Chapter 10

PROMOTING HEALTH

"Health policy was once thought to be about little more than providing and funding medical care – only academics discussed the social determinants of health[1]. This is changing. While medical care can prolong survival and improve prognosis, the social and economic conditions that make people ill are critically important for the health of the population. Universal access to medical care is clearly one of the social determinants of health."[2]

Introduction

There are three major perspectives to be considered in assessing the South African national health system and offering recommendations to promote health and prevent and manage problems.

- Demographics and health – trends in demography, vital statistics and the burden of disease-specific morbidity and mortality.
- Health systems – issues such as health finance, workforce, infrastructure, information, technology and governance. This provides insight into the capacity of the health system to respond to challenges presented in the first perspective.
- The environmental/social determinant perspective, which involves the social and ecological determinants of health, including climate change and global trends.

Underpinning the national health system philosophy are two interlinked ideas: the equalising principles of primary health care and the decentralised, area-based, people-centred approach of the district health system. Primary health care emphasises globally endorsed but widely neglected values, such as universal access, equity, participation and an integrated approach. It emphasises the importance of prevention and using appropriate technology.

Primary health care principles continue to be important considerations for health policy-makers. South Africa has a long history of commitment to primary health care. The first

[1] The social determinants of health are the conditions in which people are born, grow, live, work and age, including the health system.
[2] Wilkinson RG and Marmot M (eds) (2003). *Social Determinants of Health: Solid Facts*. Geneva: World Health Organisation. Second Edition.

attempts to establish a community-oriented primary care approach, based on a network of decentralised health centres, dates back to the 1940s. Although these efforts were never fully realised because of apartheid policies, the importance was recognised in the African National Congress (ANC) National Health Plan of 1994. The key components of primary care include enhanced access to and use of first-contact care, a patient-focused (rather than disease-focused) approach, a long-term perspective, comprehensive and timely services, and home-based care when necessary.

According to the World Health Organisation, the six elements of the district health system include: service delivery, health workforce, health information, medical products, vaccines and technologies, sound health financing, and good leadership and governance. These elements aim to achieve better health outcomes in terms of equity and quality, responsiveness, social cohesion, financial risk protection and improved efficiency.

Attention throughout this chapter has been paid to measures which prevent ill health and death. In particular we focus on identifying the social determinants of disease as a critical prevention strategy.

Health promotion and wellness are also critical to the prevention and management of lifestyle diseases, in particular the major non-communicable diseases among the poor. These diseases are likely to be a major threat over the next 20-30 years and require careful attention.

The monitoring and prevention in the public health services of other common diseases such as breast and cervix cancers in women, and prostate and lung cancers in men, require more consideration by the state.

Government, aware of the deficiencies in many sectors, has recommitted itself to transformation. Government has adopted an ambitious outcomes-based strategy that seeks to improve the effectiveness in relaton to key national objectives. The formal i expression of this is in a national charter: The Negotiated Service Delivery Agreement, which reflects the commitment of key sectoral and intersectoral partners involved in the delivery of identified outputs to achieve a long and healthy life for all South Africans.

As part of this commitment, the national Department of Health's strategic plan for 2009 to 2014 adopted a "10 point plan" to improve the performance of the national health system. The department has identified four strategic outcomes for the health sector: increase life expectancy, decrease maternal and child mortality, combat HIV/AIDS and decrease the burden of disease from tuberculosis.

This chapter outlines the vision for health in 2030 and a set of quantifiable targets to be achieved. The vision is rooted in our analysis of the current challenges and proposed actions to overcome these.

Vision for health 2030

We envisage that in 2030, South Africa has a life expectancy rate of at least 70 years for men and women. The generation of under-20s is largely free of HIV. The quadruple burden of disease[3] has been radically reduced compared to the two previous decades, with an infant mortality rate of less than 20 deaths per thousand live births and an under-five mortality rate of less than 30 per thousand. There has been a significant shift in equity, efficiency, effectiveness and quality of health care provision. Universal coverage is available. The risks posed by the social determinants of disease and adverse ecological factors have been reduced significantly.

This vision will only be achievable if the major problems that currently exist in the three perspectives are addressed effectively.

Targets for 2030

Average male and female life expectancy at birth increased to 70 years as a consequence of progressive improvement in evidence-based preventive and therapeutic interventions for HIV

The achievement of this target requires the following:

- All HIV-positive individuals on ARVs
- Consistent condom use
- Effective microbicide routinely available to all women 15 years and older
- Universal availability to pre-exposure prophylaxis with ARVs.

As a result, mother-to-child HIV transmission rates should drop below 2 percent nationally, and new HIV infections reduced more than four times among young women aged between 15 and 24 years in the period leading to 2030. To monitor progress, health authorities should set mid-term targets towards the 2030 objectives.

Progressively improve tuberculosis prevention and cure

Progress should be monitored by tracking the following indicators:

- Tuberculosis rates among adults and children compared with global targets for sputum conversion
- Successful treatment completion
- Progressive decline in latent infection rate among school-age children
- Tuberculosis contact indices decrease
- Number of latently infected people receiving six months isoniazid treatment – first-line antituberculosis medication in prevention and treatment.

[3] Refers to four disorders that contribute mostly to morbidity and mortality in South Africa namely, HIV/AIDS, Tuberculosis and sexually transmitted dise ases maternal and child mortality, non-communicable diseases, and violence, injuries and trauma.

Reduce maternal and child mortality

- Reduce maternal mortality from 500 to less than 100 per 100 000 live births
- Reduce infant mortality from 43 to below 20 per 1 000 live births
- Reduce under-five child mortality from 104 to below 30 per 1 000 live births.

Reduce prevalence of non-communicable chronic diseases by 28 percent

- Cardiovascular diseases
- Diabetes
- Cancer
- Chronic respiratory diseases.

Risk factors linked to these non-communicable diseases include tobacco smoking, physical inactivity, raised blood pressure, raised blood glucose, obesity, and raised cholesterol.

Reduce injury, accidents and violence by 50 percent from 2010 levels

- Motor vehicle accidents
- Violent crimes
- Inter-personal violence
- Substance abuse.

Factors to monitor and control include roadworthiness of vehicles, driver behaviour, alcohol and substance abuse, gender based violence, access to firearms and weaknesses in law enforcement.

Complete health systems reforms

- There is a a revitalised and integrated health system
- Evidence-based public and private health delivery system
- Clear separation of policy making from oversight and operations
- Authority is decentralised and administration devolved to lowest levels
- Clinical processes are rationalised and there is systematic use of data incorporating community health, prevention and environmental concerns
- Infrastructure backlogs addressed including greater use of ICT.

Primary health care teams provide care to families and communities

- Primary health care teams are established throughout the country with requisite complement of doctors, specialists, physicians and nurses
- Each household has access to a well-trained community health worker
- Schools receive health education provided by teachers and primary health care teams

- Primary health care teams have adequate resources for the services they need to deliver.

Universal health care coverage

- Everyone has access to an equal standard of care regardless of their income
- A common fund enables equitable access regardless of what people can afford to pay or how frequently they need to make use of health services.

Fill posts with skilled, committed and competent individuals

- Increase capacity to train health professionals
- Train more health professionals to meet the requirements of the re-invigorated primary health care system
- Link training of health professionals to future diseases, especially different categories of non-communicable diseases
- Follow the lead of the Municipal Systems Act 2000 (as amended) and set procedures and competency criteria for appointments of hospital managers
- Set clear criteria for the removal of underperforming hospital managers.

The challenge

Challenges in the health system fall under three broad perspectives: demographics and health, health systems, and social determinants and ecology.

Demographics and health

The health challenges facing South Africa are well known. The country faces a quadruple burden of disease (HIV/AIDS and related diseases such as tuberculosis; sexually transmitted diseases; maternal and child morbidity and mortality; violence and injuries and many non-communicable diseases mainly related to lifestyle). In 2007, South Africa represented 0.7 percent of the world's population, but accounted for 17 percent (about 5.5 million people) of the global number of HIV infections. Life expectancy declined from 1994 to 2009, from about 54.12 years to 53.9 years for men and from 64.38 years to 57.2 years for women. South Africa is also one of very few countries in which maternal and under-five child mortality have increased since 1990.

In 2000, the leading causes of morbidity in terms of disability-adjusted life years[4] lost were: HIV/AIDS (31 percent), interpersonal violence (7 percent), tuberculosis (4 percent), road traffic injury (3 percent) and diarrhoeal diseases (2.9 percent). The leading risk factors were: unsafe sex (32 percent), interpersonal violence (8 percent),

[4] An index that measures the disease burden in terms of the number of years lost due to disease, disability and morbidity.

alcohol harm (7 percent), tobacco smoking (4 percent) and excess bodyweight (2.9 percent).

Trends in death notifications increased rapidly, doubling over a decade to 700 000 per year by 2008. This trend was most serious among infants and young women, trebling in the 0-4 and 30-34 age groups to nearly 60 000 per year over the same period, mostly due to HIV. It has also contributed to the mortality of men, particularly in the 35-39 age group. In young men, there was also a sustained increase in excess mortality due to injury. Communicable diseases such as tuberculosis escalated, imitating the HIV epidemic, with an up to six-fold increase of death rates among young women and four-fold increase in young men. There was also a similar rise in non-communicable disorders, such as cardiovascular disease, and predisposing factors such as obesity, hypercholesterolemia (abnormally high levels of blood cholesterol) and diabetes mellitus. As a result, it is likely that cardiovascular disease will become an increasing, if not the leading, cause of death by 2030.

Evidence points to a decline in unsafe sex, resulting largely from the increase in condom use among youth. Safe sex and the widespread adoption of antiretroviral treatment suggest that the increasing prevalence of HIV has begun to level off and may significantly decline by 2030. Interpersonal violence, however, is not showing signs of long-term decline. It is about twice the global average and particularly severe among women – the homicide rate of intimate partners is six times the global average. Road traffic accidents contributed to about a quarter of all injury-related deaths in 2000 and continue to rise. These risks are exacerbated by social determinants, such as widespread poverty, unemployment and income inequality; patriarchal notions of masculinity that emphasise toughness, risk-taking, and defence of honour; exposure to abuse in childhood and weak parenting; access to firearms; widespread alcohol misuse; and weaknesses in law enforcement.

There has been an encouraging decline in the prevalence of self-reported tobacco smoking by over 40 percent since 1995, which is expected to continue. However, diet-related non-communicable ailments such as obesity, diabetes and cardiovascular disease account for a large proportion of South Africa's disease burden and may rise further, especially among poorer African women. Studies have shown that dietary transition is linked to increases in non-communicable diseases as a result of increased intake of foods high in sugar, salt and trans-fats. There have been marked changes in diet among the majority black African population in South Africa, with a rapid transition from a "traditional" diet based predominantly on unrefined maize with vegetables and occasional animal protein, to a diet consisting largely of refined and processed foods with high concentrations of sugar and salt.

In South Africa, 25 percent of the country's health care spending is devoted to cardiovascular disease. The World Health Organisation estimates suggest that non-communicable diseases have caused 28 percent of South Africa's total disease burden. Although there are no reliable calculations of costs incurred by non-communicable

diseases in South Africa, comparative data from other middle-income countries suggest that total costs are very high, as are costs imposed on the health sector.

Childhood malnutrition is another major challenge affecting many children (see section on early childhood development in Chapter 9 dealing with improving education, training and innovation).

Health systems

The overall performance of the health system since 1994 has been poor, despite the development of good policy and relatively high spending as a proportion of GDP. Services are fragmented between the public and private sectors, which serve 83 percent (41.7 million) and 17 percent (8.3 million) of the population respectively. Imbalances in spending between the public and private sector have skewed the distribution of services, which has been detrimental to both sectors and has led to cost escalation. Evidence suggests multiple system failure across a range of programmes, including maternal and child health, HIV/AIDS, tuberculosis and others, with a devastating combined impact. At the heart of this failure is the inability to get primary health care and the district health system to function effectively.

The fundamental importance of full community participation and the role of civil society has been underplayed and the focus on “people first – Batho Pele” has diminished. The culture of valuing and respecting the expressed needs of communities has faded, replaced by a top-down approach. The health system is fractured, with pervasive disorder and multiple consequences: poor authority, feeble accountability, marginalisation of clinical processes and low staff morale. Centralised control has not worked because of a general lack of discipline, inappropriate functions, weak accountability, lack of adherence to policy, inadequate oversight, feeble institutional links between different levels of services (especially hospitals) and defensive health service levels increasingly protective of turf and budgets.

Good policies are frequently not implemented in remote health facilities and district facilities, partly due to weaknesses in the relationships between medical staff and their patients. The essential values of primary health care have either not been practised or given low priority. Many health professionals have become less concerned about carrying out their responsibilities and duties to their patients, their profession and society, than about personal benefits such as pay and working conditions. Resources have been inequitably distributed and crises and curative services are responded to rather than prevented.

To address these issues, in 2009 the Department of Health recommitted itself to a revitalised primary health care approach based on a reinvigorated district health system.

A comprehensive health service requires that primary and district health systems are linked to regional and central hospitals. Given that the core business of the health sector

is clinical services that are both preventative and curative, it is important to provide the necessary environment for this to take place. This means the bureaucratic process needs to support the clinical process, and not operate at the expense of the clinical process as it does at the moment. The integrated management team should ideally be led by a practising clinician, particularly at the level of health care delivery. Critical to this management model is decentralisation of authority with enhanced budgetary control.

Social determinants and ecology

The weaknesses in South Africa's health systems are exacerbated by the burden imposed by multiple epidemics of communicable and non-communicable diseases. Health and health services have been shaped by powerful historical and social forces, such as vast income inequalities, poverty, unemployment, racial and gender discrimination, the migrant labour system, the destruction of family life and extreme violence. Progressive policies were formulated in the first years of the democratic dispensation and the public health system was transformed into an integrated, comprehensive national health system. However, poor leadership, inconsistent management and inadequate capacity meant that implementation and health outcomes fell short of expectations. There was a misguided attempt to change everything simultaneously, when many aspects of the system were not faulty. There are crucial issues that have never been satisfactorily addressed, such as the substantial human resources crisis facing the health sector and massive unemployment.

It is internationally recognised that societal risk conditions are more important than individual risk factors in the spread of a disease. The World Health Organisation Commission on the Social Determinants of Health report, made three major recommendations that are especially relevant for South Africa given the challenges we face:

- Improve the conditions of daily life – the conditions in which people are born, grow, live, work, and grow old.
- Tackle the inequitable distribution of power, money, and resources – the structural causes of those conditions of daily life – globally, nationally, and locally.
- Measure the problem, evaluate action, expand the knowledge base, develop a workforce trained in the social determinants of health, and raise public awareness.

Critical actions

In this chapter we propose actions around seven broad areas that are central to the attainment of the vision and targets set out earlier. They are: addressing the social determinants affecting health and disease; strengthening the health system; preventing and reducing disease burdens and promoting health; financing the health system; improving quality by using evidence; addressing human resources issues; and implementing effective partnerships in the health sector.

Address the social determinants affecting health and disease

The 2008 World Health Organisation Commission on Social Determinants of Health, *Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health*, provides action areas that are used to guide the proposals below.

Implement a comprehensive approach to early life

Efforts should build on existing child survival programmes and extending interventions in early life to include social/emotional and language/cognitive development. Detailed proposals are presented in the early childhood development part of this plan.

Collaboration across sectors

The health sector should engage with partners and departments to ensure that the negative impact of other policies on health outcomes is understood and minimised, while promoting policies that result in positive health outcomes.

The linkages between policies dealing with human settlements, urban planning and urban design, transport, basic services, education, energy, trade, agriculture and food security, rural development, social protection, and neighbourhood policing should be fully assessed and understood, and their design should take into account their impact on health.

Poverty is a significant health determinant. Successfully addressing poverty will have a positive impact on the nation's health.

Promote healthy diets and physical activity

We need to ensure that there is a lifestyle change in behaviour in South Africa, with healthier diets and more exercise. The best place to instil this culture is at school.

We propose that by 2020:

- Physical education should be compulsory in all schools.
- Every primary and high school in South Africa should employ a qualified physical education teacher.
- Every primary and high school should have access to adequate facilities to practice school sport and physical education.
- All schools should be supported to participate in organised school sport activities at local, district, provincial and national level.
- Health department officials should conduct regular visits to schools in which healthy dietary practices are taught and encouraged.

To ensure that a culture of wellness is also established in communities and at work, we propose that by 2025:

- Every ward across the country should have adequate facilities for communities to participate in basic exercise and sporting activities.
- Employers should be incentivised to provide opportunities to employees to engage in physical exercise and to have access to information about healthy dietary practices.

Strengthen the health system

The Development Bank of Southern Africa facilitated a consultative process to draw up a roadmap for health in 2008. Its main recommendations were to:

- Establish a coherent and vision-based executive decision-making process.
- Promote quality, including measuring and benchmarking actual performance against standards for quality.
- Define an appropriately specialised, more accountable operational management model for health service delivery, including revised roles and responsibilities for the national department, provinces, districts and public hospitals. This should also cover governance and capacity requirements.
- Bring in additional capacity and expertise to strengthen a results-based health system, particularly at the district level. This should include revised legislation to make it easier to recruit foreign skills, partnerships between the private and public sector, deployment and training for district health management teams.
- Implement a national health information system to ensure that all parts of the system have the required information to effectively achieve their responsibilities.
- Establish a human resource strategy with national norms and standards for staffing, linked to a package of care.
- Develop an implementation strategy and partnerships to leverage funding, increase health sector efficiencies and accelerate implementation of the national strategic plan.

We agree with these recommendations and support the Minister of Health's efforts to implement them. In addition, we propose that the following be given attention to strengthen health systems.

Leadership and management

Health services need to be revitalised so that they are specifically directed to patient needs. To improve services for communities and patients, roles and responsibilities need to be revised for the national department, provinces, districts, public hospitals and primary health care facilities. National, provincial and district organisational structures should also be reviewed to better support the renewed focus on primary health care. Technical capacity at national and provincial level should be strengthened to provide overall guidance on activities that improve levels of health, such as effective implementation, monitoring and assessments of policies, as well as active engagement

in the community to address social and economic factors that act as barriers to achieving good health.

Functional competence and commitment to quality service need to be a priority. Communication and coordination mechanisms should be improved within departmental spheres, across clusters and with private partners to prevent "silo" funding and operation.

Accountability to users

There should be an effective governance and management framework from national to local levels with emphasis on user/community-level accountability. Centralised guidance, technical support and monitoring should be aligned with responsibility and effective decision-making that are devolved and decentralised. Greater attention should be given to collaboration within and between national, provincial and district or local strategies and plans. Appropriate delegations can consolidate the responsibilities of chief executive officers and district managers.

Additional capacity and expertise

To strengthen a results-based health system, particularly at district level, partnerships with the private and non-profit sectors need to be boosted. Mentors and trainers should be used to improve capacity in district health management, health clinics and hospitals, and community-based outreach primary health care. The key focus of the training and mentorship should be on rolling out best practice.

Office of Standards Compliance

Maximum support is needed for the Office of Standards Compliance in promoting quality, including measuring, benchmarking and accrediting actual performance against standards for quality. There should be a specific focus on achieving common basic standards in the public and private sectors.

Health information systems

Several actions are needed to achieve maximum potential synergy between national, district, facility and community health information systems:

- Credible data is necessary to inform decision-making and regular monitoring across the system. The development and management of effective data systems should be prioritised.
- The national health information system should seamlessly integrate with the provincial, district, facility and community-based information systems. These systems should link to secure online electronic patient records and other data structures, such as financial, pharmacy, laboratory and supply chain management

systems. It should also link with other government, private sector and non-profit databases.

- Establish national standards for integrating health information systems. Challenges experienced in integrating data between differing software and financial systems highlight the importance of establishing national standards for health data.
- There should be regular independent data quality audits, possibly by the Office of Standards Compliance.
- Develop human resources for health information. The national health information system skills audit highlighted the need for continuing training and development of staff in this field to replace existing ad-hoc training.
- Strengthen the culture of information use. At community level, mobile phones (m-health systems) can improve community-based data collection by professional teams, including community health workers, to make reliable data instantly available. At facility level, the flexibility of the district health information system software should allow data to be added according to local need, to track and monitor local priorities.
- Accommodate expansion of data reporting through an innovative approach. The increasing demands on health workers for data should be addressed through a structured approach using sentinel sites; complementary use of routine data and regular inexpensive annual facility surveys to update basic information data on staff, infrastructure, equipment, maintenance, and other information that does not change often. A national task team should discuss, revise and approve the national information data system every two years, encouraging districts and provinces to take part and make submissions. Two areas requiring urgent incorporation into the data system are reports on human resources and finances.
- Improved access to digital information should focus increasingly on web-based and mobile data entry and retrieval linked to the existing district health information system, which should be continuously and incrementally modernised.
- Invest in improving data quality. This depends on the continuing allocation of full-time staff at national and provincial level, as well as commitment from district information officers and supervisors.

Prevent and reduce disease burdens and promote health

Although it is important to provide comprehensive care, particularly quality primary health care and community outreach, there is a need to have an integrated focus on three main interventions to reduce the major disease burdens.

- Prevent and control epidemic burdens through deterring and treating HIV/AIDS, new epidemics and alcohol abuse.
- Improve allocation of resources and availability of health personnel in the public sector.
- Improve health systems management by improving calibre of care, operational efficiency, devolution of authority, health worker morale and leadership and innovation.

Financing the health system

In 2005, the World Health Assembly passed a resolution on sustainable health financing, universal coverage and social health insurance. The resolution noted a wide mix of financing mechanisms across countries, but asked countries to commit to progressively extending a pre-payments system. This measure was aimed at increasing security of services, protecting against financial risk, preventing catastrophic health expenditure and moving towards universal systems.

Health system typologies

Occasionally, policy-makers and countries relook at the long-term direction and nature of their health systems and chart a fundamentally different approach for the road ahead. South Africa is at such a juncture, where the proposals for a national health insurance (NHI) system represent a profound break with the past and the potential evolution of a substantially different system. Changes we make now may set the foundations for a new health system for the next 50 years.

South Africa has a transitional or pluralist health system, consisting of a tax-funded health system for the majority and a system of medical schemes for a relatively small proportion of the population (17 percent, 8.3 million beneficiaries).[5] However, given the large inequities in income, spending within the private system amounts to about half of total health spending. This high level of spending in the private sector attracts scarce skills away from the public sector: a large proportion of South Africa's specialists, pharmacists, dentists, optometrists and physiotherapists work in the private sector. South Africa's level of public health spending (4.1 percent of GDP) is fairly average in global terms, but its high level of HIV/AIDS and burden of disease[6] gives the country an additional cost burden that has been estimated at around 0.7 percent of GDP.[7]

It is unusual for middle-income countries to spend more than 6 percent of GDP on health, while countries with higher income, such as the United Kingdom, spend about 8 percent of GDP on health services. As countries become more developed and richer, their health systems and financing systems typically move away from these transitional systems towards more universal systems, in which a large proportion of health funding is public. In advanced countries, there are three main types of health system:

- National health service: United Kingdom, Spain and Sweden. Services are predominantly tax funded and delivery is mainly through the public sector.
- National health insurance: Financing is predominantly public, but delivery is typically by a mix of public and private providers. There is a range of sub-options

[5] Council for Medical Schemes (2010). *Annual Report 2010/11*. Pretoria: Council for Medical Schemes.
[6] World Health Organisation (2009). *Mortality and burden of disease estimates for WHO member states 2004*. Geneva: World Health Organisation.
[7] Guthrie T, Ndlovu N, Muhib F and Hecht R (2010). *The long run costs and financing of HIV/AIDS in South Africa*. Cape Town: Centre for Economic Governance and AIDS in Africa Cape Town.
Haaker M (2011). *Fiscal implications of HIV/AIDS in South Africa*. Washington: World Bank.

here, but one of the main differences lies between the single-payer models (Australia and Canada) and the multi-payer models, which typically emerge and build on occupational social health insurance scheme arrangements (Holland and Germany).

- Private health insurance: The United States model of private health insurance is generally considered one of the most expensive and inefficient, and is being reviewed under the Obama health reforms.

When social insurance systems reach universal coverage, the distinctions between health insurance and health service systems may become blurred. In South Africa, the term NHI may be open to misinterpretation, as it will not be a typical insurance system. It will be predominantly based on public provision at first, and mainly funded through general tax revenues.

Evolution towards NHI

NHI is a common end-point for health financing reforms across the world and over 100 countries either have or are moving towards such systems. In many countries, NHI has evolved over decades through the progressive elaboration of social health insurance. As economies strengthen and a growing proportion are employed in the formal sector, a relatively low percentage of remaining uninsured people are subsidised to bring the entire population into the insurance system. South Africa is working towards this objective of achieving universal coverage. This approach has to be tailored to the South African context:

- Progressive inclusion of private providers into the publicly funded system is likely to be much more gradual given their substantially higher unit costs. The Green Paper already talks of a transition of 14 to 15 years. In the early years, the system will have to focus substantially on strengthening the public health service, similar to a national health service-type system.
- The system will involve substantial cross-subsidisation in the early decades, due to high levels of unemployment and income inequality.

South African health financing numbers

South Africa will spend about 8.7 percent of GDP on health services in 2011/12 (R255 billion), of which about 4.2 percent (R122 billion) will be in the public sector, 4.3 percent through private financing streams (R126 billion) and 0.2 percent through donors. The largest public stream is through provincial departments of health (3.8 percent of GDP) and the largest private stream is through medical schemes (3.6 percent of GDP).

Health expenditure in SA public and private sectors

Rand million	07/08	08/09	09/10	10/11	11/12	12/13	13/14	Annual real % change 07/08 -13/14
Public sector								
National Department of Health Care	1,210	1,436	1,645	1,736	1,784	1,864	1,961	2.2
Provincial departments of health	62,582	75,120	88,593	98,066	110,014	119,003	126,831	6.1
Defence	1,878	2,177	2,483	2,770	2,961	3,201	3,377	4.0
Correctional services	261	282	300	318	339	356	374	0.1
Local government (own revenue)	1,625	1,793	1,829	1,865	1,977	2,096	2,221	9.4
Workmens Compensation	1,287	1,415	1,529	1,651	1,718	1,804	1,894	0.6
Road Accident Fund	764	797	740	860	980	1,029	1,080	-0.1
Education	1,833	2,134	2,350	2,503	2,653	2,812	2,981	2.2
Total public sector health	71,439	85,154	99,468	109	122,427	132	140,721	5.6
Private sector				769		165		
Medical schemes	65,468	74,089	84,863	96,482	104,008	112,120	120,866	4.4
Out of pocket	14,694	15,429	16,200	17,172	18,202	19,294	20,452	-0.3
Medical insurance	2,179	2,452	2,660	2,870	3,094	3,336	3,596	2.5
Employer private	1,041	1,172	1,271	1,372	1,479	1,594	1,718	2.5
Total private sector health	83,383	93,141	104,994	117,896	126,783	136,344	146,632	3.6
Donors or NGOs	3,835	5,212	6,319	5,787	5,308	5,574	5,852	1.2
Total	158,657	183,507	210,781	233,4 52	254,518	274,083	293,205	4.4
Total as % of GDP	7.6	7.9	8.6	8.8	8.7	8.6	8.3	
Public as % of GDP	3.4	3.7	4.1	4.1	4.2	4.0	4.0	
Public as % of total government expenditure (non-interest)	13.9	14.0	13.8	14.1	14.7	14.7	14.6	
Private financing as % of total	52.6	50.8	49.8	50.5	49.8	49.7	50.0	
Public sector real rand per capita 10/11 prices	2,131	2,300	2,512	2,635	2,766	2,812	2,816	4.8
Public per family of four per month real 10/11 prices	710	767	837	878	922	937	939	4.8

The next table compares South Africa with a selection of middle-income countries using World Health Organisation data.[8] Using 2007 data, South Africa's public spending on health services was close to the global average (3.2 percent for upper-middle income countries). Upper-income countries spent on average 6.1 percent of GDP on publicly funded health services. However, the government share of the total in South Africa (41.4 percent) was significantly below average (55.2 percent for middle-income countries and 62 percent for upper-income countries), meaning that health spending in South Africa is more unequal than in most other middle-income countries.

[8] World Health Organisation (2010). *World Health Statistics 2010*. Geneva: World Health Organisation.

Government health expenditure in selected middle-income countries

Country	GDP per capita (current US$)	Gov health expenditure as % of GDP		Per capita gov health expenditure (PPP int $)		Total health expenditure as a % of GDP		Gov health expenditure as % of total health expenditure		Life-expectancy
	2007	2000	2007	2000	2007	2000	2007	2000	2007	2008
Chile	9,877	3.4	3.6	320	507	6.6	6.2	52.1	58.7	79
Mexico	9,741	2.4	2.7	236	372	5.1	5.9	46.6	45.4	75
Russia	9,146	3.2	3.5	247	512	5.4	5.4	59.9	64.2	68
Turkey	8,865	3.1	3.5	272	467	4.9	5.0	62.9	69.0	72
Venezuela	8,252	2.4	2.7	199	324	5.7	5.8	41.5	46.5	74
Uruguay	7,206	6.1	5.9	500	678	11.2	8.0	54.6	74.0	76
Brazil	7,185	2.9	3.5	202	348	7.2	8.4	40.0	41.6	72
Malaysia	7,028	1.7	2.0	159	268	3.2	4.4	52.4	44.4	74
Argentina	6,604	5.0	5.1	452	671	9.0	10.0	55.5	50.8	75
Botswana	6,545	2.7	4.3	218	568	4.4	5.7	61.0	74.6	54
South Africa	5,933	3.4	3.6	223	340	8.5	8.6	40.5	41.4	51
Costa Rica	5,891	5.0	5.9	360	656	6.5	8.1	76.8	72.9	79
Namibia	4,216	4.2	3.2	174	196	6.1	7.6	68.9	42.1	61
Peru	3,771	2.8	2.5	134	191	4.7	4.3	58.7	58.4	73
Thailand	3,689	1.9	2.7	89	209	3.4	3.7	56.1	73.2	69
China	2,651	1.8	1.9	42	104	4.6	4.3	38.7	44.7	73
Morocco	2,373	2.0	2.3	32	68	4.2	5.0	46.6	45.4	71
Nigeria	1,123	1.5	1.7	20	33	4.6	6.6	33.5	25.3	48
India	1,096	1.1	1.1	16	29	4.4	4.1	24.5	26.2	64
Vietnam	804	1.6	2.8	23	72	5.4	7.1	30.1	39.3	74
Low income		1.8	2.2	14	28	4.7	5.3	37.6	41.9	
Lower middle-income		1.6	1.8	35	76	4.4	4.3	37.0	42.4	
Upper middle-income		3.2	3.5	243	419	6.2	6.4	52.0	55.2	
High income		6.1	6.9	1,631	2,492	10.2	11.2	59.4	61.3	

Government spends about R922 per month on health services per family of four, which is roughly 14.7 percent of the main budget (excluding interest costs). A similar family covered by a medical scheme spends between four and five times as much per month. South Africa has not quite met the Abuja declaration health spending target of 15 percent of government spending.

Health financing system components

Although the broad description of a national health system is important, of more significance are the detail and design of the financing system through which varied options emerge. The costs of NHI depend on the type of system, for example, the nature and type of benefits, the extent to which private providers (private hospitals) are used, the nature of reimbursement mechanisms, how much purchasing is active or passive, the degree of genuine competition, the relative power of purchasers and providers, usage levels of services and how successfully demand is managed.

Revenue collection
Sources of funds: households, firms, government, donors (tax base)

Mechanisms of health care financing/contribution mechanisms: (type of revenue stream)

- Tax – direct/indirect, personal income tax, value added tax, borrowing
- Social insurance, NHI
- Private insurance, medical schemes
- User fees – out of pocket
- Community financing
- Donations/grants.

Types of collecting agency: Government, parastatal, private

Pooling
Risk pools

- Coverage and composition of risk pools and degree of fragmentation
- Number and nature of purchasing authorities.

Resource allocation

- Degree to which need based (risk equalised)
- Needs-based resource allocation formulae (e.g. risk-adjusted capitation).

Purchasing

- Transfer of pooled funds to providers
- Active vs passive purchasing; contracting; information systems
- Benefit package
- Budgeting, allocative efficiency
- Payment mechanisms.

The rough cost estimates provided in the Green Paper on the NHI are briefly portrayed in the table below. Public health spending will increase from R100-R110 billion at baseline to R255 billion in real terms by 2025 (R574 billion in nominal terms). As a percentage of GDP, this is an increase from about 4.2 percent to 6.2 percent.

However, the actual costs will vary depending on the way in which the NHI is implemented, and wider health system isssues, such as increasing the supply of doctors.

Green Paper cost estimates of NHI

R million	Real					Nominal				
	Baseline narrow*	Baseline broad	NHI	Gap1	Gap 2	Baseline narrow*	Baseline broad	NHI	Gap1	Gap 2
10/11	99 802	109 769			99 802	109 769				
11/12	106 171	116 265			111 798	122 427				
12/13	109 006	119 196	125 359	16 353	6 163	120 867	132 165	140 279	19 412	8 114
13/14	110 099	120 295	134 763	24 664	14 467	128 793	140 721	159 523	30 731	18 803
2,014	111 199	121 498	144 408	33 209	22 910	136 520	149 164	180 826	44 305	31 662
2,015	112 311	122 713	156 196	43 885	33 483	144 711	158 114	203 993	59 282	45 880
2,016	113 435	123 940	166 726	53 291	42 785	153 394	167 601	229 654	76 260	62 053
2,017	114 569	125 180	177 666	63 097	52 486	162 598	177 657	258 165	95 567	80 508
2,018	115 715	126 432	189 083	73 368	62 651	172 353	188 316	289 932	117 578	101 616
2,019	116 872	127 696	200 966	84 095	73 270	182 695	199 615	325 278	142 583	125 663
2,020	118 040	128 973	213 636	95 596	84 663	193 656	211 592	365 124	171 468	153 532
2,021	119 221	130 263	227 097	107 876	96 834	205 276	224 287	409 974	204 698	185 687
2,022	120 413	131 565	236 001	115 588	104 436	217 592	237 745	449 847	232 255	212 103
2,023	121 617	132 881	245 284	123 667	112 403	230 648	252 009	493 773	263 125	241 764
2,024	122 833	134 210	254 987	132 153	120 777	244 487	267 130	542 236	297 750	275 107
2,025	124 062	135 552	255 815	131 754	120 264	259 156	283 158	574 362	315 206	291 204

* Narrow refers to national provincial Departments of Health

Broad includes all other health-related services in other departments and entities

The financing of a health care system does not depend solely on its cost projections. It is subject to many other factors, such as relative prioritisation of different sectors (health services versus education, income support, infrastructure, job creation), the overall fiscal stance of the country, its economy, the ability of the sector to convincingly show value for money and political choices.

Examining international comparisons suggests that certain countries provide inadequate levels of funding for health services. For example, in India, until fairly recently, the level of public sector health funding was close to 1 percent of GDP, despite very high levels of maternal and child mortality. At the other end of the spectrum, poorly conceived health systems can bankrupt companies and governments. The United States health care system costs close to 14 percent of GDP, yet many people are uncovered and the country has comparatively poor health outcomes. In Germany, mandatory contributions cost 15 percent of payroll and have, at times, been considered unaffordable for the country and the economy. Cost spirals in health systems are easily set off and can be very difficult to control. It is important to design health systems with long-term sustainability.

Cost controls

Many mechanisms need to be put in place within health systems to improve efficiency and control costs. For example, primary care gate-keeping; demand management strategies such as appropriate self care, user fees; rationing, diagnostic and therapeutic protocols, preferred providers; managed care; reimbursement strategies (capitation or

global budgets instead of fee-for-service) and others. The *World Health Report*[9] estimated that between 20 percent and 40 percent of health spending globally is wasted through inefficiency and made diverse recommendations for greater efficiency.

Financing mechanisms

Distinct financing mechanisms could be used to generate funds for the health system and for NHI. Some common financing mechanisms for health care internationally include:

- Tax – direct/indirect, personal income tax, value added tax, borrowing
- Social insurance, NHI – often via proportional payroll contributions/taxes
- Private insurance; medical schemes
- User fees – out of pocket
- Community financing
- Donations/grants.

Typical criteria used for assessing financing mechanisms are: feasibility, effectiveness, efficiency, equity, sustainability, structuring of contributions (which can be more progressive or regressive depending on the model used), extent of coverage, and fiscal decentralisation versus centralisation.

General tax income

General tax revenue is a source of financing for health care in many countries, particularly in countries with advanced national health service systems (the United Kingdom, Sweden, Spain and Italy). Types of taxes that underlie general tax income include personal income tax, value added tax and company tax. Taxes on alcohol and tobacco also contribute to the general revenue pool.

General taxation tends to be effective and equitable. In South Africa, the South African Revenue Service is a competent national revenue authority. Personal income tax is a particularly progressive form of raising revenue as the level of income determines the amount of the contribution, with the poorest not being taxed. It is therefore more progressive than collecting comparable resources through NHI contributions as these are based on fixed contributions according to the requirements of the NHI and not by income. Value added tax is a key source of general tax in most countries. In many countries with universal health care systems, value added tax is at a higher level than in South Africa. However no firm decision has been taken on including VAT as an additional source of funding for the NHI.

[9] World Health Organisation (2010). *The World Health Report: health systems financing: the path to universal coverage*. Geneva: World Health Organisation.

Private health insurance

Private health insurance is not an effective system for providing universal health care financing because it is voluntary, uses risk rating meaning that some people may be excluded from access or charged prohibitive fees, excludes many persons and because contributions are not linked to income.

South Africa's medical schemes are not typical private health insurance vehicles, and have already been through several sets of reforms. They are non-profit entities and risk rating is prohibited.

Medical schemes in South Africa are a well established financing mechanism used by 8.3 million beneficiaries. Government itself has three schemes for government workers – the Government Employees Medical Scheme is the second largest medical scheme in the country, with 1.4 million beneficiaries and annual contributions of R13.2 billion. Occupationally linked restricted medical schemes cover 3.1 million beneficiaries and have gross contributions of R37 billion in 2010/11.[10]

Social health insurance

Private health insurance contributions are voluntary, often risk rated and not linked to income, while social insurance contributions are typically mandatory, income linked (typically as a percentage of income) and not risk rated. They are therefore more progressive than private schemes, although they typically provide a more limited set of benefits.

Payroll taxes

In some countries, NHI is funded predominantly through payroll taxes. However, once coverage becomes universal, the advantages of payroll taxes against general taxes become less significant and the more progressive nature of general taxes make them a preferable revenue-raising instrument.

User fees

Out-of-pocket payments are a regressive form of health financing and can seriously detract from access to health services. The World Health Organisation recommends that out-of-pocket payments should not constitute more than 15 to 20 percent of health financing revenue,[11] advising that the risk of catastrophic health expenditure where health costs seriously damage a households financial situation becomes minimal below these levels. In South Africa, user fees contribute about 8 percent of revenue, mainly for

[10] Council for Medical Schemes, 2010.
[11] World Health Organisation, 2009.

private services. The public sector derives only 1.8 percent of its expenditure from revenue and has exemptions for various groups.

Although user fees should not be a major component of health care financing, it is not yet clear where they should be applied. One view is that there should be no user fees at all (except for minimal exceptions such as non-South Africans, services outside the package). Another view is that user fees do have some role in controlling unnecessary demand for discretionary services, and this can be designed to avoid catastrophic health expenditure (defined as more than 10 percent of household income).

We support the broad principle of universal coverage outlined in the Green Paper on NHI and the process under way in government to investigate the most appropriate mechanisms for financing NHI to achieve universal coverage. The success of national health insurance will depend on the functioning of the public health system. The commission supports attempts to improve how the health system operates, starting with the auditing of facilities.

Measures also need to be put in place to reduce inefficiencies in the private health sector to reduce costs. This includes revisiting the Health Professions Council's decision to bar private hospitals from employing doctors. This decision has led to a private hospital model in which hospitals use incentives to attract doctors and specialists to establish practices within hospital premises.[12] Hospitals invest in infrastructure and equipment to attract doctors and generate demand for doctors' services by referring patients, while doctors generate demand for hospital beds. This model leads to over-servicing that drives the cost of private health care.

Human resources in the health sector

There is a disparity in the distribution of health personnel, driven by differences in service conditions between the public and private sectors. This issue is linked to the funding of health. There are further difficulties in planning for human resource development, because the PERSAL system in the public sector and the health council registration system in the private sector are not providing accurate statistics. The commission proposes a number of actions to overcome the human resources challenges at different levels of the health sector.

Community-based health care

A core component of the re-engineering primary health care strategy is the proposal to place much greater emphasis on population-based health and health outcomes. This includes a new strategy for community-based services through a primary health care outreach team, based on community health workers and using advocacy on major

[12] Matsebula T and Willie M (2007). 'Private Hospitals' in Harrison S, Bhana R and Ntuli A (eds) *South African Health Review*. Durban: Health Systems Trust.

health campaigns such as the provision of health information and responding to issues identified by communities.

Community health workers can successfully undertake a range of interventions in maternal, neonatal and child health (MNCH), as well as acute and chronic disease management. Although community health workers' activities in South Africa have been limited to a few areas, especially HIV/AIDS care and prevention, community workers are performing a wide range of tasks in a growing number of countries , especially in relation to maternal, neonatal and child health. Research has accumulated evidence of the effectiveness of community health workers in providing comprehensive health care, including treatment of common, acute, mainly childhood illnesses.

Policies permitting community-level workers to use antibiotics to treat pneumonia have been controversial, because health professionals are concerned that antibiotics might be misused or over-used. However, in Ethiopia and Nepal, the quality of care has remained high. Supportive national policies are needed to allow community health workers to administer antibiotics for specific childhood diseases, along with strengthened regulatory and quality controls for the distribution and appropriate use of antibiotics.

Community health workers have been successful in various capacities, from approaches that emphasise community-controlled, part-time workers (Thailand, Rwanda) to those where community health workers are formal members of sub-district health teams (Iran, Brazil). In all the countries where community health worker programmes enjoy success, community participation occurs through structures that are integrated into the wider health system.

The number of tasks a community health worker can reasonably perform depends on a variety of factors, the most important being the ratio of community health workers to families, the duration and quality of their training, and the extent and quality of their supervision.[13] The Re-engineering Primary Health Care policy proposes six community health workers for each primary health care outreach team, each community health worker covering 250 households, or about 1 000 people. Lessons learned from low- and middle-income countries suggest that the necessary ratios for community health workers to families should be as many as 1:500 families for full-time workers, or 1:10-20 for part-time workers. The shortage of trained staff and community workers to provide health-promoting, disease-preventing and curative services is a major hindrance to service delivery. These workers also need supervision. In the early stages of a community health worker programme, when total numbers are small, it may be most cost-effective to prioritise recruitment and allocation of community health workers to the neediest areas.

As in other countries (Brazil, Rwanda, Thailand, Bangladesh), this model should rapidly increase the poor's access to health care and result in improved health outcomes. This

[13] World Health Organisation, 2010. Guthrie et al, 2010.

would be especially so if the ratio of community health workers to population increases to ensure that all households are regularly visited and health problems detected early. In several countries, high ratios are achieved through a "two-tier" system, where the ratio of full-time community health workers is 1:250-500 households, and full-time community health workers supervise part-time community health workers with more limited training.

The ratio of full-time to part-time community health workers averages 1:10 to 1:20 in countries where this system operates successfully. We propose serious consideration be given to this two-tier system. If we opt for a ratio of 1 full-time community health worker for every 20 part-time community health workers, we will need just over 700 000 community health workers. And if we opt for the ratio of 1 full-time for every 10 part-time community health workers we will need over 1.3 million.

This cadre of community-based workers would undertake a range of health care activities, spanning the full breadth of rehabilitative/palliative care, treatment, preventive and promotive interventions. They would form the base of the health pyramid. In addition to rendering health care more accessible and equitable, this primary health care system will create more jobs and indirectly improve health by reducing the prevalence and depth of poverty.

To achieve this model of community-based health care, the power of conservative professional councils will need to be curtailed. The scope of practice for non-doctors, especially community health workers and nurses, will have to be enlarged.

Accelerate production of appropriately skilled nurses

The core of the primary health care outreach team will consist of a professional nurse, staff nurse and community health workers. This will require substantially increased numbers of trained nurses and significant strengthening of their skills to carry out and support primary health care. Because primary health care includes promotive and preventive components, the key activities of public health, these nurses (or at least the professional nurse leading the outreach team) will need to be substantially competent in public health. Indeed, in several countries, community nurses (professional nurses with public health training) lead many aspects of district health work.

Prioritising the training of more mid-wives and distributing them to appropriate levels in the health system could have an immediate positive impact on maternal, neonatal and child health, which would reduce maternal and child mortality.

The above requirements demand a rapid expansion and reorientation of nursing training. The policy decision to reopen and expand nurse training colleges is a welcome step in the right direction. However, revitalising these institutions must be accompanied by curriculum review that includes advisers external to the current nurse training bodies (Nursing Council and Sector Education and Training Authorities), with expertise in public

health and experience in countries that have implemented a comprehensive, district-based approach.

Doctors and specialist support teams

According to the Re-engineering Primary Health Care document, "family physicians as part of the district specialist support team in line with national policy and guidelines, should take the primary responsibility for developing a district specific strategy, implementation plan for clinical governance and provide technical support and capacity development for the implementation of clinical governance tools, systems and processes for clinical service quality in the district health system that includes the community-based services, primary health care facility services and district hospital services. Family physicians should also take overall responsibility for the monitoring and evaluation of clinical service quality for the entire district." [14]

In many countries, the emphasis of family physician training and practice has been on individual patient care in a well-resourced context. In several countries that have promoted doctors as leaders of the district health team, these professionals have undergone training in five speciality areas (medicine, surgery including anaesthetics, obstetrics, paediatrics and psychiatry) and are also encouraged to obtain a public health qualification or training, or both. This arrangement should be considered, rather than employing orthodox specialist family physicians.

Recently, the Minister of Health announced the formation of district specialist teams. It is clear from several assessments and research studies that patient care in many district hospitals is poor. There is too little emphasis on prevention, primary health care and quality of care in district hospitals and clinics. The current output from specialist training schemes is out of step with what South Africa needs. Such training encourages continued production of system specialists, most of whom will seek and find employment in teaching institutions or the private sector (or overseas), but does not address the needs of the majority of the population, who live beyond the reach of the major city teaching centres, often in remote rural areas. Priority should also be given to developing specialists who improve the quality of care in their speciality area in district hospitals and surrounding health centres and clinics, as well as improving the planning, management and monitoring of district services in their field.

To address this challenge, there needs to be a major change in the training and distribution of specialists. It will require the accelerated production of community specialists in each of the five specialist areas. Training would include compulsory placement in regions under the supervision of provincial specialists. Those in placements would be based at a regional hospital, but would examine and improve the standard of health care across a system or within a region – including preventive work, quality of

[14] Department of Health (2011). National Health Insurance in South Africa. Policy Paper. Government Gazette No. 34523. Government Notice No. 657. 12 August 2011.

care at primary care clinics and district hospitals, and supporting the referral and transport network.

Rapidly increase investment in health personnel development

Brazil's health system has inspired some of South Africa's key policies, particularly Re-engineering Primary Health Care. Brazil has more than 2.5 million workers employed in the health sector. For direct employment in formal skilled jobs, this represents about 10 percent of the workforce – a far greater proportion than South Africa's. These numbers have been achieved by significant investment in health research and development, including expansion of training, especially for nurses and technicians, up-skilling of public health and auxiliary personnel (problem-solving and reflective thinking), and attractive incentives to promote curricular reform in undergraduate programmes.

In stark contrast, there has been stagnation in South Africa's production of doctors and, until recently, a decline in the number of nurses. Training in public health, a core component of primary health care, is minimally supported by government funding, with most schools of public health relying heavily on external donor and research funding. Most categories of health professionals – with the exception of nurses – are disproportionately located in the private sector.

To implement policies that are more appropriate to the health and health care needs of South Africa, there needs to be a massive and focused investment in training health personnel. Government could incentivise the production of appropriate trained personnel in sufficient numbers within a realistic, but short, time frame.

Review management positions and appointments and strengthen accountability mechanisms

Evidence suggests that, notwithstanding stagnation in public health personnel numbers from the late 1990s, national and provincial management has grown. The percentage growth of management posts has greatly exceeded that of posts for service delivery. Recently, reviews have been undertaken of management personnel and their competencies to strengthen and rationalise health service management. Statutory structures need to be bolstered and resourced for community representation in health system governance – it is widely acknowledged that these structures mostly function poorly. If greater accountability to communities could be secured through such mechanisms, it is likely that the quality of management and service delivery would improve.

Equip health personnel to lead intersectoral action

The Re-engineering Primary Health Care policy states that: "It is well recognised that many of the factors that impact on health are outside of the health sector. Much of the work of the community-based services team is linked to improving social determinants

at the community level. However there are many other factors that need intervention at other levels."[15] Intersectoral action is a feature of most successful community health worker programmes, although its implementation takes several different forms. In Iran, community health workers are the key players in intersectoral activities, while in Brazil, community health workers act primarily as health care workers and refer clients where necessary to other sectors for assistance.

The Re-engineering Primary Health Care document suggests that there should be "align(ment) (of) the intersectoral programme at district level through the municipal integrated development planning process with that of the provincial and national clusters with specific time bound targets."[16] However, it is not clear who will assist community health workers and lead this work in districts and wards. This could be the role of environmental health officers, yet the current training and activities of these officers suggests that they are ill-equipped to lead such work in disadvantaged communities. This is an area for priority consideration.

Ensuring that this important aspect of re-engineering primary health care is successfully addressed requires identifying the key categories of health and health-related personnel, their respective roles, and the elaboration of appropriate and practical training programmes for them, combined with a facility for ongoing mentoring and support in the field. These actions are likely to require active enrolment of the skills of non-governmental organisations with good credentials in this type of work.

It is critical for the health sector to play an active advocacy role in other key sectors with policies that affect the social determinants of health, such as safety and security, trade, water affairs, education, and so on. Some European countries have successfully pursued integration by ensuring that the highest level of government actively promotes health-friendly policies by insisting on a "health in all policies" approach.

Strengthen human resource management

Human resources need to be strengthened at all levels by increasingly ensuring accreditation of this function, continuously reviewing remuneration and putting into operation incentive schemes such as the occupation-specific dispensation to boost services in underserved areas. Effective performance management frameworks are an important aspect of human resources management. Fulfilling these frameworks and retaining staff should receive as much attention as producing new professionals. Poor management at facility level is the most cited reason for doctors leaving the public sector, so fixing management will help address this retention problem. Recruiting skilled professionals from abroad is very difficult in South Africa, owing to considerable red tape in being granted a work permit and registering with statutory bodies. In a worldwide knowledge-based economy, South Africa is struggling to compete for this scarce resource. This matter requires urgent attention.

[15] Department of Health, 2011.
[16] Department of Health, 2011.

Collaborate with traditional healers

With more than 28 million consumers of traditional medicine in South Africa and about 185 500 traditional medicine practitioners, African traditional medicine is one of the major service industries in this country. Raw medicinal plants, prescriptions and herbal medicines add up to an industry worth R2.9 billion. The Traditional Health Practitioners Act (2007) provides for national policy on traditional medicine, although there has been limited actual integration of traditional medicine into the national health care system and structured relationships with the African pharmaceutical industry. It is important for the Department of Health, particularly its human resources directorate, to develop a policy framework for how traditional medicine fits into the health workforce.

Improve quality by using evidence

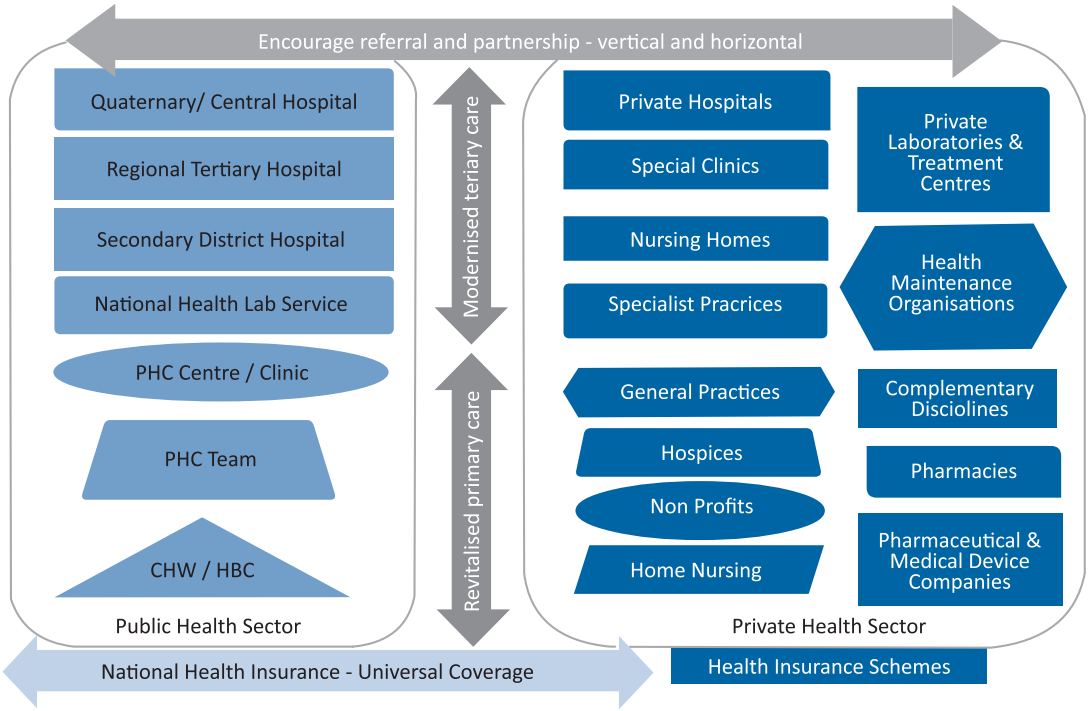
Given the escalating costs of services in both the public and private sector and the high proportion of GDP that goes to health service funding, it is essential to create a culture of using evidence to inform planning, resource allocation and clinical practice. The quality of planning can be improved through evidence-based evaluation, planning and implementation. The health workforce, and particularly those in leadership, needs to be encouraged to become familiar with using evidence in all aspects of practice.

Empirical evidence on which to base predictions for specific health plans and targets should be regularly reviewed, and data and scenarios to refine targets for 2030 continuously updated. At district level, this implies effectively using the district health expenditure review and planning process.

Meaningful public-private partnerships in the health sector

Meaningful public-private partnerships in the health sector are important, particularly in the context of the NHI. To achieve this, South Africa needs robust debates between public and private sector partners, including civil society organisations. Key issues would depend on when and how partners approach this debate in the short to medium term, and it is likely that they will need to include legal and governance frameworks, the public-private partnership policy environment, the socio-political dimension of such partnerships, public-sector capacity, and the business and financial implications of partnership implementation. The principles to manage these partnerships should guide best practice purchasing, provisioning, procuring and sound financial management of health services to create incentives for improving access, greater equity, higher quality, more innovation and serving the poor with efficiency.

Integration between and within public and private sectors



Summary of main proposals

Central to the proposals in this chapter is greater inter-sectoral and inter-ministerial collaboration.

Address social determinants of health

- Most of the recommendations relating to the social determinants of health are dealt with in other chapters and relate mainly to provision of quality services.
- Introduce school health education.
- Promote an active lifestyle, balanced diet, control alcohol abuse and health awareness to reduce non-communicable diseases.
- Reduce exposure to harmful environments by managing greenhouse gas emissions at acceptable levels.

Reduce disease burden to manageable levels

- Ensure all HIV positive individuals are on antiretroviral treatment
- Promote consistent condom use
- Effective microbicide routinely available to all women 15 years and older
- Universal availability to pre-exposure prophylaxis with antiretroviral treatment
- Reduce maternal mortality to appropriate target levels
- Reduce mother to child transmission of HIV-1 rates to below 2 percent nationally
- Increase prevention and successful treatment of tuberculosis
- Reduce violent crime and injuries from car accidents

- Provide quality pre-birth and postnatal services through a primary health care approach.

Build human resources

- Accelerate the production of appropriately-skilled nurses by reopening nursing colleges, accompanied by curriculum review.
- Accelerate production of community specialists in each of the five main specialist areas (medicine and surgery, including anaesthetics, obstetrics, paediatrics and psychiatry.
- Recruit, train and deploy between 700 000 and 1.3 million community health workers to implement community-based health care.
- Introduce polices to allow community health workers to administer antibiotics for specific childhood diseases and strengthen regulatory and quality controls for the distribution and appropriate use of antibiotics.

Strengthen national health system

- Put in place appropriate delegations – ensuring that management teams delivering services are led by a practising clinician.
- Determine minimum qualifications for hospital managers and ensure that all managers have the necessary qualifications.
- Improve governance by resourcing and strengthening statutory structures for community representation in health system governance.
- Eliminate health infrastructure backlogs and increase the use of ICT to treat and manage health conditions.

Implement the NHI scheme

- Implement the NHI scheme in a phased manner
- Improve the quality and care at public facilities
- Reduce the relative cost of private medical care
- Increase the number of medical professionals
- Introduce a patient record system and supporting information technology systems.