatric services in the peripheral hospitals. If a MLW requires intense support and supervision, it would take away time from the medical specialist.

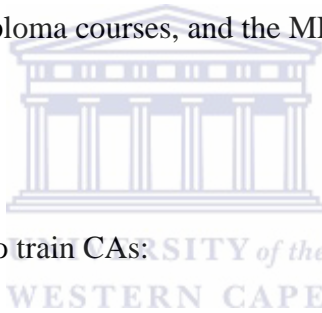
4.4.3.1 Mid level worker training:

Apart from CAs, pharmacy assistants and EN, there was lack of clarity and differing ideas as to what is available, and where training for MLWs should be done. KI 3 was of the opinion that:

Training should be done within existing training facilities, such as Universities of technology. But there is currently no incentives to train MLWs. Private training could be used, but only if they can deliver according to needs.

KI 12 explained:

University B had 24 Clinical Associates that started their training in 2009 and plans to increase numbers from 2010. The pharmacy department at University B indicated they are not interested in training pharmacy assistants. There is tension between what an academic university versus a university of technology offers. University B is no longer allowed to offer diploma courses, and the MLW would likely be a diploma course.



There are no plans University A to train CAs:

Training of clinical associates should be completed and after they start working evaluated. If nurses are offered upgrade training, it may be an incentive to stay; return to nursing; and may attract additional nurses. (KI 11)

4.5 District Level

The District Hospital (DH) serves between 300,000 to 400,000 people or 5 CHCs.

The majority of respondents agreed that District Hospitals (DH) need teams who have a population based approach, with responsibilities for a defined catchment area (population or geographic), rather than purely clinic based responsibilities. There was also agreement that

health workers should be generalists and multi skilled. KI 12 highlighted the current shortfalls:

Generally district hospitals are not well staffed. Most critically short are doctors.

District hospitals are mainly staffed by foreign qualified doctors.

One respondent who has worked in and researched rural areas was specific about the needs of DHs, and the disadvantages of specialists rather than generalists:

Family physicians need to work as part of a population based PHC team.

Furthermore, there is the need for physician with teaching skills and involved with quality improvement and management, not just a clinician. There is resistance from people who follow the GP model. Generalists are needed, and all should have family practice training. For example, a senior Chief MO who is a surgeon could not be utilised full time – there is a limit to skills required in this area. More useful would be a generalist, who can perform surgery. (KI 1)

KI 4 who is a paediatric and child health specialist agreed with the need for generalists, but highlighted the paediatric needs:

You need a Medical officer (non-rotating) with Diploma in Child Health and responsible for managing child health in District Hospital.

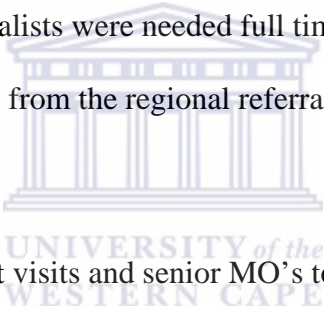
Counselling services would be required, but these are generally basic, so it was felt that lay counsellors could fulfil this function, referring to a psychologist or social worker as required.

It was stressed that a principle of family medicine was continuity of relations and therefore one or two doctors would be required to take responsibility for an area/clinic:

There should be 6 doctors in a team holding a generalist approach together and responsibilities should include priority programmes and projects in the community; support to PHC sites in the peripheral clinics; monitoring and evaluation. The same doctor should visit the same clinic on a regular basis, allowing for leave periods.

Continuity is also required with the professional nurses. This is a major principle for family medicine. (KI 1)

None of the respondents felt specialists were needed full time at the DH, but they would require regular visits of specialists from the regional referral hospital:



We need rotating specialist visits and senior MO's to provide support. Visiting specialists to rural areas will broaden learning and scope of practice provided to patients. (KI 10)

4.6 Secondary level/regional hospital:

A few respondents spoke of a model for paediatrics being followed where regional hospital doctors have regional wide positions and responsibilities to support the DH, which in turn has responsibilities to support the PHC clinics. KI 3 stated:

Tertiary care should also be geographic, population and risk based. They currently work on what they are interested in, rather than what is needed. An example of good approach is [.....], who takes responsibility for the whole area, and looks at what is

needed. He therefore is looking at how tertiary care can contribute to health of the whole area.

The regional paediatric model has a wider range of skills at this level (refer to Appendix 2), with academic tertiary hospitals needing more and a wider scope of specialists.

It was stressed by a number of respondents that specialists should be employed at regional and tertiary hospitals, but have responsibility for the whole catchment area. KI 12 expanded:

How specialists are organised makes a difference. There needs to be continuity and developing relationships for it to work. If different doctors come in every time, it limits the services to the few people who get treated. If the same doctor comes on a regular basis, a relationship is developed allowing for more effective service provision. There is however currently a shortfall of specialists in regional hospitals. The Cubans often fulfilled some of these functions. General physicians and surgeons are critical in providing support in regional hospitals.

4.7 Training of health professionals

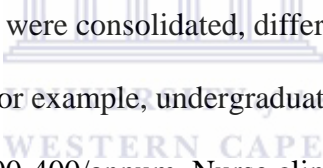
The majority of key informants believed that all categories of health workers at community, primary and DH levels should be generalists. All health workers need a basic common set of skills to which some specialisation could be added as required.

4.7.1 Nurse training

Although a number of people interviewed expressed views about nurse training, only one key informant, was interviewed in depth about this. She expressed concerns about the rationalisation and closing down of nurse colleges, and the long term impact this may have:

KI 13: Consolidation of universities and colleges was very demoralising. The loss of basic training posts and consequences has not been evaluated and will impact on our current ability to increase production of nurses.

She went on to explain how the consolidation of colleges influenced what nurse training is done and where:



When the nursing colleges were consolidated, different training functions got taken on by different universities. For example, undergraduates are all trained at one university [University C], totalling 300-400/annum. Nurse clinicians are being trained at others [Universities D and E]. Another [University A] does post-graduate training including advanced midwifery; critical care of children; child nursing; ophthalmology and others as the needs arise. Most courses are geared at the primary level, except ICU which is geared towards people working in tertiary facilities.

The informant also expressed concern that with inadequate statistics on registered nurses practicing in the public sector, it is difficult to know the need:

KI 13: The current statistics for practicing nurses are inadequate. It's difficult to say how many nurses are actually practicing as the register just states numbers registered

and cannot separate where nurses have multiple registrations for example midwifery, general, psychiatric, etc.

It was highlighted by the respondent that significantly increasing numbers of nurses being trained may be difficult due to shortage of tutors and space:

KI 13: Anything clinical needs supervision, and there is a shortage of nurse tutors and clinical nurse tutors. There is also a space shortage. With voluntary retrenchment and downsizing, good people left. There was a critical loss of middle management, especially people who were experienced and able to train. If training is to be increased, we need to think out of the box.

The need for increasing nurse training was stressed by KI 5, who highlighted the problem of ageing nurses as well as the shortage of nurse tutors:

At primary care level, we are losing a lot of experienced nurses through attrition and retirement. We have an ageing population of nurses and are losing a lot of capacity and skills. How do we replace this? We need to focus on undergraduate training and get that sorted. And we need more nurse educators. Maybe we can get retired nurses to assist with clinical supervision and education.

With regards to financial and provincial support for training, KI 13 responded:

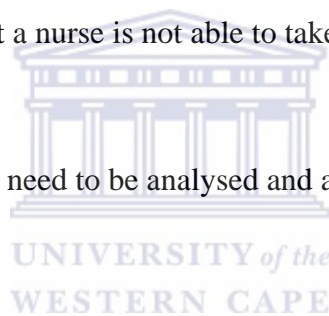
Funding is also a challenge. Staff at [University A] are mainly in part time positions and it's difficult to meet equity targets using part time posts. Yet funding is better when

meeting equity targets. There is generally no direction from province about training needs and numbers. We are open to increasing numbers and scope of training if funding increases.

A few key informants expressed concern about the CA programme not referencing existing training and scope of practice and one of these expressed concern that there could be confusion between CAs and Clinical Nurse Practitioners (CNPs). KI 13 explained:

There is some confusion between CAs and CNPs. Nurse clinicians have a broader scope of practice and are able to prescribe higher schedule of drugs than CAs. Yet CAs will apparently be paid higher. But a nurse is not able to take an order from a CA.

These differences and similarities need to be analysed and acted upon.



4.8.1 Medical students:

“There is the budget in SA, just no vision” KI 1

The National Department of Health has apparently told HSF’s to double their intake of medical students. There are however limitations and the researcher explored these and the capacity of two different HSF (University A and University B) to increase production of medical students with a number of informants from the two HSF. The limitations to increasing training were mainly inadequate facilities and limited clinical training platforms.

KI 12 expanded:

University B can increase production but rooms and lecture space are needed. Extra staff are needed, but the critical factors are more physical. When education takes

place off campus, accommodation can be a problem. Grants have been received from Departments of Education and Science and Technology, but neither of these finance infrastructural costs. University B is currently working on a model using subsidiary schools, linked to the main medical school and also linking with universities who do the 3 years undergraduate training. Students then attend University B for their post graduate studies.

KI 11 highlighted space and infrastructural limitations, and also highlighted the clinical platform as being the greatest limitation to increasing production:

The University A HSF is already stretched in terms of staffing and infrastructure. Clinical teaching is difficult with more students and will increase pressures and demands on staff in the services. You cannot have too many students surrounding a patient. There are already sometimes 20 and if numbers double, there would be 40. You also need clinical staff to supervise students. So even if funding is increased, it is difficult to deal with infrastructural problems - there are not enough facilities for clinical training.

This was verified by KI 6, who went further to explain that the site for training also influences the emphasis and orientation of training:

Space for training at the primary level is a problem. There are not enough consulting rooms or people to supervise at the primary level. At the secondary level, there is more space and as a result, the emphasis is still on clinical training in the narrow sense. The focus is on treatment but not enough on community and primary care.

At both Universities A and B, some of the infrastructural limitations spoken about were the lack of community based sites with adequate space and facilities, teaching facilities (flat floor space; space for small groups; and problem based learning), transport, IT access and support.

While it was acknowledged that rural sites were needed, a number of limitations were spoken about. KI 11 explained:

Ideally rural sites are needed for students, but this is very challenging. Currently we only send a few students to rural areas as accommodation and transport are difficult.

University A currently trains 200 MBCHB students per annum and in 2011 will be increasing by 50% (intake will be 300); 200 rehabilitation students per annum (physiotherapists, occupational and speech therapists). There is however a limitation on numbers of rehabilitation students as there are not any posts in the public sector.

While informants within HSF spoke of the limited clinical platform for increasing the intake of medical students, those focussing on rural health and within health services agreed that the current clinical sites have reached their limit, and highlighted the need to decentralise training. KI 1 expanded:

Clinical support has probably reached its limit at regional and tertiary levels, but there is capacity at District to take on medical and other students. We need to look innovatively at teaching platforms – we are currently excluding a whole range of facilities. Transport and accommodation at periphery hospitals are more difficult, but

these are not insurmountable problems. Australia and Canada are successfully using “distributed medical education” where education is distributed amongst smaller facilities. In New Mexico students are sent out for a year’s clinical experience at about 4th year training, and this is showing good results with graduates.

KI 10 concurred:

Health training facilities need to be decentralised – transport and accommodation expenses would however require increased funding.

KI 1 gave specifics about how the teaching sites could be better utilised:

The province has 44 District Hospitals and only 8 are used for training purposes. This could easily be increased.



It was perceived by a number of informants that the rural education system is not preparing students for higher education:

KI 6: The rural education system is not equipping students for university entry.

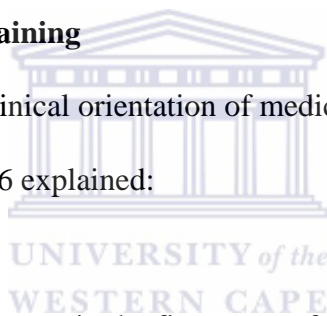
University A has an intervention programme to assist. The students are assessed during the first semester and if they are struggling academically, they go into an extra year with added academic work and extra assistance. The Department of Education gives money for this programme.

University A works with a rural support network to try and recruit more students from rural areas. The rural support network provides potential students with information on study options and logistical information. In terms of attracting students to work in less resourced areas, University A places students at community based facilities:

KI 11: University A sends students into rural areas during holidays and offers electives through the PHC directorate. The rural support network provides support to them. Students also have placements in community-based facilities as an induction to community work.

4.8.1.2 Clinical orientation of training

Concerns were raised about the clinical orientation of medical training, with inadequate attention being given to PHC. KI 6 explained:



There have been major changes in the first years of medical training. However, what is being taught about PHC in the first few years is not being carried out in health services once they start clinical training. Little has changed with clinical training. There are some rural placements, which does help. But again there can only be a limited number of students and there is not enough supervision.

Another key informant raised similar concerns:

KI 1: Some people in family medicine have 20 years practice, but have never done a home visit! The medical model is so pervasive that very few programmes require home visits. We are feeding people into a system with specific values and a

framework that is geared towards a medical model. Much of post graduate training is remedial education – if under-grad training was good, there would be no need for remedial education.

This was also reflected in nurse practice, where the key informant spoke of the performance management system which assesses nurses by the number of patients seen:

We need a performance management system that motivates nurses to go beyond clinical practice. We need to look at process indicators and we need to look at projects they are involved with, not just patients seen. (KI 1)

4.8.1.3 Ongoing training/re-orientation:

Ongoing and post-graduate training courses mentioned were the University of the Western Cape (UWC) School of Public Health; the UCT Oliver Tambo programme; the Centre for Rural Health; The Academy of Family Practice; and UCT offers a Family Medicine diploma and masters which focuses on burden of disease and health systems. KI 1 felt there should be increased focus on the post-graduate diploma as there were limits to those who could do a Master in Public Health.

It was acknowledged that some technical skills are required when moving to a rural area, but that most could be gained through mentorship or rotation through a DH. KI 12 explained:

Technical skills are sometimes needed in new appointments to rural area, for example surgical or anaesthetic skills. Doctors are sent to district hospitals to get these skills. Currently it is mentorship that is done, rather than training courses. There are well

established skills lists, so it is easy to assess individual needs against this list, and fill in gaps according to what their needs are.

4.8.1.4 Training of managers

Most key informants highlighted that management skills are often quite weak, specifically mentioning: information management; PHC; monitoring and evaluation; general management (leadership; visioning; general management skills):

There is no consistency in how the health system is managed – there are ten health systems in the country, not one. (KI 10)

KI 12 spoke specifically about the rural management training that would be required for implementation of a NHI system:



This should include financial skills and billing. Managerial skills are lacking in many DH managers.

Another key informant highlighted the inadequacies of the current training model and highlighted skills required to complement the changes within the health system and service delivery model:

KI 5: Training is inadequate and inappropriate. There needs to be a technical shift in the way people are trained. For managers, a number of technical skills are needed, for example: working with people; participatory planning; leadership; changing

organisational culture. The current system is punitive of innovation – managers need to learn to foster innovation.

The Centre for Rural Health runs a management support programme, but it is not functioning effectively due to funding problems:

KI 1: The programme has fairly successful outcomes, but is limping along as there is no funding support from Province.

4.8.2 Proposed new sub specialities

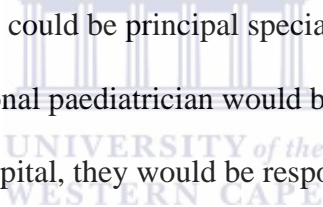
One key informant has been exploring options for a paediatric sub-speciality in clinical community paediatrics. The community paediatric sub-specialities would be in regional hospitals e.g. Worcester, George and in metro hospitals such as Victoria. They would however be responsible for whole catchment area. He proposes the following training model:

KI 14: Formal distance education, with rotation through appropriate hospitals, and targeting bright energetic general clinicians that want to do more. Training would include financial, HR management; networking and liaising; and facilitating functions. Sub speciality training would be carried out over 18 months to 2 yrs. Family physicians with a special interest in child health may be interested in the course.

When asked what was needed to get the course functioning, he responded:

It needs someone to drive it full time to get it going, and requires funding and support. The job description has been developed. The project has been presented to academic heads of paediatric departments and has unanimous support. Our aim is to have a national programme, accredited with SAQA/Universities and College of Medicine. However it needs money to develop the curriculum and get this going. This should be a module sharing arrangement e.g. different universities would be involved and collaborate in training. (KI 14)

He explained how the community regional paediatrics position would fit into the health system, and the career pathway:



KI 14: The career pathway could be principal specialist post; or a registrar post. In DH's the community regional paediatrician would be the local resource person for children. In a regional hospital, they would be responsible for outreach and support to level 1 facilities.

This model should be implemented, and evaluated with the view to expanding community sub-specialities to other specialities.

4.9 The training context

4.9.1 Department of Education:

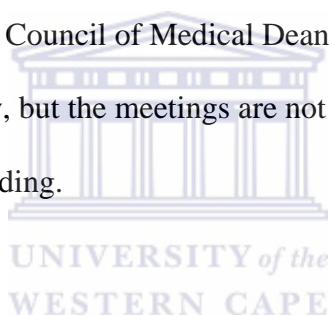
Most key informants questioned spoke of the need for better HR planning and the need for closer links between the Departments of Education and Health. There were differing views about the value of the meetings set up between Deans of HSF. KI 10 was of the view that the meetings were disorganised.

Another key informant working in the DoH was of the view that these are regular meetings, but are not influencing the practice within HSF:

KI 2: There are regular meetings with the Deans, but there is a tendency of medical schools to continue doing what they want regardless.

And yet another informant felt that although the meetings take place regularly, they are not constructive:

KI 11: There is a National Council of Medical Deans that meets with the National Director of HRH regularly, but the meetings are not conclusive and quite 'airy fairy'. Apparently there is no funding.



4.9.2 Funding and government support:

Generally it was felt that funding for medical training was inadequate and did not match training requirements or directives given regarding training. Some funding was given by the National Department of Education, based on the faculty meeting equity targets. There is a health professional training and development grant, made available by the Provincial DoH in support of health professional training. However there is little transparency about how these funds are disbursed. It was generally felt that there was inadequate resourcing for training from the DoH and the health services. KI 12 explained:

If the Department of Health wants more and better human resources, more resources need to be allocated for training of health professionals. There does not appear to be

recognition of the role of health services in training health professionals. In Australia, health service management put resources into the training programmes as they recognise that there is no future health service without the development of HRH.

4.10 HR planning:

In response to questions as to whether HR planning was adequate and informing training plans, there were mixed reactions. Most respondents felt that there were good national HR plans, but these were not being effectively implemented.

KI 5: National human resource plans are hugely inadequate, and were developed with limited consultation. New plans are developed without reflecting or using what has gone before.



KI 10 raised similar concerns:

There are plans, but meat needs to be put on including norms, standards, targets and budgeting.

It was commonly perceived that there was inadequate planning in terms of increasing numbers:

There is no clear HR plan as to how to increase number of health professionals being trained. The Free State is taking the lead in terms of trying to increase capacity to train more e.g. building new facilities. (KI 10)

Another key informant stated:

There are no discussions with the department of health about numbers of professionals to be trained. It is up to individual medical schools to decide. The Health Professional Council sometimes stipulates a maximum number for specific reasons. For example MEDUNSA was told to decrease numbers as they were not able to provide adequate supervision and support for high numbers of students. (KI 12)

4.11 Management

4.11.1 Rural retention

A fair amount of research has been done on recruitment and retention strategies for rural areas, both internationally and within South Africa. Yet the research does not appear to be influencing policy or practice in South Africa. For example, a few of the respondents spoke of the evidence that students of rural origin are more likely to return to a rural area, yet rural origin is not a criterion at HSF:

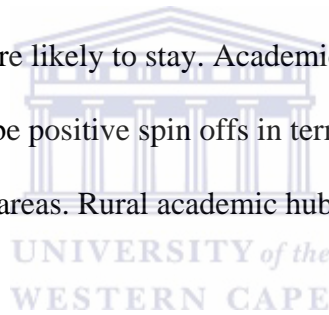
KI 12: There is growing international evidence that the selection of certain profiles of students influences where they end up working. For example, a student of rural origin is 5 times more likely to return to a rural area to work. The race issue has been focussed on, but rural students are not getting into medical school because of disadvantaged rural education systems. More focus needs to be put on identifying and preparing rural students for university.

KI 1 spoke of strategies in other countries:

In Australia there is a government decree that 25% of students must be of rural origin if the university is to receive government bursaries. In some countries, for example Pakistan, doctors are required to work in rural practice before being accepted as a registrar for post-graduate training.

A number of informants spoke about the need for distributive medical training in terms of increasing the platform for clinical training. This was further motivated by some as a strategy that could influence retention in rural areas:

KI 10: Where training happens also affects retention of doctors. If people are trained in rural areas, they are more likely to stay. Academic sites need to be developed in rural areas and there will be positive spin offs in terms of medical professionals choosing to work in rural areas. Rural academic hubs would encourage people to work in rural areas.



KI 12 concurred:

There are examples where registrars have chosen to move from extreme rural areas to less extreme rural areas, the reasons being that there is no support in extreme rural areas. Having academic complexes will assist in providing more support for rural professionals.

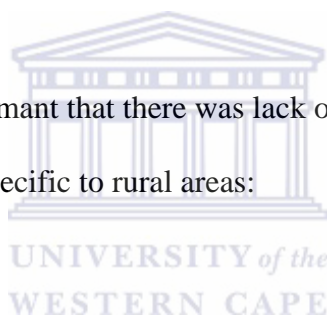
While rural allowances were thought to help, most respondents believed that further research was needed into how much. A number of informants highlighted management and general support as being required. KI 12 explained:

There needs to be good management support for health professionals working in rural areas. Managers need to understand health professionals and realise that they are professionals and not clerical staff. Support is needed around children's educational needs, accommodation, family, etc. This can make a big difference.

This was supported by KI 10:

Rural allowances can help, but we also need to look at things like provision of housing, HR management and development.

It was perceived by one key informant that there was lack of understanding from Provincial DoH about management issues specific to rural areas:



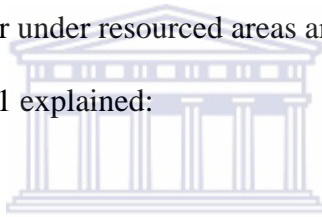
KI 12: Small hospitals don't have adequate numbers of staff to provide a 24 hr service. If there are 4 doctors employed it is difficult to cover both day and night shifts. When a doctor is on 2nd call in a rural area, they basically have to be at the hospital, yet are only paid for the time they are called out. Management issues such as this need to be addressed by the Provincial departments. They are not very understanding of rural needs.

In Province B, provincial bursaries were given to some rural medical and occupational students on condition that they return to work in area. KI 6 mentioned this as a good rural recruitment strategy.

A number of the key informants referred to work being done by the Rural Doctors Association of South Africa (RuDASA) and some referred to the Collaboration of Health Equity and Education in Research (CHEER), which brings together people from each health sciences faculty involved in community-based or rural health to look at questions and educational determinants of rural practice and how to influence students to choose rural practice.

4.11.2 Foreign doctors and Cuban programme:

All key informants believe there is a role for foreign health professionals in the health system, but some expressed the need for a formal, scientific and objective evaluation. In South Africa and internationally, rural and other under resourced areas are frequently supported by foreign national health professionals. KI 1 explained:



We need foreigners to fill up posts that locals don't want. For example, South Africans are working in Canadian rural areas and those working here choose to work in urban areas. So South Africa needs foreigners to support our own rural areas.

While it was felt that the foreign doctors had a good range of technical skills (for example surgical procedures), they did not always have the skills to deal with South African needs and protocols. Two key informants highlighted similar concerns about foreign doctors, and difficulties these doctors face. KI 12 explained:

Communication is not always good as a result of language, but sometimes doctor-patient relationships are also poor. They are not used to working in a team with PHC nurses. They are often quick to provide medical solutions, for example, antibiotics are

prescribed frequently and special investigations done, making services more costly. There is also a reluctance to refer - this is in general, but more so with foreign doctors. This is both systemic and a skills issue and reasons for low referral can include poor transport, referral hospitals not wanting to take patients or not knowing a personal contact at the referral hospital. On the other hand, foreign doctors have also experienced xenophobic responses and verbal abuse from specialists and registrars when referring patients – this leads to a further hesitancy to refer.

The process for foreign nationals to obtain work permits and registration to practice is known to have been long-winded and difficult. It appears however that this may now be slightly easier, as KI 1 explained:



Africa Health Placements has eased the process for recruitment of foreigners. They have been very successful in reducing the length of time to register to 2 or 3 months. Over six to eight years they have assisted approximately 450 doctors obtain registration.

4.11.3 Community Service

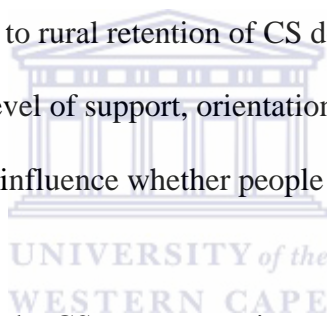
Community service (CS) was seen as a really good opportunity with 2800 professionals being in the health system for a year. However it was felt that how it was managed influenced whether people stayed on in rural areas after CS. This view was supported by a number of key respondents, as KI 1 explained:

It is a good recruitment strategy but a poor retention strategy, unless there are adequate support mechanisms in place e.g. professional development, mentoring and

management support. If managed well, rural areas can be made attractive enough to stay. However people do not stay if there is not proper management and support, or if the community service doctors are not adequately prepared. There is an example at Murchison in KZN, where all the community service officers were retained. Staff are well looked after and part of a really productive team. They have a tradition of looking after staff and young community service officers want to stay on.

The key informant spoke of an impact study that was done after 10 years of CS:

The study shows that the ratio of South African to foreign doctors has changed as a result of CS. With regards to rural retention of CS doctors, in Limpopo 20% and in KZN 6% remained. The level of support, orientation, mentoring, career and professional development influence whether people stay or not. (KI 1)



KI 12 raised a concern about how the CS programme is currently functioning:

What results is a constant flow of health professionals with entry level skills.

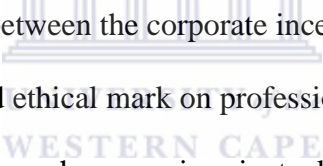
4.10.5 Private Sector

Government plans to use the private sector for services falling within the NHI, but it was beyond the scope of this study to look in detail at the benefits and limitations of using the private sector. It is however unlikely that private sector doctors would be available in any significant numbers in areas with the greatest need, such as rural areas.

Only one key informant responded about the role and limitations of private sector professionals:

There should be incentives to attract private sector professionals to work in public facilities. But this needs careful management. Private doctors often prescribe a broader range and more expensive drugs than prescribed within the Essential Drugs List (EDL). So they may need training on the EDL. They are often not aware of the standard protocols, and would need support. This would be problematic if they were expected to deal with overtime calls as there may not be support available. (KI 12)

A second key informant cautioned against using the private sector:



There is such a clear link between the corporate incentive for profit in the private sector, which has left a bad ethical mark on professionalism in the public and private sector. People making too much money in private destabilises the public sector.

The contribution of doctors is eroded by high income in the private sector, and people in the public sector wanting the same. The health system needs a flatter hierarchical structure and more team work, a “pancake model”. (KI 3)

CHAPTER 5 DISCUSSION:

5.1 Introduction:

This study aimed to explore and identify the HR requirements for the effective and equitable implementation of a NHI-funded health service. While the NHI has been discussed for some time, until recently there has been very little reference to the HR requirements. Most of the initial responses and articles written focussed on the crisis in the public sector, and the costing and affordability of a NHI funded scheme, with no or only slight reference to human resources (McIntyre, 2009; Broomberg, 2009; Van Den Heever, 2009; Mooney, 2009).

In his address to parliament, in the debate on the President's State of Nation address on 5th June 2009, the Minister of Health Aaron Motsoaledi speaking about the NHI highlighted the need to overhaul the public health system (Motsoaledi, 2009¹). He mentioned inadequate staffing levels as a problem. He was more explicit in his Budget Speech, less than a month later, where five of the ten issues he highlighted as contributing to problems in the health system relate to human resources, namely: poor managerial skills; not taking responsibility for actions; inadequate disciplinary process; training and attitude of staff; inadequate staffing (Motsoaledi, 2009²). In highlighting actions in the same speech, in relation to HR the Minister was only explicit about strengthening management with the aim of decentralisation; and made mention of the need for improved HR planning, development and management.

Although South Africa has expressed commitment to the PHC approach, what emerged through the literature review and was verified during the course of the interviews is that South Africa's current health service delivery and HR models favour urban, tertiary and curative care. Findings from this study confirm that the interventions are focussed on curative care and largely ignore preventive care and health promotion. The educational system for

health professionals has not changed in orientation; it is still clinical in focus and there is little understanding of PHC in practice. While the NHI aims to address inequities in the health system, unless the model of service delivery is changed, and there is a pro active strategy to adopt a new HR model, recognising and utilising CHWs and MLWs effectively, it is very unlikely that the rural areas will benefit from a NHI funded system. In fact, it is thought that if the NHI were implemented without rapidly improving the public sector, it could increase inequality (Heywood, 2009).

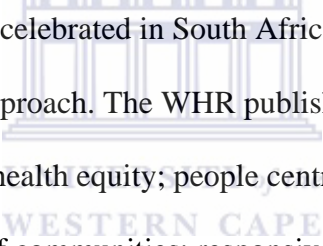
The government plans to use the private sector to supplement the public health sector services; however, it is unlikely this will benefit the rural areas and the urban poor as the private sector is mainly concentrated in wealthier urban areas (Heywood, 2009), yet health needs are greater in the poorer areas (Mooney, 2009). Most of the commentators on the NHI, regardless of their background agree that the only way to meet the health needs of the entire population is through a strong, publicly funded health system (McIntyre, 2009; Heywood, 2009; Mooney, 2009; Broomberg, 2009).

5.2 HRH in the health system and implications for a NHI

It is estimated that globally we are short of nearly 4.3 million health workers, with the worst affected being poorer countries with a high burden of disease (WHR, 2006). The worst affected is Sub-Saharan Africa. The global shortage will take some time to remedy, and will require actions from all countries. High-income countries which are the recipients of health workers trained in middle and low-income countries need to start planning and training for their own needs (GHWA, 2008; Sanders and Lloyd, 2005). Low and middle-income countries need to increase training of professionals; however, health professionals take in excess of 4 years to train, and once they are qualified, there is no guarantee that they will

remain in the country, in the public sector, or working in areas where they are needed most. The current health service delivery model in South Africa is a nurse/doctor driven system, geared towards tertiary, curative and urban services. We need to change to a skills mix that is more appropriate for our needs, using MLWs and CHWs as part of family health teams.

While the NHI offers new mechanisms for funding, if it is implemented without addressing the HR crisis, and without fixing problems in the current public health system, it is unlikely to provide increased access to health services, improved quality of care or improved health outcomes. Human resources are acknowledged as one of the key contributors to achieving improved health outcomes (WHR, 2006).



The 30th anniversary of Alma Ata celebrated in South Africa and around the globe served as a reminder of the value of a PHC approach. The WHR published in 2008, emphasised four PHC reforms namely: improving health equity; people centred health systems; public policy promoting and protecting health of communities; responsive and participatory leadership (WHO, 2008). The HR model proposed within this study supports a system geared towards the PHC approach and the four PHC reforms, with teams of health workers taking responsibility for geographic areas. Particular attention has been paid to the needs at the primary, community and district level, and in particular rural needs.

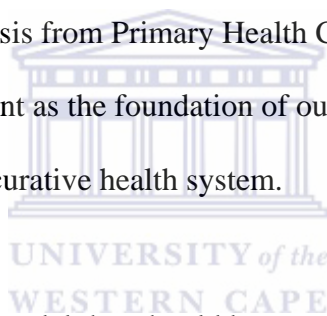
5.1 Skills Requirements

As has already been outlined, the range of services that would be rendered would have to be established prior to identifying the skills required. However, South Africa has committed itself to a PHC approach, and it is widely acknowledged that a comprehensive package of

health care should include prevention, promotion and rehabilitation services, in addition to curative commitments (DoH, 2001).

A number of key informants highlighted that South African health services are over focussed on clinical services. The training platform emphasises the clinical approach and according to a number of key informants undermines PHC. A similar view was also expressed by the Minister of Health in his budget speech, April 2010 (Motsoaledi, 2010) where he said:

South Africa has a predominantly curative health system that places less emphasis on disease prevention and health promotion. Over the last 10 years, there was an inadvertent shift of emphasis from Primary Health Care, which was adopted by the first democratic government as the foundation of our health service delivery system, towards a predominantly curative health system.



The Brazilian system, which is a model that should be considered by South Africa, includes promotive, preventive, rehabilitative and curative services. The Brazilians believe PHC services are essential to the success of their system (WHO Bulletin, 2004). Considering South Africa's adoption of the PHC approach, the section following focuses on the skills and human resources required to shift the emphasis from a curative to a PHC approach.

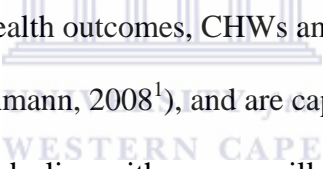
5.4 Optimal minimum skills mix with a focus on community and primary levels

5.4.1 Introduction and models of care:

As already discussed, South Africa has inadequate numbers and maldistribution of health professionals (doctors and nurses), yet has lagged behind in effectively developing the MLW

category of health worker. South Africa has many different categories of CHWs, yet these are currently disorganised and unstructured and very often operate parallel to, rather than supporting and complementing the public health system.

The Kampala Declaration and Agenda for Global Action highlights the need for a skills mix appropriate for countries' needs (GHWA, 2008). It also demands that immediate priority be given to increasing the production of CHWs and MLWs. In Africa, a number of countries have recognised the value of government supported CHW and MLW programmes, including the Health Extension Worker programme in Ethiopia (Negusse et al, 2007; GHWA, undated) and the Health Surveillance Assistants programme in Malawi (Kadzandira and Chilowa, 2001). We need to learn from examples of other countries similar in profile to South Africa.



Apart from the direct benefit on health outcomes, CHWs and MLWs are much more likely to remain in their home country (Lehmann, 2008¹), and are capable of undertaking many of the functions of doctors and nurses in dealing with common illnesses and injuries. They do however require to be supported by nurses and be able to refer complicated cases to higher levels of the health system. All respondents concurred that in the short term, the skills gap must be primarily filled by CHWs and MLWs while simultaneously accelerating the production of nurses and doctors focussing on appropriate skills for low-resource settings. This is in line with the Kampala Declaration which highlights the need for a massive scale up of CHW and MLW programmes while addressing the need for professional and more specialised health workers (GHWA, 2008).

Nearly all key informants supported generalists within every category of health worker, from CHW to doctor. For example, nurses need to be multi-skilled and doctors at the DH need to

be multi-skilled. This was stressed more when talking about rural areas, where every cadre of health workers requires a basic common set of skills/generalist training. Thereafter, some could acquire a speciality. For example, a doctor at a rural DH should be trained as a generalist, and some could have specific skills developed e.g. anaesthesia or surgery.

The model proposed requires what has commonly been called ‘task-shifting’ or delegation of tasks from a health worker to others in a team, typically to those lesser qualified (WHO, 2007) for example some tasks currently done by doctors or nurses could be delegated to MLWs and CHWs. Some professionals feel threatened by this and a number of key informants spoke about professional jealousy and the need for changes in power relations. A number of key informants highlighted the need to explore task shifting specifically for nurses as had been done previously with the paediatric primary care course run by Red Cross Hospital. It was thought that task-shifting could also reduce duplication of functions.

A number of key informants spoke of the lack of continuity of care in particular between public health and community services. The model proposed would require a greater flow of information through all levels and sectors of the health system, including the community level, as well as seamless referrals between different levels and generally within the health system.

5.4.2 Community level

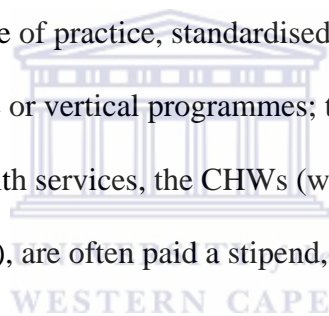
‘Community level’ care includes community and home-care (WHR, 2008). Findings from this study found that community level care is primarily carried out by NGOs and with very few exceptions is not carried out by or supported by the state health services. CHWs need to be formally recognised and at the heart of any community-based health interventions. Nurses

and doctors in the public sector currently do not conduct home-visits. CHWs operate in the community and could immediately fill this gap in health service delivery.

A number of key informants stated that the referral system between CHWs and from health services to CHW is currently not functioning adequately, resulting in underutilisation. The clinic or health centre should play a pro-active and co-ordinating role in ensuring a smooth and efficient referral process.

5.4.3 Community Health Workers

CHWs were supported by all key informants. However, while there are thousands of CBHWs, there is no defined scope of practice, standardised training or model of working. Many are working on single issue or vertical programmes; there is no career progression; and despite carrying out essential health services, the CHWs (who are often women from the most disadvantaged communities), are often paid a stipend, or expected to volunteer.



Key informants were in agreement that to be effectively used, CHWs would need to operate as part of a team, and be at the centre of the community level health system, involved with prevention, health promotion, education, campaigns, home visits, home-based care, limited curative services, and broader development in the community. The importance of home visits and the role of CHWs at the community level and in taking the services beyond the clinic was highlighted. All CHWs should be trained as generalists and be a link between the community and the health system.

Based on recommendations of key informants, and experiences highlighted from other countries, South Africa should consider a large scale CHW programme, on a similar model to

the Brazilian system. There are already thousands of CHWs that could be better utilised and additional CHWs could be trained and ready to start working in a relatively short period. An innovative, well planned, supported and financed CHW programme, as in Brazil, would make a huge difference to the health of many people currently denied adequate access to health care, particularly the rural and inadequately resourced peri-urban areas. Furthermore, a large scale CHW programme, would free the clinic and therefore health professionals of many minor cases (Lehmann and Sanders, 2007).

The CHW Policy Framework (2004) was developed following a CHW Lekgotla, and was to guide provinces in the development of CHW programmes. Provinces however, were not obliged to follow the framework and largely developed their own programmes. Despite the Framework recommending the generalist model, many single issue or vertical CHW programmes have developed, with inadequate funding being provided for support, administration and management. This was verified by a number of informants.

There is a new policy document in the pipeline, which intends to form the framework for Departments of Social Development and Health, but which still needs further development to be formalised into a proposal and policy. Criticism of this new document is that there has been inadequate consultation with civil society, especially some of the pioneers of CHW projects and people experienced and working in the field. There are however some civil society groups planning to host consultation workshops with key role players including with CHWs themselves.

5.4.3.1 Employment, management and supervision:

Further work should be done to explore the Brazilian model, where CHWs are a recognised and valued part of the Family Health Team and paid by government; there is a close interaction between nurses and CHWs, with nurses playing a supervisory role. The CHWs are the link between the community and the facility. However in South Africa, further work needs to be done to shift health professionals' attitudes towards CHWs. This was highlighted in the 2002 SAHR (Friedman, 2002; 174):

The environment within clinics is fairly hierarchical, with a rigid management structure where nurses tend to approach CBHW supervision from a disciplinary rather than supportive standpoint.

Lehmann and Sanders (2007) similarly highlighted that nurses are often ill equipped to adequately support CHW, partly because of the hierarchical system, but also because of the clinical orientation of their training.

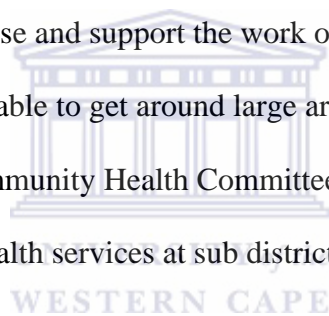
Currently in South Africa, many CHW programmes have not been integrated with public health system. As Lehmann (2008²: 171) noted:

.. early experiences suggest that while CHWs play an important role in service delivery at primary care level, they remain peripheral to main stream health services.

Some key informants cited examples where CHWs have been taken on by the health services, and have ended up being clinic based clerical workers instead of community level health

workers. Others spoke of poor referral systems from public health facilities to CHWs, resulting in underutilisation of the CHW.

Support and supervision of CHWs are viewed as essential, yet often weak in CHW programmes (Lehmann and Sanders, 2007). Key informants asked believe that supervision should be done by a professional nurse, with community training and an outreach responsibility. Friedman (2005: 186) proposes “support, mentoring and monitoring” should be provided by Community Health Facilitators, but speaks of skilled professional nurses providing technical support for home based care. One key informant stressed that this should not be done by an EN, as the complexity of the CHWs work was beyond their scope. The CHW supervisor needs to supervise and support the work of the CHW in the community, and therefore needs to be mobile and able to get around large areas. There should be local accountability of CHWs to a Community Health Committee or District committee, which would provide feedback to the health services at sub district level.



In terms of relationship with government, there are two models which should be explored: the first would be similar to the Brazilian model, where CHWs are part of family health teams, and supervised by a nurse in the team. This requires a shift from the current mind set of health workers towards CHWs and community-based services. It would also require skilling nurses in supervision skills (Lehmann, 2008²).

The second would work towards the Brazilian model, but pay for NGOs to employ CHWs, with standardisation of training, roles and salaries. Employment directly at the clinics as part of family health teams would be phased in as capacity is developed.

A seamless referral system and continuity of care needs to be developed between health facilities and NGOs. The communication and referral system between clinics and CHWs needs to be improved, with working partnerships developed around service delivery. Models to improve this need to be further explored.

5.4.3.2 Financing

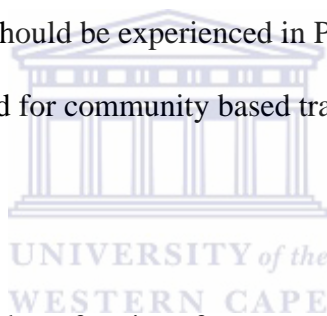
It was expressed that there is no role for community financing, as CHWs usually serve the poorest of communities. It is however important that CHWs are recognised as part of the public health service and be paid a minimum reasonable wage. Volunteers should only be used for short, limited and time bound periods.

According to Lehmann and Sanders (2007), there is little evidence that volunteer programmes or community financing are sustainable; CHWs are often working in areas where formal health services do not work, and this is usually in the poorest of communities. Key informants believe that CHWs should be adequately remunerated. The difference in CHW payment in South Africa is vast (Friedman, 2002) and there need to be some attempts to develop standardisation of remuneration.

5.4.3.3 Training and career pathways

Training of CHWs is currently not standardised, although it appears there are attempts by some to fall in line with the NQF. Over the last years, in order to assist with the HIV pandemic, there has been a massive increase in the number of CBHWs, especially home-based carers, TB DOT supporters and Lay Counsellors (Lehmann, 2008²; Friedman, 2005). There was consensus that all CHWs initial training should be generalist with co-ordinated training blocks added.

There has been progress in developing unit standards and recognition by SAQA of CHW training; however it appears as if training is being carried out by a number of service providers, with very little compliance with policy (Friedman, 2005; Lehmann, 2008²). Lehmann (2008²) highlighted the need for monitoring of training, and that Provincial governments should ensure adequate resourcing for compulsory CHW training. There was agreement amongst key informants that training should be done by accredited organisations and individuals, who understand the context, are experienced in service delivery/CHW projects, and using a curriculum developed by DoH. Training should be supplemented by rotation through health services for specific training blocks. The CHW Policy Framework (2004) specifies that the trainers should be experienced in PHC, the DHS and community development. It speaks of the need for community based training with structured and supervised practical work.



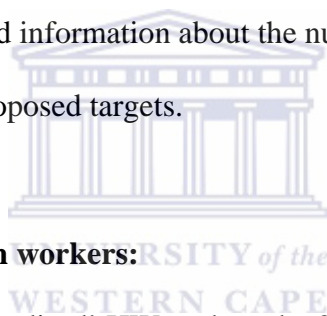
Key informants highlighted a number of options for career progression for CHWs which include specialisation; entry level to other health professions; supervision/co-ordination. The development of unit standards and recognition by SAQA (Friedman, 2005) open the possibility of career progression for CHWs.

Possible career progression into other health professions, and in support of the above, were proposed by Lehmann (2008²), where progression to the next level would be dependent on experience and training. Lehmann's flow chart starts with a community volunteer; who with training and experience can progress to CHW level; then enrolled nursing assistants; EN; professional nurse and finally clinical nurse practitioner.

5.4.3.4 Numbers of CHWs required:

Using a rough estimate based on the Brazilian model (approximately 6 CHWs per 5,000 – 10,000 people), and based on the South African population estimate of 48.7 million, it is calculated that South Africa would need between 48,000 – 96,000 CHWs. This would create large scale employment while directly improving access to health services and health outcomes. In less densely populated rural areas where the geographical spread would be wide, the ratio of CHWs to population would be lower than in densely populated urban areas.

There are however major reskilling requirements for existing single issue CHWs. An audit would need to be done to estimate the number of existing CHWs and their training requirements; and provide detailed information about the number of additional CHWs that would be required to reach the proposed targets.



5.4.4 ‘Old’ categories of health workers:

There are a number of ‘non-standardised’ HW such as the Specialised Auxiliary Service Officer (SASO) and Community Liaison Officer (CLO) which include nutrition advisers, family planning and health promotion advisers. There is very little sympathy or budget given for health promotion, and therefore also no plan for HRH for health promotion. Key informants were in agreement that formal accredited training programmes need to be developed and it was proposed that workers within these categories should have a training needs assessment to identify training needs and fast tracking of career progression.

Please refer to Appendix 3 for a diagrammatic flow chart of how career progression could be planned for nutritionist assistants. A register has been opened for Nutritionists at the HPCSA – this is an ideal opportunity to finalise both the nutrition adviser/CHW and a MLW. The

nutrition MLW would have 2 years training; and the next career progression would be an additional 2 year training to become a nutritionist. The same model could be used for the career progression of health promotion advisers to MLW to professional.

5.5 Primary Level

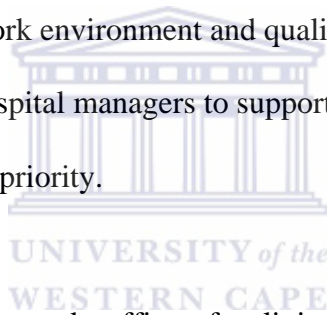
5.5.1 Clinics

A number of key informants spoke about the need for a population or geographic based approach and clinics being responsible for a catchment area. This approach is generally more inclusive and supportive of the PHC approach. The WHR in 2008 highlights that once a health service is responsible for a defined geographic area, they can better be held accountable for health outcomes; are more likely to embark on prevention and promotion activities, as well as to reach out and work closer with other service providers in the community, allowing for continuity of care; are more likely to take work beyond the confines of the clinic; and very importantly, more likely to work with other sectors in tackling the broader social determinants of health (WHR, 2008).

Each clinic should be staffed by a team of health workers, which would differ according to rural and urban and size of population in the catchment area. MLWs and CHWs would be key members of the team at this level. Staff numbers should ensure the required staff is available when others are on leave, sick leave or days off. There should be regular and structured doctor visits. This way initiation of ARVs can be done at the clinic level and complicated cases which may require referral can be seen.

A study done into the role of doctors at PHC clinics (Nkosi et al, 2009: 408) proposed that doctors could be better utilised at the clinics, in supporting PHC nurses, training and other functions:

Doctors' visits are not being utilised to their full potential. Additional support for PHC nurses could be provided by doctors if clear roles and activities were set out for clinic visits. These should include skills training for clinic nurses, development of clear referral criteria, and improved communication and feedback. Doctors should spend more time at the clinic during visits and work at the same clinic for a longer period. Expanding the doctors' role would improve teamwork within districts, leading to improvements in the work environment and quality of care. However, this requires commitment of district hospital managers to support doctors in their role and ensure that clinic visits are given priority.



Please refer to Appendix 1 for proposed staffing of a clinic and Appendix 2 for a regional model for paediatrics.

5.5.2 Community Health Centre:

The MLW should be well utilised at this level.

Norms of functioning at the CHC should include: Family health teams responding to population needs; all facilities to have a population-based approach interacting with programmes; orientation to the PHC approach; a performance management system that incentivises, monitors and evaluates and motivates nurses to go beyond clinical practice. Clinicians need to be involved in population-based activities and share in the community

wide programme; CHCs need a visit from a doctor on a weekly (regular and dependable) basis.

Please refer to Appendix 1 and 2 for more details on recommended skills at this level.

5.5.3 Mid level workers:

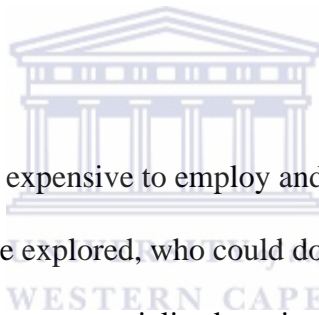
Development of MLW categories is unfortunately lagging (Lehmann, 2008²). There was consensus amongst informants that there need to be MLWs; however many expressed frustration at the lack of progress, delays in legislating and inadequate numbers trained. Unfortunately the proposed development of MLW seems to have brought about insecurity in a number of professions, resulting in delayed implementation.

Experience in other countries has demonstrated the value of using MLWs (Bolton-Moore et al. 2007; Steinlechner et al, 2006; Chilopora et al, 2007; Pereira et al, 2007; Thetard and Macheso, 2004; Lehmann, 2008¹; Lehmann, 2008²). In South Africa the nurse (enrolled nurses); and pharmacist (pharmacy assistants) MLWs are established. While there are CAs being trained, the numbers are insignificant.

Some informants felt that the CA programme will need to be evaluated, and a comparison done with models of MLW in other African countries where the scope of practice is much broader. For example, in Malawi and Mozambique mid level medical workers do a range of surgical procedures including Caesarean section; hernia repair, fracture management and management of an ectopic pregnancy (Thetard and Macheso, 2004; Steinlechner et al, 2006; Chilopora et al, 2007; Pereira et al, 2007).

The role of MLWs needs to be finalised (and in some cases further explored) for social work; rehabilitation; mental health and nutrition assistants. According to Hugo (2005), a four year university course for a mental health MLW was developed. However this MLW would only be registered to work in the public and NGO sector, and some initial students trained were unable to get work as no posts were created in the public sector. It is unclear if training has continued since then.

There was general consensus that it would be more relevant to train a generic MLW, especially in rural areas, with the caution that too many sub groups/specialisations could be difficult to monitor. This would be in line with the Clinical Officers in Malawi (Thetard and Macheso, 2004)



Tertiary level specialists are more expensive to employ and a few key informants suggested that mid-level specialists should be explored, who could do routine procedures thereby enabling the specialist to focus on more specialised routines. This is task shifting: MLW carrying out standard procedures, relieving professionals for more complex and specialised work.

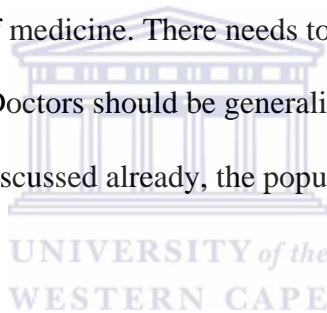
5.5.3.1 Training, support and supervision

Training of CAs is currently being carried in a very limited way, and a number of key informants suggested that there is an urgent need to scale up the training. It was however also suggested that we should upgrade nurse training to include some of what will be done by CAs. Everyone was in agreement that training needs to be standardised and NQF aligned and contain both academic and practical content. The ideal location of such training needs to be researched.

Supervision should be by the professional in the team, for example, pharmacy assistants should be supervised by a pharmacist. Health professionals will need training when taking on a supervisory role.

5.6 District Hospital

The DH should be providing non specialist hospital services and should also be responsible for co-ordination of health care within the DHS and provide support and supervision to the CHCs, clinics and community level programmes. What was emphasised repeatedly was that the DHS needs a team of people who have a population based approach to health and are not just following a curative model of medicine. There needs to be continuity of care between health professionals and clients. Doctors should be generalists, multi-skilled and with expertise in family practice. As discussed already, the population based approach is emphasised in the WHR (2008).



While many of the recommendations of this study suggest strategies that would assist with the shortfalls of health professionals, there is also further discussion about rural retention and community service under 5.10.1 and 5.10.2.

The Regional model for paediatrics in [Province A] was cited in a number of interviews as systematically meeting the population needs and effectively demonstrates the potential success of a population based approach.

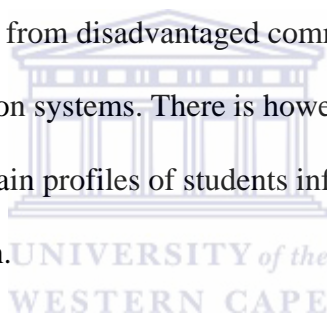
5.7 Tertiary Level

Tertiary care should also be geographic, population and risk based – this was the view of a number of key informants. Tertiary care needs to contribute to health of the whole area, and not only the people who seek care and are seen in the tertiary facility. A wider range of skills and specialisation are required at this level. The paediatrics model (Appendix 2) demonstrates how tertiary care can contribute to health care in the whole catchment area.

5.8 Production

5.8.1 Selection

There was general consensus that HSF need to have a rural quota in addition to racial quota. Few rural and peri-urban students from disadvantaged communities get into medical school because of disadvantaged education systems. There is however growing international evidence that the selection of certain profiles of students influences where they end up working, for example, rural origin.



A study done in 2003 found that 38.4% of rural origin doctors were currently practicing in rural areas as opposed to 12.4% of urban origin and recommends that (de Vries and Reid, 2003: 3):

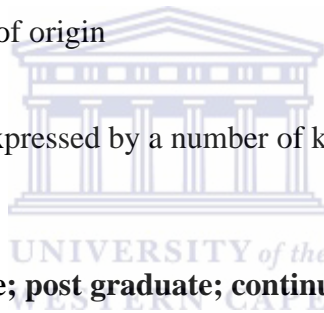
- The National Department of Health provide incentives to universities to enrol rural students;
- Medical school selection criteria should preferentially include rural origin; aspirations for a career in rural health, primary care or general practice (the latter are more likely to practice in a rural area).

- Enrolment of rural students and the proportion of rural graduate students returning to practice in rural areas should be monitored on an ongoing basis.

The above were echoed and expanded on in a letter written by RuDASA (2009), drawing on conference resolutions, where they called on the Minister of Health to:

Support programs that seek to mentor rural learners in order to prepare them for tertiary training; provide guidelines on the distribution of provincial health study bursaries in a way that improves equity and representation of rural provincial sub-districts, as well as a framework for commitments to work back for the province in the specific district of origin

Similar recommendations were expressed by a number of key informants.



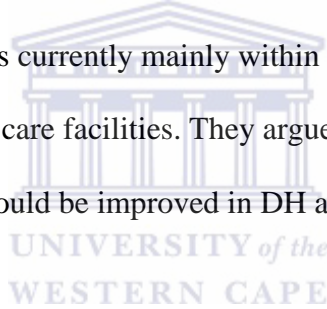
5.8.2 Training (undergraduate; post graduate; continuing)

There is clearly much work needed in bringing the departments of Higher Education and Health together in relation to health professional training. The Health Sciences Working Group, which was established to advise the Commission on Higher Education on the organisational and financial model for health sciences, made recommendations that a health personnel education council be established jointly by the Departments of Health and Education. This was supported by the final report of the Commission, which recommended that such a joint body take recommendations of the working group forward. (Shear et al, 1997)

The health personnel education council has never been set up, but it is clear that the Departments of Health and Education need to work closely to ensure health service responsibilities are fulfilled through health science education, and this study recommends that such a joint body be formed.

5.8.3 Doctors

Medical universities have been told to double their intake, yet academic staff interviewed indicated that the limited access to clinical training platforms made increasing training difficult and additional students would increase pressures on staff in services. Others key informants felt strongly that more innovative ways need to be developed to expand the clinical training platform, which is currently mainly within secondary and tertiary facilities, with a limited number of primary care facilities. They argued that infrastructure (e.g. accommodation and transport) should be improved in DH and rural areas, which could then be used for clinical training.

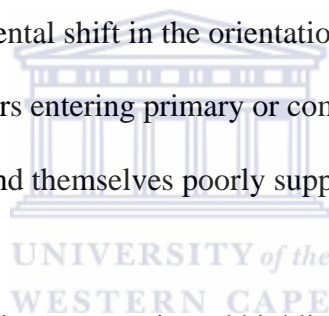


This view is supported by the RuDASA position paper, which calls on the MoH to expand clinical training sites to include district health campuses, and increase funding to prepare such sites for teaching (RuDASA, 2009). Lehmann (2005: 142-143) emphasises that the National Health Act stipulates that academic health complexes should include all levels of care:

With the new legislation, health science faculties, in conjunction with the departments of Health and Education, will now have to apply their minds as to how district hospitals, clinics and community-based settings can be developed as venues for learning in terms of structure, governance, funding and staffing.

Key informants cited examples from other countries where training has been decentralised. Apart from limiting exposure, the tendency to use secondary and tertiary hospitals for clinical platforms also has a negative effect in terms of emphasis in training, which ends up being focussed on clinical training in a well resourced environment and does not equip medical students with skills to practice comprehensive PHC in resource poor settings. An expansion to include more DH, especially in rural areas, would assist in developing skills for DHS development (Lehmann, 2005). However as highlighted by Lehmann (2008²), this also needs to be supported by changes in orientation of the curriculum:

Very importantly, while there has been curriculum reform in many medical schools, there has been no fundamental shift in the orientation and resourcing of health professions. Health workers entering primary or community care services thus often remain ill-prepared and find themselves poorly supported and resourced.



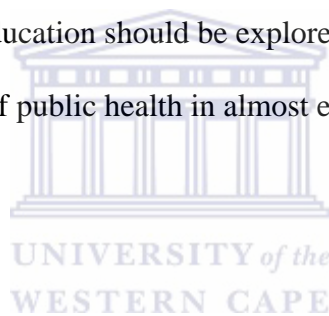
Findings from this study and the literature reviewed highlight a number of recommendations including: increasing clinical training sites to include DHs and increasing availability of transport and accommodation for students doing clinical placements in rural areas; assessing medical curriculum and training and its success in training medical students in the PHC approach (Lehmann, 2008²). This should inform future changes to the curriculum and training; increase PHC focus during training; and develop collaborative relationships with NGOs involved in PHC and service delivery.

Funding for training of health professionals is primarily from National Department of Education and Provincial Health Departments in the form of “joint agreements” with HSF.

Most provincial funding for training goes to employment of medical specialists and joint service/academic appointments located in tertiary or academic hospitals.

A greater quantum of funding is needed with a much larger proportion being allocated to such service/teaching posts at primary and secondary levels; to rationalise and extend joint service/academic appointments and to promote the development of integrated academic health service complexes (Shear et al, 1997).

Funding from the Departments of Health and Education needs to be well co-ordinated and increased significantly to increase production of health professionals. The Brazilian system of funding for health professional education should be explored. In addition to the funding of HSF, Brazil also funds a school of public health in almost every state to ensure the ongoing training of health personnel⁴.



5.8.4 Nurses:

The training of nurses and decision around numbers falls within the Provinces, however the NDoH has recommended that the training of professional nurses should be increased to 3000/annum by 2011 (DoH, 2006). As was discussed earlier, it is difficult to access accurate information on nurses practicing in the public sector. However it is clear that production has not kept up with population growth and the increasing burden of disease and resultant requirements, and the number of nurses expected to retire in the next 10 years (Lehmann, 2008²). Furthermore, the demoralisation and loss of nurse tutors as a result of the rationalisation process has made any increase in production of nurses difficult.

⁴ Personal communication with Francisco de Campos, Ministry of Health, Brazil

A number of key informants spoke of the need for task shifting, and redefining the scope of practice for nurses. This is backed by a number of articles reviewed. Lehmann (2008²) highlights the need for task shifting to nurses. Any task shifting will require revisions in training curriculum (Subedar, 2005).

Given the shortage of nurse tutors, South Africa should explore the use of incentives to encourage nurse tutors and experienced clinical nurse supervisors (retired or working in another field) to return. An audit should be done of the number of nurses working in services, with specific information on CNPs and age of nurses. This audit should inform national and provincial plans for production of nurses taking into account the ageing population of nurses; proposed changes in scope of practice (task shifting); high migration and numbers working in the private sector; the need for specific post-graduate skills such as CNPs.

Legislation limiting nurses' functioning should be revisited, for example, the issue of nurses prescribing anti retroviral therapy (Lehmann, 2008²). The training plan should be developed based on needs taking into account such factors as the ageing nursing population.

5.8.5 Upgrading / re-orientation:

Planning and management skills of managers have been highlighted as a weakness requiring action (Lehmann, 2008²) and lack of management skills affects the ability of health services to implement policy (Lehmann, 2005), as well as limiting the workplace environment in terms of encouraging change required (Lehmann, 2008²). The key informants concurred that management training is inadequate and inappropriate, and highlighted that there needs to be a technical shift in the way people are trained. District development as a means to transform the

health system requires re-orientation of health workers to the PHC approach as well as technical and management skills to effectively manage the transformation.

While the above recommendations focus on training needs of doctors and managers, all cadres of health workers need training and re-orientation. Training has often had the wrong emphasis and reskilling will allow the more effective use of existing staff. For example, the emphasis in Environmental Health Officers training has been on ‘inspection’, rather than the development of appropriate environmental hygiene e.g. improved toilets and improved small water supply. Many CHWs have been trained in single issues, rather than as generalists, etc.

5.9 Planning

Findings from this study about HR plans not being fully implemented are backed up by literature; for instance Lehmann (2008²: 165) in discussing the National HRH strategy developed in 1999/2000 and the HRH plan highlights:



The Department of Health’s HRH Task Team explored staffing implications of the PHC package in great detail and considered the revision of scope of practice of health professionals, with the aim to broaden the roles of service providers. It identified strategic needs in the areas of health management and organisational development as well as education and training. While some of these have been addressed, many targets remain unmet, particularly regarding the technical and management skills and staffing mix required for the implementation of PHC services.

The national human resources plan, finalised in 2006, echoes a strong focus on training and continuing development of human resources. However, current

production targets suggest that these will fall short of projected needs. Most importantly, it does not suggest mechanisms to redirect resources for deployment and training, nor for primary and community levels of care as recommended by the National Health Act.

The NHI planning process needs to draw on and expand existing plans. There needs to be a clearly identified model for HRH, with final NHI plans articulating a clear plan of action for phased implementation over a realistic time period. HR plans should identify projected HR needs and provide a phased strategy to link training to needs. The HR plan needs to incorporate HR development; management and production, including norms, standards, targets and budgeting. Performance agreements should be linked to plans. Plans, budgets, monitoring, evaluation and implementation all need to be linked.



5.10 Management strategies to address HR needs for a NHI

In management of HRH, mechanisms to improve retention and functioning are both financial and non-financial, and include support, supervision and continuing education. Health professionals in the public sector work under difficult conditions; often working long hours in poorly staffed and poorly resourced facilities. It is clear that salary, leadership and management of public health facilities all need to be addressed and that health workers in difficult conditions need adequate support and supervision. (Wolvardt et al, 2008)

Management is a broad subject, and this study focussed on a few key areas, namely rural retention, community service and the Cuban/foreign health worker programme. The NDoH HR plan (2006), highlighted strategies to attract and 'distribute' health workers in

underserved and rural areas including recruiting doctors from other countries; introduction of community service; and the provision of a scarce skills and rural allowance.

5.10.1 Rural retention

RuDASA has experience and has done research on rural health issues including rural retention. RuDASA should be a central partner in formulating policies around rural issues.

A number of factors were highlighted by key informants as contributing to retention of health workers in rural areas including good management support, infrastructure and amenities, clinical support and support by visiting specialists. While rural allowances do make a difference, it is not clear how much. This view was supported by the NDoH HRH Planning document (2006) which highlighted that the scarce skills allowance should be re-assessed.

Some of RuDASA's research has already been discussed under selection of medical professionals. In addition they propose that doctors who have worked in rural areas should be given preference for acceptance into post-graduate training as a registrar (RuDASA, 2001).

5.10.2 Community Service (CS)

CS provides an opportunity to make large numbers of professionals available to the health system. Rural doctors expressed that the CS programme has been “very effective as a recruitment tool, but useless as a retention tool”. Studies on rural retention of CS doctors has shown that the level of support, orientation, mentoring, career and professional development influences people staying or not (Lehmann, 2005). Study results published in 2009 concluded (Ross and Reid, 2009):

The retention in the same DH of only 8% of the CS officer cohort in three rural provinces indicates a serious loss of skills on a recurrent annual basis. Local hospital management can do much to strengthen the factors that would attract CS officers to stay on by improving orientation, mentoring, teamwork, professional development opportunities, medical equipment and accommodation.

In planning the distribution of CS officers, areas with the greatest need should be allocated first (RuDASA, 2001). Effort needs to be made to strengthen and institutionalise the factors identified as supporting retention of CS officers.

5.10.4 Foreign doctor programme

In South Africa, the most significant foreign professional programme has been the Cuban doctor programme. Respondents felt that foreign doctors have a good range of technical skills, but not necessarily the skills to deal with the broad scope required for rural practice.

Couper et al (2005), found that the Cuban doctors had a positive effect on rural DHs, and that the reduced number has resulted in less support for DHs.

Internationally rural areas are significantly staffed by foreigners. Problems in registration of foreign doctors have improved with Rural Health Placements. Further means of speeding up registration of foreign doctors should be explored.

5.10.5 Redistribution of medical specialists

It is clear from this study that there are insufficient numbers of specialists in provincial and regional hospitals and inadequate support and supervision by them to DHs. Urgent attention

should be given to creating more Provincial and Regional specialist positions and developing job descriptions for specialists which encompass both clinical responsibilities (in Provincial and Regional hospitals) as well as supportive/supervisory responsibilities in strengthening services in DHs. They would need to spend a significant percentage of time visiting hospitals in their region.

This has significant implications for the training institutions and examining bodies which need to be encouraged and incentivised to ensure that regional/rural service is a compulsory rotation in specialist training and that sub specialities, for example in community paediatrics, are created.

5.10.6 Incentives to attract private sector professionals

The NHI is a funding mechanism to finance the health system using both public and private providers. However time limitations have not allowed this study to thoroughly explore the incentives that would be required to attract private sector professionals to work part-time in the public sector. To do so would require an in depth review of models in other countries with similar income and demographic profile and interviews with key role players in the private health sector.

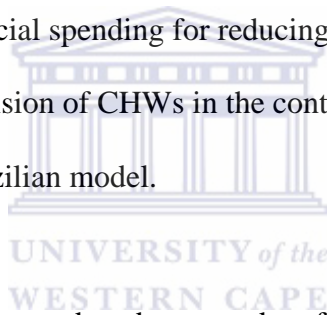
A number of key informants expressed that they felt it was too expensive to consider and that it is unlikely private sector professionals would wish to work in rural and resource poor areas. The mechanisms for contracting private sector professionals to work in the public sector need to be worked out clearly, following planning and consultation. It is recommended that different models be piloted and evaluated in different contexts (e.g. rural, urban, under-resourced, etc), before being rolled out on a large scale.

5.11 Key interventions

The NHI will need to develop a clearly articulated and well consulted plan with phased implementation, leading towards a defined and comprehensive package of services. The following section highlights a few broad legislative and advocacy challenges required in realising this model. This should be read in conjunction with recommendations highlighted in other sections.

5.11.1 Community Health Workers:

Government should support the development of large scale CHW programmes, funded by National Treasury as preferred social spending for reducing unemployment. A model for funding, management and supervision of CHWs in the context of a NHI, needs to be developed, learning from the Brazilian model.



The Community Care Giver policy needs to be opened up for further consultation with key stake holders.

An audit should be done of existing CHW programmes, followed by phased upgrading of CHW training and a phased process to bring existing CHWs into a nationally funded CHW programme. The audit should identify gaps in service delivery and where additional CHWs are required. It should also identify transport requirements.

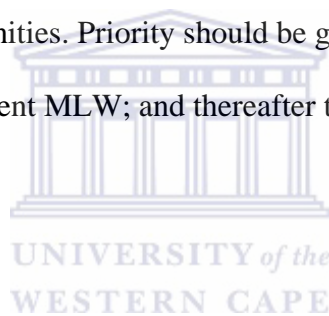
Training should be standardised, accredited, NQF aligned; community based and provided by practitioners involved with service delivery. CHWs should be trained as generalists, and work

as part of a multidisciplinary team within a comprehensive PHC framework. The CHW should be an entry level to other health professions, with formalised career pathways.

CHW should be remunerated through allocations from national treasury. The CHW salaries should be graded and increased in line with experience and career progression. Funding should be provided for infrastructure, training, transport, management and supervision.

5.11.2 Mid level workers:

The formalisation and implementation of a structured MLW programme would allow for increased access to a wider range of services at all levels of the health system, but in particular in underserved communities. Priority should be given to finalising the scope of practice and curriculum for different MLW; and thereafter to accredit training providers and start training.



5.11.3 General:

A comprehensive HR plan should draw on existing plans, and articulate the new model and steps for implementation of a NHI with scopes of practice, production needs, norms and standards. It needs to include plans for task-shifting and new cadres of workers.

The accurate collation of health worker data needs to be prioritised. Production should be informed by current health worker data and projected staffing needs.

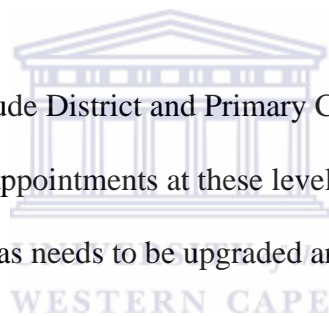
HR management systems need to be developed with the view to improving performance and addressing poor working conditions and resultant demotivation of health professionals.

Urgent consideration should be given to rural recruitment and retention strategies including reducing loans for professionals willing to work in rural areas; rural origin being considered as a selection criterion; increased undergraduate training in peripheral sites.

HIV/AIDS programmes should be integrated within other programmes, rather than having a separate budgets and staffing. It should be identified at which levels anti retroviral therapy should be provided.

A joint Department of Health and Education committee should be formed to co-ordinate and oversee health professional training, targets and funding.

Clinical training sites should include District and Primary Care levels. A greater quantum of funding should be given to joint appointments at these levels. Infrastructure and amenities (e.g. accommodation) in rural areas needs to be upgraded and expanded.



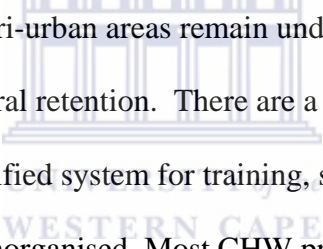
Medical professional curriculum needs to be evaluated in terms of training in the comprehensive PHC approach and adjusted accordingly. Contracts should be concluded with training institutions and schools of public health to provide standardised management and PHC training for health workers.

The National Health Act needs to be fully implemented.

The public sector needs to review expanding available positions in areas such as physiotherapy, occupational therapy, speech therapy, clinical psychology, where there are huge needs, yet graduates are struggling to get work in the public sector.

CHAPTER 6 CONCLUSIONS

The findings of this study have highlighted the challenges South Africa faces in preparing human resources for a NHI funded system. While government has a stated commitment to a PHC approach, our health system has remained a predominantly curative model. The health HSF have struggled to expand the training base to include peripheral and rural faculties, which limits the number of students that can be trained, and results in a continued clinical and specialised focus in training. Nursing colleges and universities are struggling to keep up with the demand caused by attrition of nurses to the private sector and overseas. And we have an ageing nurse population.



The rural and poorly resourced peri-urban areas remain understaffed, with few legislative and support mechanisms to support rural retention. There are a large number of CHWs employed, however there is no unified system for training, support, supervision, or payment of CHWs – the sector is largely unorganised. Most CHW projects are running parallel to the public sector services, and not being utilised to their maximum benefit. Government services are primarily clinic based and curative.

Although there has been talk of MLWs for some time, there has been little progress in the implementation of structured MLW programmes. The nurse, pharmacy and dental MLWs are in place, but underutilised.

Despite recommendations about task shifting, there has been little progress to clearly define roles and responsibilities of health workers with a view to task shifting.

Prospects appear pretty bleak – there is however a huge opportunity presented with the NHI. The energy that has developed in relation to the NHI should be harnessed and used to revisit our health service delivery and HR model. We need to return to the Alma Ata principles that informed our vision for health. We have the opportunity to review the implementation of a responsive PHC driven system, which reaches the most remote and poorest rural communities.

To do so, we need to identify an appropriate skills mix. This study makes recommendations informed by the experience of key informants and literature reviewed. It explores the use of the Brazilian model, which uses a population based approach using family health teams (including CHWs) serving defined populations. A number of specific recommendations have been made within the discussions with broad priority recommendations highlighted below.

6.1 Recommendations:

This study makes a number of specific recommendations within the discussion chapter. There are however some broad priority recommendations highlighted below:

Firstly, key findings from this research should be presented or forwarded to a number of groups working on the NHI including: the NHI Ministerial Advisory Committee technical subcommittee on HRH; the Black Sash coalition on the NHI; the Conference of the Left task team working on the NHI; and the civil society group working on the community care giver policy.

Secondly, relevant key findings should be presented to key stakeholders for consideration including: health science faculties; National and Provincial Ministers of Health; National and

provincial HRH policy makers and key decision makers; the HPCSA; the South African Nursing Council, CHW organisations.

Thirdly, some short specific policy briefs should be developed to popularise key messages and to be used for advocating for recommended changes.

Fourthly, there are a number of policies and legislation that have either not been finalised or fully implemented. Specific attention should be given to the following: The Rural Health Strategy needs to be finalised and taken to the National Health Council; the Health Act and regulations related to academic health complexes (e.g. registration and procedures; funding; governance arrangements) need to be revisited with the view to urgently expanding the Academic Health Complexes to include all levels of care and rapidly increasing production of health professionals; the Public Service Management Act should be revisited to ensure fair reward for good performance; Scopes of Practice will need to be re-examined in relation to task shifting. In particular, the Scope of Practice of professional nurses should allow for dispensing of ARVs and that of CHWs should allow for treatment of selected acute conditions (Haines et al, 2007).

Fifth, government should support the development of large scale CHW programmes, funded by National Treasury as preferred social spending for reducing unemployment. A model for funding, management and supervision of CHWs in the context of a NHI, needs to be developed learning from the Brazilian model.

Sixth, the scope of practice, curriculum and accreditation of training for different categories of MLW needs to be finalised.

Seventh, the production of all categories of health workers needs be increased, but particular priority should be given to CHW and MLW. Priority should also be given to accelerating the production of doctors and rendering their training more appropriate

Eight, there needs to be implementation of a strategy to increase retention of health professionals in the public sector, including choice of students; working conditions; improved management, support and supervision; salaries and incentives.

Lastly the role and scope of practice of all categories of HW should be revisited with view to task shifting.

6.2 Limitations:

While the informants were drawn from different sectors and represent different interests, informants primarily, but not exclusively, are supportive of the comprehensive PHC approach as well as supportive of and experienced with 'non professional' categories of health workers. The study did not explore in depth the role the private sector could play, which could be considered a limitation as the government plans to outsource services within the NHI to accredited private providers.

While recognising that traditional healers play an important and continuing role in health care, in this proposal, this research only focussed on the formal or 'modern' sector.

REFERENCES:

African National Congress (ANC), 2007. ANC 52nd National Conference; 2007 Dec 16 - 20; Polokwane, South Africa. Available:

<http://www.anc.org.za/ancdocs/history/conf/conference52/resolutions.html> [22/02/2010, 3.36pm].

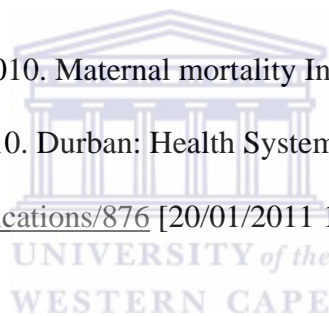
African National Congress (ANC), 2009. *National Health Insurance Policy Proposal*, 13 July 2009. Available: <http://www.health->

[e.org.za/documents/5b5e24462cdf6e214072c2e3f92ab1b9.pdf](http://www.health-e.org.za/documents/5b5e24462cdf6e214072c2e3f92ab1b9.pdf) [09/05/2010 9.35am]

Blaauw D and Penn-Kekana L, 2010. Maternal mortality In: Fonn S, Padarath A, editors.

South African Health Review, 2010. Durban: Health Systems Trust; 2010. 3 – 28.

URL: <http://www.hst.org.za/publications/876> [20/01/2011 11pm]



Bolton-Moore C, Mubiana-Mbewe M, Cantrell RA, Chintu N, Stringer EM, Chi BH, Sinkala M, Kankasa C, Wilson CM, Wilfert CM, Mwangi A, Levy J, Abrams EJ, Bulterys M, Stringer, JSA (2007). Clinical outcomes and CD4 cell response in children receiving antiretroviral therapy at primary health care facilities in Zambia. *Journal of the American Medical Association*, 298(16):1888–1899.

Broomberg J, 2009. Discovery – ‘Bring the NHI debate into the public domain’. 02.06.2009.

Available <http://www.health-e.org.za/news/article.php?uid=20032322> [21/04/2010 2.09pm]

Chilopora G, Pereira C, Kamwendo F, Chimbiri A, Malunga E, Bergstrom S, 2007.

Postoperative outcome of caesarean sections and other major emergency obstetric surgery by

clinical officers and medical officers in Malawi. *Human Resources for Health*, 14; 5:17. June 2007. Available: <http://www.human-resources-health.com/content/5/1/17> [09/05/09 07.35am]

Community Health Worker Policy Framework, 2004. Final draft, 19 February 2004.

Coovadia H, Jewkes R, Barron P, Sanders D, McIntyre D, 2009. The health and health system of South Africa: historical roots of current public health challenges. *The Lancet*. Volume 374, Issue 9692. 817 – 834, 5 September 2009. Available: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)60951-X/fulltext?_eventId=login#bib91](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)60951-X/fulltext?_eventId=login#bib91). [30/09/09 4.15pm]

Couper I, de Villiers M, Sondzaba N, 2005. Human resources: district hospital. In Ijumba P, Barron P (editors). *South African Health Review*, 2005. Durban: Health Systems Trust; 2005. 118 – 133.

Day C and Gray A, 2008. Ch 16 - Health and Related Indicators. In P Barron and J Romareardon (eds), *South African Health Review 2008*. Durban: Health Systems Trust; 2008. 239-396.

Daviaud E and Chopra M, 2008. How much is not enough? Human resources requirements for primary health care: a case study from South Africa. *Bulletin World Health Organ*. 2008 Jan;86(1):46-51. Available: <http://www.who.int/bulletin/volumes/86/1/07-042283.pdf> [08/05/09, 09.30am]

Department of Health (DoH), 2001. *A comprehensive service package for Primary Health Care*. Available. <http://www.capegateway.gov.za/eng/pubs/policies/C/3183> [07/05/09, 08.30am]

Department of Health (DoH), 2006. *A National HR Plan for Health to provide skilled human resources for healthcare adequate to take care of all South Africans*. Final draft. Pretoria.

Department of Health; 2006. Available: <http://www.doh.gov.za/docs/discuss-f.html> [07/05/09, 09.40am]

Department of Health (DoH), 2009. *Establishment of the National Health Insurance Advisory Committee. National Health Act, 2003 (Act No 61 of 2003)*. Government Gazette No903, No32564. 11 Sept, 2009. Pretoria. Government Printer. Available:

<http://www.greengazette.co.za/docs/2009/09/Gazettes/National/20090911%20-%20National%20Gazette%20No%2032564%20of%2011-Sep-2009,%20Volume%20531.pdf>

[14/03/2010, 3.47pm]

De Vries E and Reid S, 2003. *Do South African rural origin medical students return to rural practice?* School of Public Health, UCT and Nelson R Mandela School of Medicine.

University of Natal, supported by a grant from Health Systems Trust.

Friedman I, 2002. Community Based Health Workers. In Ijumba P (ed). *South African Health Review*, 2002. Durban: Health Systems Trust; 2002. 161-180.

Friedman I, 2005. CHWs and community caregivers – towards a unified model of practice. Community Based Health Workers. In Ijumba P, Barron P (editors). *South African Health Review*, 2005. Durban: Health Systems Trust; 2005. 176-189.

Global Health Workforce Alliance (GHWA), World Health Organisation, 2008. *The Kampala Declaration and Agenda for Global Action – Health workers for all and all for health workers*. World Health Organisation, Geneva.

Global Health Workforce Alliance (GHWA), World Health Organization (undated). *Country case study: Ethiopia's Human Resources for Health Programme*. World Health Organisation, Geneva.

Haines A, Sanders D, Lehmann U, Rowe AK, Lawn J, Jan S, Walker DG, Bhutta Z. “Achieving child survival goals: potential contribution of community health workers”, *Lancet*, 2007, Vol. 369, pages 2121-2131

Heywood M, 2009. *NHI – A step in the health direction*. Amandla! Issue No. 9, September 2009.

Hogberg D, 2007. Sweden's *Single-Payer Health System Provides a Warning to Other Nations*. The National Centre for public policy research. Available:

http://www.nationalcenter.org/NPA555_Sweden_Health_Care.html [10/05/09 5.20pm]

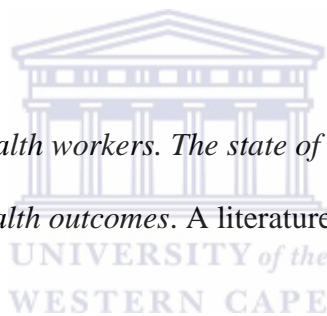
Hugo J, 2005. Mid level health workers in South Africa – not an easy option. In Ijumba P, Barron P (editors). *South African Health Review*, 2005. Durban: Health Systems Trust; 2005. 149-159

Kadzandira J, Chilowa W, 2001. *MLW: The Role of Health Surveillance Assistants (HSAs) in the Delivery of Health Services and Immunization in Malawi*. Centre for Social Research, University of Malawi. Available http://www.unicef.org/evaldatabase/index_14066.html.

[19/04/2010]

Lehmann U, 2005. Building the skills base to implement the district health system. In Ijumba P, Barron P (editors). *South African Health Review*, 2005. Durban: Health Systems Trust; 2005. 136 – 145.

Lehmann U, 2008¹. *Mid-level health workers. The state of the evidence on programmes, activities, costs and impact on health outcomes*. A literature review. World Health Organisation; Geneva; July 2008.



Lehmann U, 2008². Ch 11, 2008. Strengthening Human Resources for Primary Health Care, in Barron P and Roma-Reardon J (eds), *South African Health Review*, 2008. Durban: Health Systems Trust; 2008. 163-177.

Lehmann U and Sanders D, 2007. *Community Health Workers: What do we know about them?* The state of evidence on programmes, activities, costs and impact on health outcomes of using community health workers. Geneva: World Health Organisation, 2007

Matjila MJ, Hoosen AA, Stoltz A, Cameron N, 2008. Ch 6. STI's, HIV and AIDS and TB: Progress and Challenges. in Barron P and Roma-Reardon J (eds), *South African Health Review*, 2008. Durban: Health Systems Trust; 2008.

McIntyre D, 2009. NHI could spell health for all. *Amandla!* Issue No 9. September 2009.

McKerrow N and Mulaudzi M, 2010. Child mortality in South Africa: Using existing data.

In: Fonn S, Padarath A, editors. *South African Health Review*, 2010. Durban: Health Systems Trust; 2010. 3 – 28. 59-72. URL: <http://www.hst.org.za/publications/876> [20/01/2011 10pm]

McIntyre D, Thiede M, Nkosi M, Mutyambizi V, Castillo-Riquelme M, Gilson L, Erasmus E, Goudge J, 2007. *A critical analysis of the current South African health system*. SHIELD Work Package 1 Report. Health Economics Unit, University of Cape Town; Centre for Health Policy, University of the Witwatersrand (Johannesburg), 2007. Available: <http://web.uct.ac.za/depts/heu/publications/SHIELD WP1 only report SA final.pdf> [21/03/2010 8:19pm].

Ministry of Health, Brazil, undated. *Family Health Strategy and Primary Health Care*.

Available: http://dtr2004.saude.gov.br/dab/docs/publicacoes/geral/family_health_strategy.pdf [11/05/09 6.15pm]

Ministry of Health (MoH), South Africa, 2009. *Statement on the appointment of a Ministerial Advisory Committee on the National Health Insurance*. 5 November 2009. Available:

<http://www.doh.gov.za/mediaroom/index.html> [14/03/2010, 4.22pm]

Moodley Jennifer, 2000. CHW programs in South Africa: A contextual framework

Mooney GH and McIntyre D, 2008. South Africa: a 21st century apartheid in health and health care? *Medical Journal of Australia* 2008; 189 (11/12): 637-640. Available: http://www.mja.com.au/public/issues/189_11_011208/moo11135_fm.html [22/03/2010, 3.26pm]

Mooney G, 2009. *SA healthcare in desperate need of reform – health economist* (09/06/2009). Available <http://www.health-e.org.za/news/article.php?uid=20032330> [21/04/2010, 1.30pm]

Motsoaledi Dr A, 2009¹. *Debate on the President's State of the Nation Address Dr Aaron Motsoaledi MP*. 5 June, 2009. Available <http://www.doh.gov.za/mediaroom/index.html> [19/04/2010, 9.15am]



Motsoaledi Dr A, 2009². *Budget Speech of Honourable Dr. A. Motsoaledi, MP, Minister of Health, Delivered To The National Assembly, Parliament Of The Republic Of South Africa*. 30 June 2009. Available <http://www.doh.gov.za/mediaroom/index.html> [19/04/2010, 9.35am]

Motsoaledi Dr A, 2010 – Minister of Health, National Assembly. *Debate on the Health Budget Vote*, 13 April, 2010. Available: <http://www.health-e.org.za/documents/5fa768bf3f67209cdb15171b42b055c7.pdf> [5/04/2010, 9.25pm]

Negusse H, McAuliffe E, MacLachlan M, 2007. Initial community perspectives on the Health Service Extension Programme in Welkait, *Ethiopia. Hum Resources Health.* 2007; 5: 21.

Available <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2000465/> [22/04/2010]

Nkosi PH, Horwood CM, Vermaak K, Cosser C, Haskins JL, 2009. The role of doctors in provision of support for primary health care clinics in KwaZulu-Natal, South Africa. *SA Family Practice* 2009. Vol 51 No5. Available:

SA Family Practice 2009. Vol 51 No5. Available:

<http://www.safpj.co.za/index.php/safpj/article/view/1285/1644> [24/04/10 10.36pm]

Pereira C, Cumbi A, Malalane R, Vaz F, McCord C, Bacci A, Bergström S, 2007. Meeting the need for emergency obstetric care in Mozambique: work performance and histories of medical doctors and assistant medical officers trained for surgery. *Bjog*, 114(12):1530–1533

Rohde J, Cousens S, Chopra, Tangcharoensathien V, Black R, Bhutta Z, Lawn JE, 2008.

Alma-Ata: Rebirth and Revision 4. 30 years after Alma-Ata: has primary health care worked in countries? *Lancet* 2008; 372: 950–61

Ross A and Reid S, 2009. The retention of community service officers for an additional year at district hospitals in KwaZulu-Natal and the Eastern Cape and Limpopo provinces. *SA Family Practice* 2009. Vol 51 No3. Available:

SA Family Practice 2009. Vol 51 No3. Available:

<http://www.safpj.co.za/index.php/safpj/article/view/1154> [24/04/10 10.15pm]

RUDASA position paper, 2001. “*Crisis in staffing of rural hospitals*”. January, 2001.

Available: <http://www.rudasa.org.za/papers.php> [24/04/2010; 11.25pm]

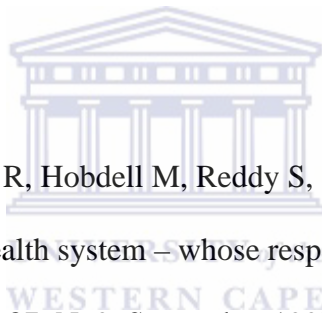
RuDASA position paper, 2009. *A proposal to improve selection and training of health care workers for rural areas*. Conference resolution. RuDASA students. 29 August 2009.

Available <http://www.rudasa.org.za/papers.php> [21/04/2010, 12.01pm]

Sanders D, undated. What Mix of Health personnel should the countries be striving for?

Paper presented at the Maputo Seminar on “Health Manpower Policies in Southern Africa – the Contribution of Research (Perspectives in a Changing Environment)

Sanders D and Lloyd B, 2005. Human Resources: International Context in Ijumbo P and Barron P (eds), *South African Health Review*, 2005. Durban: Health Systems Trust; 2005. 76-87.



Shear M, Sanders D, van Niekerk R, Hobdell M, Reddy S, 1997. Education of Health Professionals for a restructured health system – whose responsibility should it be? *South African Medical Journal*, Volume 87, No9, September 1997

Solidarity Research Institute (SRI), 2009. *Nurse Shortage in South Africa: Nurse/Patient ratios*. Available http://us-cdn.creamermedia.co.za/assets/articles/attachments/21373_solidarity.pdf [11/06/09 11.30am]

Shisana O, Hall E, Maluleke KR, Stoker DJ, Schwabe C, Colvin M, Chauveau J, Botha C, Gumede T, Fomundam H, Shaikh N, Rehle T, Udjo E, Grisselquist D, 2003. *The impact of HIV/AIDS on the health sector*, National Survey of Health Personnel, ambulatory and hospitalised patients and health facilities, 2002, HSRC, MEDUNSA, MRC. Available : <http://www.hsrcpublishers.ac.za> [23/06/09 1.30pm]

Steinlechner C, Tindall A, Lavy C, Mkandawire N, Chimangeni S, 2006. A national survey of surgical activity in hospitals in Malawi. *Tropical Doctor*, 36(3):158–160.

Subedar H, 2005. The nursing profession. In Ijumba P, Barron P (editors). *South African Health Review*, 2005. Durban: Health Systems Trust; 2005. 88 – 101.

Sweden.se. Sweden's official website: run by The Swedish Institute, the Swedish Government Offices (including the Foreign Ministry and the Ministry of Enterprise, Energy and Communications), the Invest in Sweden Agency, the Swedish Trade Council and Visit Sweden. Available: <http://www.sweden.se/eng/Home/Society/Health-care/Facts/Health-care-in-Sweden/> [20/04/2010;7.45pm]

Thetard R and Macheso A, 2004. "Midlevel workers in other countries" in *Rural Health Issues*, 2004. Produced by the South African Academy of Family Practice's Rural Health Initiative (RHI).

UNAIDS, 2008. Joint UN programme on HIV/AIDS. *Report on the global epidemiology of HIV/AIDS epidemic*. Geneva: UNAIDS; 2008. Available: <http://www.unaids.org> [11/05/09, 3.15pm]

Van Den Heever A, 2009. *NHI – What's wrong with this debate*. 09.06.2009. Available <http://www.health-e.org.za/news/article.php?uid=20032331> [21/04/2010 2.02pm]

van Ginneken Nadja, Lewin Simon, Berridge Virginia, 2010. The emergence of community health worker programmes in the late apartheid era in South Africa: An historical analysis. *Social Science and Medicine* 71(2010) 1110-1118.

Van Niekerk JP de V, 2010. National Health Insurance Exposed, *South African Medical Journal*, Jan 2010, Vol 100, No. 1 SAMJ. Available: samj.org.za/index.php/samj/article/view/3943/2660 [14/03/2010, 5.57pm]

Waters M, 2009. *Doctors and Nurses vacancy rate increases*. DA Press release. 15 December 2009

WHO Bulletin, 2004. *Flawed but fair: Brazil's health system reaches out to the poor*. April 86 (4). Available: <http://www.who.int/bulletin/volumes/86/4/08-030408.pdf> [15/05/09, 5.20pm]



Wolvaardt G, 2008. Ch 15. The Role of Private and other Non-Governmental Organisations in Primary Health Care in Barron P and Roma-Reardon J (eds), *South African Health Review*, 2008. Durban: Health Systems Trust; 2008. 223 – 236

World Health Organisation (WHO), 2007. *Task shifting – Global recommendations and guidelines*. Geneva: World Health Organisation; 2007. Available http://data.unaids.org/pub/Manual/2007/ttr_taskshifting_en.pdf [22/04/10 11.10am]

World Health Report (WHR) 2006. World Health Organisation. The World Health Report 2006: *Working together for health*. Geneva: World Health Organisation; 2006. Available: <http://www.who.int/> [10/05/09 3.50pm]

World Health Report (WHR) 2008. World Health Organisation. *Primary Health Care, Now more than ever*. Geneva: World Health Organisation; 2008. Available <http://www.who.int/> [11/10/2009, 9.15pm]



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Appendix 1: Skills mix required

Community Level

Using a rough estimate based on the Brazilian model (approximately 6 CHWs per 5,000 – 10,000 people). The number of CHWs would relate to the catchment size of the clinic which employs them.

Primary level:

Clinic

A clinic serving approximately 10,000 people should have at least the following:

- A doctor visit on a regular and dependable basis e.g. the doctor may be employed by the District Hospital and required to support the clinic on a weekly basis;
- A team of nurses: clinical nurse practitioner, professional nurses and enrolled nurses (EN) and enrolled nursing assistants (ENA). The number would range from 4 to 8 depending on the catchment size and workload.
- CHWs: minimum of 6, however number would vary according to the catchment size and whether rural or urban.
- MLWs: Pharmacist assistant and possibly CRWs; nutrition assistant; health promotion; mental health worker, etc. There would need to be at least one Environmental Health Officer and several environmental health assistants within each sub district.

Community Health Centre:

It is proposed that a CHC supporting 6 clinics or approximately 60,000 people, should have at least the following staff mix:

- 1 doctor (access to a doctor on a regular and dependable basis; the doctor may be required to support the clinic on a weekly basis); and a team of nurses: clinical nurse practitioner, professional nurses, EN and ENA.
- Dentist
- Pharmacist or Pharmacist assistant
- Other mid level workers such as Lay counsellor; CRWs; nutrition assistant; health promotion, etc

Within staff available, there should be skills in midwifery, community health nursing, paediatrics, psychiatric nursing, health promotion; possibly a lab technician, depending on catchment size, and proximity to closest referral district hospital.

District Hospital (supports approx 5 CHCs / 300,000 – 400,000 people):

Staffing requirements:

- 6 Doctors trained in Family Medicine or as generalists with skills in medicine, surgery, paediatrics, obstetrics, and gynaecology, psychiatry, orthopaedics, and anaesthetics as well as basic medico legal work. This caters for leave and outreach work of doctors. The number could be decreased if clinical associates and/or clinical nurse practitioners were employed at the facility e.g. 4 doctors with generalist skills and 2 clinical associates.
- Doctors in team share hospital clinical duties and also supervise priority programmes and projects in the district and provide support to the CHCs and peripheral clinics; M&E responsibilities.
- Continuity of relations. 1 or 2 doctors to take responsibility for an area/clinic. Same doctor to visit same clinic on a regular basis, allowing for leave periods.
- A district health officer with qualifications in public health;
- A team of Professional, enrolled and assistant nurses
- A team of mid level workers supporting the work of health professionals such as social workers, physiotherapists, Occupational therapists, dieticians, psychologists, etc. Ideally, every District Hospital should have at least one professional in each of these areas of 'allied' health work.

Skills requirements:

- A comprehensive range of clinical skills;
- Public health skills
- Doctors trained in Family Medicine with practical skills in medicine, surgery, paediatrics, obstetrics, and gynaecology, psychiatry, orthopaedics, and anaesthetics as well as basic medico legal work.
- Monitoring and evaluation.
- Supervisory skills

Appendix 2: Regional model for paediatrics

Regional Model for paediatrics:

Community:

- CHWs working at home level, focussing on health promotion, prevention and a small amount of curative, facilitating further access through referral to facilities.
- CHWs should be supported by community based health professionals.
- Dedicated maternal and child health workers, with appropriate focus.
- Outside the health institutions, comprehensively trained CHWs, that would facilitate the community access to the health services.

Primary level:

Serves 10,000 people

- Professional nurses with maternal and child health skills within the staff complement.
- Appropriate skills mix and training e.g. IMCI, EPI, ante natal.
- Immunisation and growth monitoring to be done by Enrolled nurses.
- Community IMCI nurses
- 2/3rds in PHC setting need above skills, to make sure that there is always someone available.

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Community Health Centre's:

1 CHC to support 6 PHC clinics (60,000 people).

- Relationship with PHC clinic needs to be recognised and extended.
- Deliveries and neonatal resuscitation will be done therefore requires professional nurses with midwifery supported by staff and enrolled nurses.
- HIV services, will need Lay Counsellors;
- Other non medical appropriate support – social workers; rehabilitation worker; dietician; CHWs to be working at household level. Need to go to where child lives and adapt treatment accordingly.
- Allocate staff specifically for children – they should not be mixed with adults. CHC needs dedicated areas for children, and a children's outpatient facility.
- Needs a medical practitioner and a professional nurse, with access to supplementary health services and administration.

District Hospital:

Serves between 300,000 to 400,000 people or 5 CHC's.

- Core clinical staff – medical practitioner. If using clinical associates, requires a different ratio with children e.g. 2 doctors to 1 clinical associate. Clinical associate to only do basic triage type procedures.
- Counselling services – lay counsellors needed, not psychologists. Counselling work is generally basic such as debriefing, education & screening. If they identify problems, they would refer to psychologist or social worker as required.
- Admin support – clinic orderlies and ward clerks to take away the non health work.
- Stimulation of children – play lady.
- Where children are hospitalised, there should be accommodation for lodger mothers. Lodger mothers should have access to 50% of beds available for children e.g. 50 children beds = 25 beds for lodger mothers. There should be housekeeper support for lodger mothers.
- In outpatient and children's wards – people with paediatric skills; IMCI (out patient); 1 sister with advanced paediatrics and a cores staff that is non-rotating. Half of the staff to be paediatric.
- Advanced midwifery.
- Medical officer (non-rotating) with Diploma in Child Health and responsible for managing child health in District Hospital.

Regional hospital

Serves 1.2 – 1.5 million people and covers 4/5 District Hospitals:

- Same as District hospital + nurse educator to support outpatient clinic.
- Nursery – lactation facilitator; phlebotomist; clinic orderly;
- Advanced neonatal experience
- Counsellors; speech; audio; physiotherapist.
- A psychologist to oversee stimulation of children (educational Psychologist).
Supplementary assessment of handicapped and school readiness. Ensure the correct nature and quality of stimulation to pre school kids.

Tertiary:

3.6 to 4 million people / 3 regional hospitals

- ICU; advanced midwifery; neonatal experience.
- All lab support; cardiac ultrasound; neurophysiology, etc.
- Need a psychologist to oversee stimulation of children (educational psychologist). Supplementary assessment of handicapped and school readiness. Ensure the correct nature and quality of stimulation to pre school kids.
- Specific Paediatric MO's:

Regional positions:

6 Specialists including neonatologist; paediatric intensivist; regional paediatrician; 3 generalist paediatricians. These would be responsible for the whole catchment population (1.2 – 1.5 million).

- The regional paediatrician would be responsible for community health centre services in whole population; surveillance; health services; movement of patients; continuum of care.
- Neonatologist would be responsible for all the newborns in the catchment area and overall neonatal services in whole catchment area.
- Intensivist – would be responsible for paediatric ICU in the catchment area; overseeing emergency and critical care at each hospital; overseeing high care at District Hospitals and level 1 ICU at the Regional hospitals.; ICU Level 2 at tertiary hospitals; quaternary hospital neonatal surgery.
- The 3 generalist paediatricians would be responsible for running paediatric services in the facilities and supporting paediatrics in referring District hospitals. Each generalist would be responsible for 4/5 hospitals (approx 75 000 people).

Academic tertiary hospitals need more and a wider scope of specialists. E.g. you need 2/3 neonatologists for training purposes and accreditation; this is the same for critical care. These specialists could also play a role in supporting institutions in the catchment area (3 regional hospitals).

At satellite sites of university (e.g. PMB, EC) – 2 tier tertiary hospital. Major academic has to have all the sub specialities (oncology; pulmonary, GI, etc). Non academic tertiary would need cardio, neurology, haematology, infectious diseases.

For services to be sustainable, there is a need to have specialists in each facility (to cover attrition, training periods, leave, etc).

Appendix 3:

Proposed career progression for nutrition advisor:

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

As an example of skills upgrading and how career progression could be planned with existing workers, a model is proposed using nutrition as an example.

- Assess current skills and training requirements of nutrition advisers.
- Recognition of prior learning and additional training by recognised training institutions to bring the workers up to NQF level 4 (according to needs).
- Thereafter career progression to NQF level 5 which is the level of a nutritionist.



Developed using information from key informant

Appendix 4: Question guidelines for interviews

The researcher will give each person interviewed an overview of the research and why it is being done. All informants will be asked section A, and some with experience broadly in human resources or public health will be asked the full set of questions.

A. Question guidelines for all informants:

Taking into account the current skills mix, the skills requirement, burden of disease and caseloads; and thinking ahead to look at future needs and implementation of a NHI:

- In your opinion, what categories of health workers are needed (at community, primary, secondary, and tertiary) to provide an optimum minimal skills mix? Expand on this.
- What is your opinion about introducing other categories such as mid level workers (MLW's)? In what areas e.g. primary clinical care, pharmacy, occupational therapy, etc?
- In your opinion, can CHW's play a role, and how?
- Are you aware of any examples of 'ideal skills mix', either within SA, the region or internationally? Expand and refer to any research or documents that you are aware of.

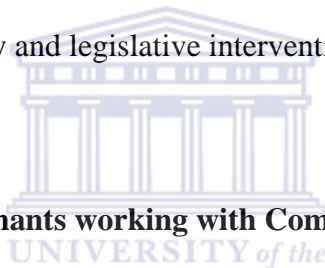
B. Question guidelines for informants with experience / skills with Community Health

Workers (CHW's) and Mid Level Worker's (MLW's):

- i. Explore accelerated production (training) of community health workers (CHW's) and key MLW's:
- ii. Suggestions for ratios and total numbers required; multi- or single-purpose, standardisation of training, support, conditions of service etc

CHW's:

- In your opinion, should employment, management and supervision of CHW's / MLW's be by NGO's or government? Expand.
- How can working relationship/continuity of care between CHW projects and public facilities be improved?
- Who should be doing the supervision (nurse, mid level worker, etc)? Expand
- Should CHW's be generalists, single issue, or 'specialist' CHW's? Is there scope for both generalists and specialists?
- Who should do the training of CHW's? Where is it currently done?
- What should a career pathway be for CHW's? And MLW's?
- Can you suggest key advocacy and legislative interventions needed?



C. Question guideline for informants working with Community Liaison Officers (CLO's) and Specialised auxiliary service officers (SASO's):

- What programme areas do CLO's / SASO's and/or EHO's currently work in (e.g. nutrition, environmental health, etc)
- What existing training is carried out for these categories of health workers? Is it standardised? NQF level? Are there any refresher courses available for existing workers?
- Is there capacity to rapidly increase training of these categories of workers/expand numbers? And what would be needed (infrastructure, resources)?
- Is there standardised salaries and role expectations? Who supervises and supports?
- Could these categories of workers assist with expanding availability of health services with implementation of a NHI? What training would be needed for this?
- What career pathways are there, and could these be improved?

- Can you suggest key advocacy and legislative interventions needed?

D. Interview guidelines for health professionals, health science faculty staff, public health professionals and academics involved in training, research and / or rural health needs:

Explore accelerated production and re-training/reorientation in service of existing personnel, especially nurses and doctors.

Given the shortfall of health professionals in the country, and the planned implementation of a NHI:

- Do medical universities have the capacity to increase the production of health professionals? And if so, by how much?
- What infrastructure and resources would be required to improve capacity?
- Is there any screening to choose students that are more likely to work in rural areas once qualified?
- What is your opinion of the foreign doctor programme (e.g. Cuban doctors) and does it assist in easing the shortfall of health professionals?
- Are there any programmes for retraining/reorientation of health professionals?
- What training/re-orientation is required to better equip health workers to work in rural/under resourced areas?
- Would universities have the capacity, or are there other training programmes/institutions?
- What training is offered for mid level workers or clinical nurse practitioners?
- Incentives and government contracts with Health science faculties / Schools of Public health? What do the contracts involve? Are there agreements about numbers of students to be trained?

- What re orientation, training and mentoring is needed for HR in priority areas (e.g. PHC, clinical and managerial)?
- What can be done to ensure redistribution of medical specialists (creation of posts in underserviced areas; contracting services of selected private sector specialists)
- Can you suggest key advocacy and legislative interventions needed?





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Private Bag X17 • **BELLVILLE** • 7535 • South Africa
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Dear Participant

Research on human resource needs for implementation of a national health insurance scheme:

In follow up to the telephonic and/or email contact, I would like to provide you with further information on the research, as well as further information on your potential involvement. I would like to use information from the interviews for my mini thesis, which is a requirement of the Masters in Public Health I am doing at the University of the Western Cape.

The title of the research is “*Human Resource needs for Implementation of a National Health Insurance scheme in South Africa*”.

The research aims to identify the human resource requirements to support the effective and equitable implementation of a National Health Insurance (NHI) in South Africa. I will be approaching participants from government, civil society and academia. It is anticipated that your participation will lead to greater understanding of current problems with human resources as well as lead towards an improved human resource model and skills mix relevant for the South African context. Given the shortfalls in health professionals, it is hoped that the recommendations from the research would influence the skills mix and structuring of Human Resources for Health, within a NHI funded health scheme.

The research is qualitative and done through individual interviews, conducted telephonically or where possible face to face. Research recommendations will be supported by literature and other research. There are a set of questions on skills mix, asked of all participants. The remainder questions are specific to your area of interest or expertise. You may abstain from answering questions should you feel they are not within your expertise or you do not feel comfortable responding to. The mini thesis will be submitted by the end of May 2010.

Your name will remain confidential at all times. The broad skills / area of work of participants will be included in the final research as an appendix. All records of interviews will be kept securely locked away for the duration of the research, and will be destroyed on completion of the research. It is not expected that there would be any adverse consequences

or harm from participating in the research. However should you feel concerned, you would be free to withdraw.

The decision to participate in this research is entirely voluntary. Should you choose to participate, you will be asked to sign a consent form, but will still be free to withdraw at any stage. Should interviews already have been conducted, all records will be destroyed as soon as I receive notice of your wish to withdraw. There will be no adverse consequences should you choose not to participate, or choose to withdraw. You may also choose not to respond to any questions asked.

There is no cost to participate in the research, other than the time taken to conduct interviews, approximately one hour. There is also no direct benefit in participating, although it is hoped that the research may assist in improving the human resource model in a nationally funded health insurance scheme.

Should you agree to information from the interview being used, I will need you to sign and return the attached consent form.

If there is anything that is unclear or you do not understand, please feel free to contact me, and/or my supervisor. I have included contact details below.

Bridget Lloyd
Student number: 2438569
Email: bridgetl@mweb.co.za
Cell: 083 3833511
Tel: 021 4475464 (h) / 021 4473037 (w)
Fax: 0866707216



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INFORMED CONSENT TO CONDUCT AN INTERVIEW

Interviewer: Bridget Lloyd
UWC Student no: 2438569
Tel: 021 4475464/083 3833511
Fax: 0866707216
E-mail: bridgetl@mweb.co.za
Institution: University of the Western Cape

Thank you for agreeing to allow me to interview you. What follows is an explanation of the purpose and process of the interview. You are asked to give your written consent to me prior to my conducting the interview.

1. Information about the interviewer

I am Bridget Lloyd, a student at the SOPH, University of the Western Cape. As part of my Masters in Public Health, I am required to submit a mini thesis. I will be focusing on the Human Resource Requirements for implementation of a National Health Insurance scheme in South Africa. My supervisor is Prof David Sanders who is contactable at 021 959 2132 or c/o SOPH Fax: 021 959 2872 or by e-mail at dsanders@uwc.ac.za.

Below is some information to explain the purpose and usage of my interview.

2. Purpose and contents of interview

The research aims to identify the human resource requirements to support the effective and equitable implementation of a National Health Insurance (NHI) scheme in South Africa. I have approached participants from government, civil society and academia. It is anticipated that your participation will lead to greater understanding of current problems with human resources as well as leading to an improved human resource model and skills mix relevant for the South African context. Given the shortfalls in health professionals, it is hoped that the recommendations from the research would influence the skills mix and structuring of Human Resources for Health, within a NHI funded health scheme.

3. The interview process

The research is qualitative and done through individual interviews, conducted telephonically or where possible face to face. Research recommendations will be supported by literature and other research. There are a set of questions on skills mix, asked of all participants. Remainder questions will be specific to your area of interest or expertise. You may abstain from answering questions should you feel they are not within your expertise or you do not feel comfortable responding to. A record of the interview will be kept securely for the duration of the research and will be destroyed on completion of the research.

4. Anonymity of contributors

At all times, I will keep the source of the information strictly confidential and refer to you or your words as those of a key informant. All other records of your participation will be locked away at all times, and destroyed after the research is completed.

5. Things that may affect your willingness to participate

It is not expected that use of information from the interview would have any negative consequences. However, if there is anything that you would prefer not to be included or discuss, please feel free to say so. I will not be offended and there will be no negative consequences.

6. Agreement

6.1 Interviewee's agreement

You will be required to sign your consent below, authorising that I may use information from the interview for my mini thesis.

6.2 Interviewer's agreement

I shall keep the contents of the above research interview confidential in the sense that you will not be identified by name, and will be listed as “key informant” in all documents which refer to the interview. The contents will be used for the purposes referred to above, but may be used for published or unpublished research at a later stage without further consent. Any change from this agreement will be renegotiated with you.

I have read the information from the participation information sheet, and above. I have had the opportunity to ask questions, which have been answered to my satisfaction.

I have consented to participate in the interview voluntarily, and am aware that I can withdraw at any time, and can abstain from answering any questions.

Signed by interviewer:

Signed by participant:

Date:

Place: