COMMENTS ON THE NATIONAL HEALTH INSURANCE POLICY PAPER OF 12 AUGUST 2011

COUNCIL FOR MEDICAL SCHEMES

19 JANUARY 2012

Foreword

It is with pleasure, excitement, and anticipation that the Council for Medical Schemes (CMS) submits these comments on the Department of Health's draft National Health Insurance (NHI) policy (1).

When the Department released the draft policy in August 2011, the Chairperson of Council convened a strategic management team consisting of Council members and senior officials at the CMS. This team engaged with the draft policy and held two workshops in September 2011. The Director General attended one of these team meetings, and gave a presentation on the policy. During its strategic planning sessions at the end of September and October 2011, the CMS aligned its strategy with the draft policy to ensure that CMS activities are supportive of the implementation of the policy. In preparation for this submission, all CMS employees had the opportunity to comment on the draft policy, and the author incorporated these comments in this submission. I am grateful for the comments we have received form Council members on a previous draft of this document.

It is clear that the healthcare environment will change dramatically with the full implementation of the NHI policy, and the CMS will continuously engage with the Department during the forthcoming years to ensure that the CMS focuses its regulatory activities on those matters which best support the full development of the NHI.

The CMS is supportive of this historic work, and wishes the Department well in its efforts to finalise and implement the policy.

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1 Layout of submission

This document consists of the formal CMS submission in response to the draft NHI policy.

Part I: (page 1) presents the context of NHI in South Africa in relation to the government's programme of action and the Department's 10-Point Plan for Healthcare and presents general comments on the draft NHI policy.

Part II: (page 8) contains an analysis of the current health system in relation to the World Health Organisation (WHO) health system goals and functions (2), makes recommendations that seek to strengthen the NHI policy, and includes comments and recommendations on transitional challenges.

Section 20 (page 68) contains a *list of recommendations* made throughout the document.

Part III: (page 72) considers the CMS's strategic goals in relation to the NHI policy.

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Part I: The context of NHI in South Africa

> *"Health policy was once thought to be about little more than providing funding and medical care – only academics discussed the social determinants of health. 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."*
>
> *National Planning Commission* (3)

2 National Health Insurance (NHI) in South Africa

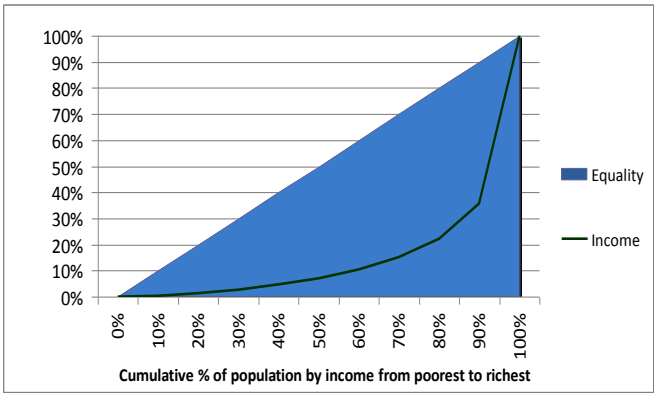
In consideration of the NHI discussion document and independent comments on the topic (4), it is important to comment on the term "NHI" and its meaning in the South African context before commenting on the proposed strategic health reform. In South Africa, the term NHI might be open to misinterpretations since the reform will not result in a typical insurance system, but will initially be publicly provided and will mainly be funded through general tax revenues (3).

The generally imprecise use of terms in the area of healthcare financing frequently leads to confusion; it is therefore useful to consider the specific meaning of "*NHI*" in the South African context. The term NHI, and its connotation with *"*insurance*,"* which in the South African context might be understood as a *"*government-*run* national medical scheme," is not important. The achievement of *equitable universal coverage* is however of paramount importance, and each country must develop a "home-grown system" to achieve this. Such a homegrown systems needs to embody an understanding of the meaning of universal health coverage from a localised perspective. As a minimum, universal health coverage must ensure access to services and risk protection. Annexure B (page 80) summarises the key characteristics of systems that have developed into universal coverage, and serves to demonstrate that many possible alternatives exist. Reference to acronyms such as NHI or SHI, (Social Health Insurance) or a single "magical" step – such as the creation of an NHI fund – are isolated instruments that by themselves do not guarantee success in ensuring access to healthcare. Instead, a comprehensive approach is required to address a complex and constantly developing set of challenges to universal access. This approach requires constant analysis, research, and evaluation within a public accountability framework (5).

2.1 Economic inequalities in South Africa

South Africa is a country with huge economic inequalities that contribute to health disparities among different population groups. Powerful historical and social forces, including vast income inequalities, poverty, unemployment, racial and gender discrimination and other social forces, have shaped the current health system (3). This complexity is important in consideration of the discussion document. Figure 1 shows that the bottom 80% of income earners earns approximately only 20% of the income in the country, leading to one of the worst Gini coefficients in the world.

Figure 1: **Lorenz curve for South Africa (6)**



2.2 Government's Programme of Action (2009-2014)

The huge inequity in income in South African society is accompanied by similar and equally marked inequity in access to healthcare. Table 1 (page 2) shows that government has identified 10 priority areas for 2009 to 2014, with emphasis on those factors which support the first priority area, being focus on economic growth. The inequity depicted in Figure 1 might have prompted government to prioritise the development of economic growth. The improvement of the health profile of all South Africans is the fifth priority area (7). In this context, investment in healthcare does support economic growth (8) and overall economic developments in as far as inequalities are reduced.

Table 1: **Government's Programme of Action (2009–2014) (7)**

Government's 10 priority areas, from 2009 up to 2014
1. Speed up **economic growth** and transform the economy to create decent work and sustainable livelihoods
2. Introduce a massive programme to build **economic and social infrastructure**
3. Develop and implement a comprehensive **rural development** strategy linked to land and agrarian reform and food security
4. Strengthen the skills and human resource base
5. Improve the **health profile** of all South Africans
6. Intensify the fight against **crime** and corruption
7. Build cohesive, caring and sustainable **communities**
8. Pursue **African advancement** and enhanced international cooperation
9. Ensure sustainable **resource management** and use
10. Build a **developmental state**, improve public services and strengthen democratic institutions

This approach, whereby the social determinants of health are targeted, is supported by the World Health Organisation (WHO), which states that progress in reducing health inequities is not possible without addressing social inequities (9). Furthermore, the global disease burden and the major

causes of health inequities, which are found in all countries[1], arise from social conditions, and by implication, cannot be addressed by the health system alone (9).

2.3 The Department of Health's 10-Point Plan (2009-2014)

Supported by the Development Bank-led road-map process (10), the Department has responded to the problems in the health system by identifying 10 strategic focus issues for 2009 to 2014 (11) (Table 2 below).

Table 2: Strategic issues included in the Department of Health's 10-Point Plan (11)

	Strategic issue
1.	Strategic leadership and social compact for better health outcomes
2.	Implementation of NHI
3.	Quality of services
4.	Overhauling the system and its management
5.	Improved human resources planning
6.	Revitalisation of infrastructure
7.	Accelerate implementation of communicable diseases management
8.	Mass mobilisation for better health
9.	Drug policy
10.	Research and development

The context within which "NHI" is stated, as an important strategy included in the Department's 10-Point Plan, cannot be ignored when considering the NHI discussion document. In this context, it is clear that "NHI" does not propose a "government-run national medical scheme" or mere financing reform, but that the draft NHI policy recognises the need for a much broader reform. The "NHI" process, amongst the other strategic issues included in the 10-Point Plan, includes the overhaul of the entire system, its management, and accountability, and includes a range of activities that are required to achieve equitable universal coverage. Criticism levelled at the NHI proposal because it does not adequately address "*the rehabilitation of public sector healthcare*" (12) is therefore unfounded.

3 History of healthcare financing reform in South Africa

The proposed NHI policy must be seen in the historic context of health policy development in South Africa.

The first public commission on healthcare in South Africa which included reference to National Health Insurance was the 1928 Pienaar Commission on old-age pensions and National Insurance, followed by the 1935 Collie Committee of Inquiry into National Health Insurance in 1935 (13). The

[1] For example, in the UK where universal and equal healthcare has been available for over 60 years, there are sharp differences in health outcomes in different parts of the country. In poorer parts, (Liverpool) male life expectancy is 67 years, opposed to 89 years for the richer parts of West London (12).

Gluckman Commission in 1948 also recommended a National Health Insurance system, but its focus was on a strong NHS[2] -type system (funded by a national health tax), with emphasis on primary healthcare (14).

The 1994 ANC Health Plan focused mostly on the development of a strong, publicly funded, publicly provided, decentralised NHS-type system with peripheral mention of a system of National Health Insurance. This policy included large reforms to strengthen the proposed district-based health system. During the mid- and late nineties, and early 2000's, various committees considered the financing of healthcare in South Africa, which included the Taylor Committee (2002) and the SHI (Social Health Insurance) task team.

In 2002, the Taylor Committee recommended the decentralisation of public services and the introduction of stronger governance structures, along with structural improvements in the regulation of medical schemes and a long-term institutional reform of the public system as well as the implementation of a purchaser-provider split within provinces (15).

At the 2007 Polokwane ANC conference, a resolution was adopted towards "*the implementation of the National Health Insurance* system *by further strengthening the public* healthcare *system and ensuring adequate provision of funding*." In itself, this statement might appear ambiguous because it refers to both a National Health Insurance system, and, in keeping with previous policy positions, a stronger public healthcare system.

Many media reports on the un-affordability of NHI preceded the ministerial appointment of an advisory committee on NHI in November 2009 (13). This response has very likely been due to the misunderstanding of the term NHI. There is consensus that it would be unaffordable to provide universal access through medical schemes at the current levels of production with the current limited tax base (16).

In relation to the alternatives for funding healthcare presented in Table 3 below, South Africa has a mixed system, with the publicly funded, publicly provided part mostly accessible to low-income and unemployed people, with a privately financed (tax-subsidised) and privately (and publicly) provided system. Imbalances between the different fragments have been detrimental to both subsystems, with cost escalations in the private "system" and multiple system failure across a range of programmes in the public sector (3).

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[2] Note that in developed countries there are three main types of systems (3) providing universal coverage, these are:

National Health Service (NHS):	Such as those in the UK, Spain, and Sweden. These are predominantly publicly funded and publicly provided systems.
National Health Insurance (NHI):	Financing is predominantly public, but provision is typically a public-private mix. Australia and Canada have single payer systems, while countries such as the Netherlands and Germany have developed multi-payer systems, which were built on occupational health insurance vehicles.
Private Health Insurance:	The US model of private health insurance is considered to be very expensive and inefficient.

Table 3: Alternatives for funding and providing healthcare (17)

		Provision	
		Public	Private
Finance	Public	1	2
	Private	3	4
	1 Public finance and public provision 2 Public finance and private provision	3 Private finance and public provision 4 Private finance and private provision	

4 General comments on draft NHI policy

The CMS supports the proposed NHI policy and will adjust its strategy to ensure unity of purpose in achieving equitable universal coverage. The CMS acts on the mandate contained in the Medical Schemes Act (131 of 1998), and will from time to time advise the Minister of Health on proposed amendments to the Act which could support the implementation of NHI.

In an effort to strengthen and assist in the implementation of the NHI policy, and to assist in the process of gaining equitable universal access, the following sections contain proposals to strengthen certain areas of the policy. These proposals are either research-based or based on specific experience that the CMS has gained in the execution of its regulatory duties over the past eleven years.

4.1 High-level understanding of the health system under NHI

Figure 2 on page 6 reflects the CMS's understanding of the flow of funds and the provision of services in a fully developed NHI. Under NHI, taxes will be collected by SARS and, in addition to the allocation to the provinces through the equitable share formula and the national Department of Health, an allocation will flow from Treasury to the NHI fund.

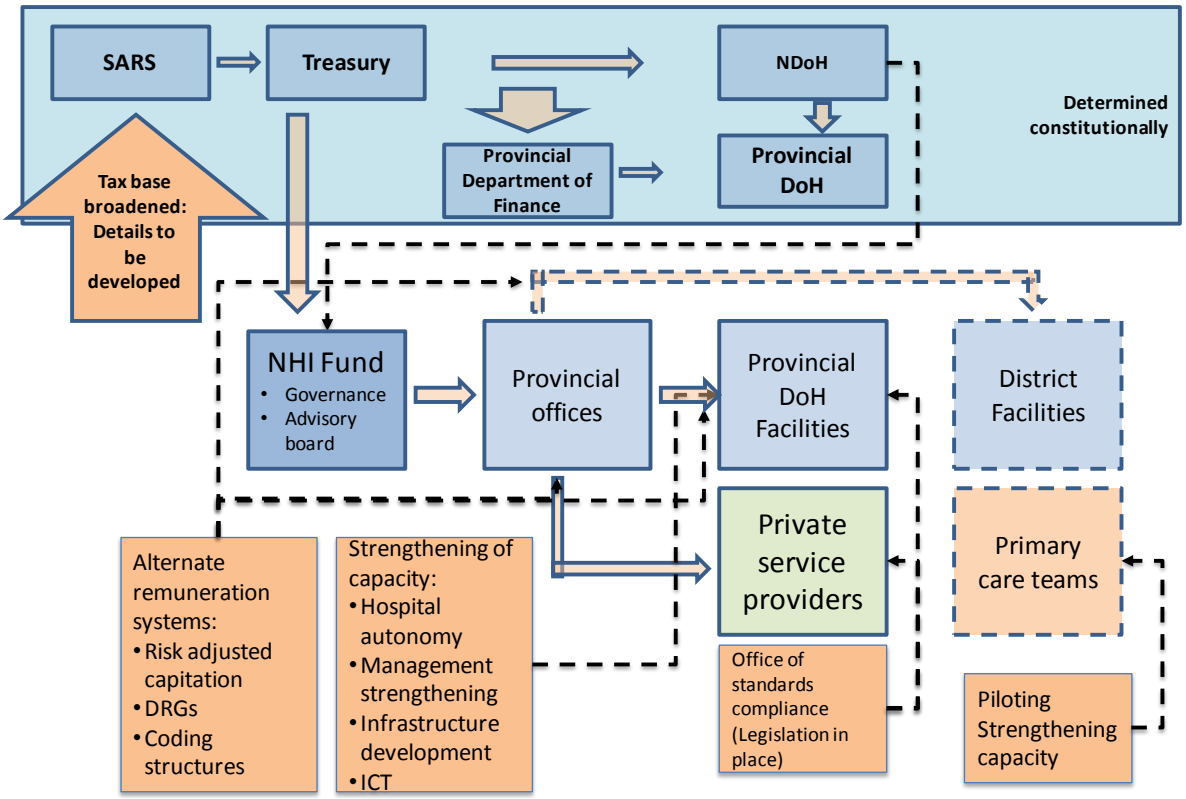
A key feature of the new system will be the creation of a purchaser-provider split, whereby the NHI fund (which will have provincial and district structures), will purchase services from private and public service providers. This active purchasing will rely on prospective reimbursement mechanisms such as case-based (e.g. DRGs) hospital payments and risk-adjusted capitation for primary care.

Another key feature of the system is the focus on primary care. Primary care teams will provide comprehensive and multidisciplinary primary care to reverse the current curative focus of the system. It is important to emphasise that curing sickness is not the only goal of the health system and for the most part, is not even the important goal of the health system.

Full implementation of the policy will lead to a complete reform of the health system that could meet the desired characteristics of the desired health system as identified by the National Planning Commission; these characteristics include (3):

- a revitalised and integrated health system;
- an evidence-based public and private health delivery system;
- clear separation of policy making from oversight and operations (see section 11.1.3, page 15, and section 11.1.5, page 16);
- authority is decentralised and administration is devolved to lowest levels (see section 11.1.6, page 17);
- clinical processes are rationalised and there is systematic use of data (see sections 11.1.2 and 19, pages 14 and 67); and
- infrastructure backlogs are addressed and there is greater use of ICT (see sections 12.2.1 and 19, pages 33 and 67).

Figure 2: Flow of funds and provision of services in the NHI framework



4.2 Economic impact of NHI

A statement in the Green Paper indicates that investment in health supports economic growth. This is supported by a recent KPMG analysis, which indicates that spending on healthcare is a long-term investment in the human capital of South Africa, and could lead to an average improvement of up to 0.3 percentage points in GDP growth (8).

4.3 Governance of NHI

The Green Paper suggests that the head of the NHI fund will report directly to the Minister of Health without a board. This is discussed in more detail in section 11.1.3 (page 15).

This document also makes recommendations in respect of governance and accountability at the service delivery level in section 11.1.5 (page 16).

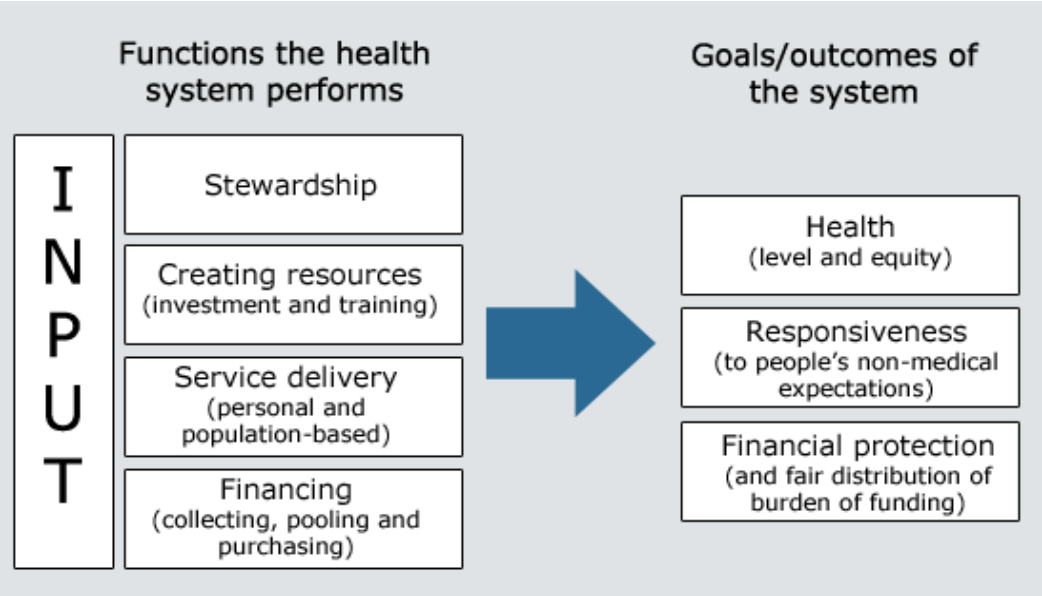
Part II: Evaluation of the current health system goals and functions with proposals to strengthen the draft NHI policy and comments on transitional challenges

This part considers the current attainment of health system goals, and is mostly of an observational nature. Specific recommendations appear in relation to the functions of the health system, starting from paragraph 10 (page 12).

5 Consideration of South Africa's attainment of health system goals

In consideration of the draft NHI policy, this submission evaluates the South African health system's performance in relation to the WHO health system goals. Figure 3 below shows that the four WHO health system functions (which includes financing, the creation of resources, service delivery and stewardship), address three health system goals: health (level and equity); responsiveness (to people's non-medical expectations); and financial protection (and fair distribution of the burden of funding) (2).

Figure 3: WHO's health system performance framework: functions and goals (2).[3]



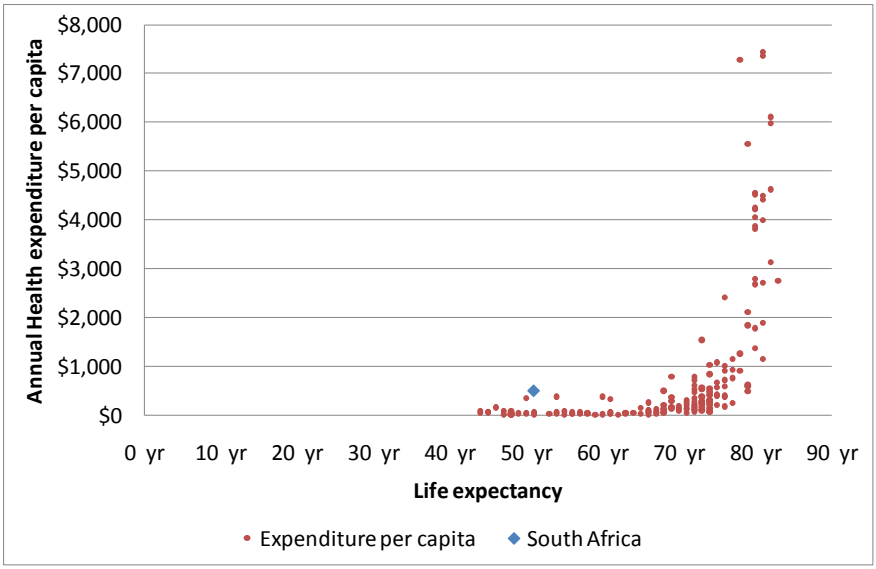
6 Health (level and equity)

South Africa's health system performs very poorly in relation to the amount of money it consumes, and performs below par in respect of most health indicators. This is in spite of good healthcare policy (3). Based on World Bank data (18), Figure 4 (page 9) shows that South Africa's life

[3] This framework shows the basic functions that organisations have to perform. While every health system is different, each must tackle the problems of designing, implementing, evaluating, and reforming the organisations and institutions that facilitate the four key functions (2).

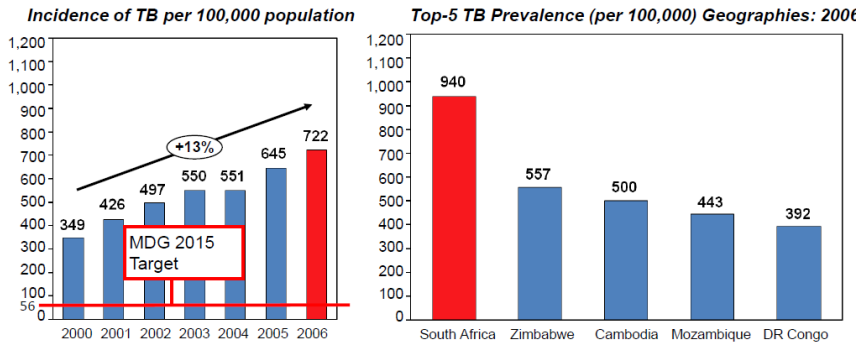
expectancy is about 55 years[4], while many countries that spend similar amounts per capita have life expectancies exceeding 70 years.

Figure 4: Health expenditure by life expectancy (2007) (18)



The Roadmap to Health produced by the Development Bank in 2009 (10) includes stark images demonstrating the failure of the South African health system. Figure 5 below shows the very high and increasing levels of tuberculosis (TB) in the country, and compares these numbers with those of our neighbours. Figure 6 (page 10) shows the high level of malnutrition in children that have died. Figure 7 (page 10) shows the very high prevalence of HIV and low life expectancy in comparison to 218 other countries during 2007.

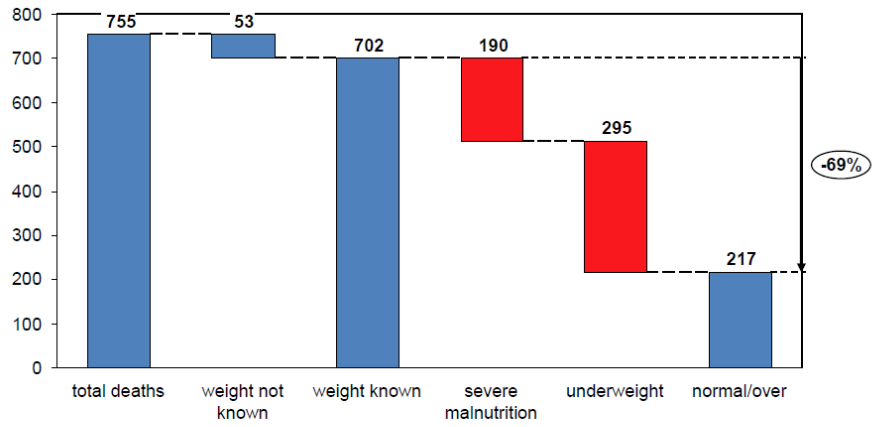
Figure 5: South African TB statistics (10)



- *TB-HIV co-infection was approximately 55% in 2002*
- *The number of people diagnosed with TB trebled between 1996 and 2006 (from 269 to 720 cases of TB per 100 000)*
- *900 cases of Extensive Drug Resistant TB were reported between 2004 and 2007*

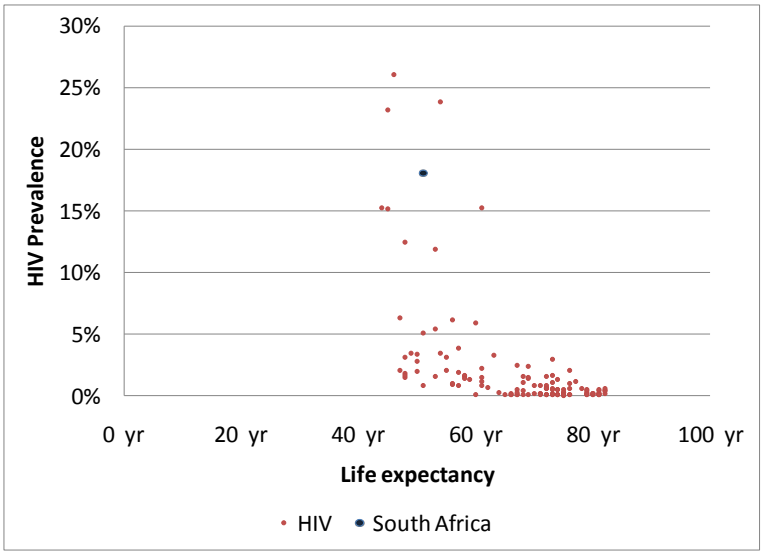
[4] The life expectancy figure is the average figure and may conceal the full situation. Should these numbers be available for medical scheme members versus non-medical scheme members, the inequity in the current system would be even starker.

Figure 6: Nutrition status in audit of 755 child deaths (10)



- of the known weights at death, 69% were underweight (including severe malnutrition)
- being underweight more than doubles case fatality rate for infectious diseases (risk of dying)
- Severe malnutrition in Mafikeng went from 22% in 2001 to 31% in 2003/4

Figure 7: High HIV prevalence and low life expectancy relative to other countries (2007) (18)



7 Responsiveness (to people's non-medical expectations)

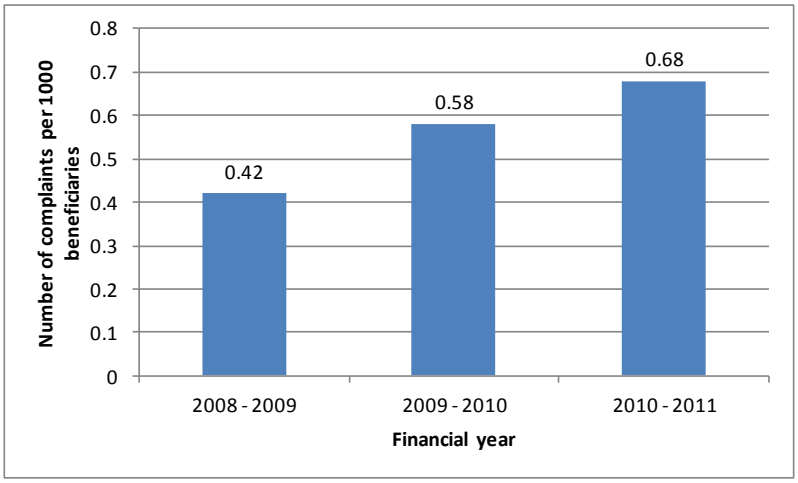
The CMS's areas of expertise do not include service delivery; therefore, comments on this area are very limited.

Official and other reports (10)(12)(19), and numerous press reports indicate that the system is not responsive to people's non-medical needs. Unnecessarily long waiting times, rudeness of staff, lack of cleanliness, and general unhappiness with the public sector is widely reported on in the media. The 2010 general household survey indicates low levels of satisfaction with public sector encounters (20).

In the private sector, consumers frequently accuse medical schemes of not being accessible to members, complain that medical scheme rules are hard to understand, and point out that medical schemes are quick to collect premiums but fail to pay claims when necessary.

The CMS has received an increased number of complaints in recent years (see Figure 8, page11). Many of these complaints are about the non-payment for prescribed minimum benefit (PMB) conditions and have increased due to resistance from some medical schemes led by the Board of Healthcare Funders (BHF) to Regulation 8 of the MSA, which requires PMB claims to be paid in full . In the 2010-2011 financial year, 5 351 complaints were resolved; 3 480 (65%) of these were resolved within 120 days of the date on which they were referred to the relevant medical scheme for comment (21 p. 65).

Figure 8: Number of complaints to CMS per 1 000 beneficiaries (21 p. 65)



8 Financial protection (and fair distribution of burden of funding)

8.1 Current financial protection and distribution of the burden of funding

Section 14.1 (page 38) discusses the distribution of healthcare financing between the public and private sectors and shows that even though not full protection against the financially catastrophic impact of the treatment of health events is covered through medical schemes, only about 16% of South Africans enjoy this cover. Employers and private individuals fund schemes privately, but contributors enjoy tax expenditure subsidies. Lower-income people without medical scheme cover are covered by the public sector.

Section 14.3.4 (page 47) deals with inequities in medical scheme cover, and identifies the well-recognised (5) phenomenon of inequity that arises from split risk pools.

9 Conclusion on the current attainment of health system goals

Health outcomes within the South African population vary starkly and coincide with differences in income and geographical location. Generally, poor rural people are wholly dependent on public sector healthcare and have much worse health indicators than a better-off, racially mixed class of

urban people with access to private sector healthcare, or relatively better public sector healthcare (12).

The preceding sections 5 to 8 present a gloomy picture and present a key motivation for a major reform of our health system; it is however important to consider some of the achievements over the past 15 years.

Table 4 below shows that there have been improvements in the system.

Table 4: Principle accomplishments and shortcomings of the South African health system (1994-2009) (19)

Accomplishments	Shortcomings
Legislation and gazetted policy	**Insufficient prevention and control of epidemics**
1 Free primary health care	1 Limited effort to curtail HIV/AIDS
2 Essential drugs programme	2 Emergence of MDR-TB and XDR-TB
3 Choice on termination of pregnancy	3 Lack of attention to the epidemic of alcohol abuse
4 Anti-tobacco legislation	**Persistently skewed allocation of resources between public & private sectors**
5 Community service for graduating health professionals	4 Inequitable spending patterns compared to health needs
	5 Insufficient health professionals in public sector
Better health systems management	**Weaknesses in health systems management**
6 Greater parity in district expenditure	6 Poor quality of care in key programmes
7 Clinic expansion and improvement	7 Operational inefficiencies
8 Hospital revitalisation programme	8 Insufficient delegation of authority
9 Improved immunisation programme	9 Persistently low health worker morale
10 Improved malaria control	10 Insufficient leadership and innovation

10 Comment on the functions performed by South Africa's health system: stewardship, creating resources, service delivery, and financing

In the implementation of NHI, it is important that the respective functions of the health system are carefully coordinated and developed in a manner that supports the implementation of NHI.

11 Stewardship

The present health system is marred by historic inadequate stewardship, which did not address inequities, and manifests in a private sector dominated by commercial interests, and inadequate management and resourcing of the public sector.

11.1 Stewardship: steering the system towards the implementation of NHI

The implementation of NHI will require careful coordination of a range of activities to ensure that the implementation is successful. The implementation of NHI is not merely a revised flow of tax funds towards healthcare, but constitutes a major reform requiring careful stewardship to prevent the derailing of this process.

The striking similarity between the US and South African systems in respect of financing, gives an indication of the difficulty of the reform. The USA and South Africa, despite being at very different stages of economical development, are characterised by high healthcare expenditure which are not reflected in good health outcomes, have relatively low public health expenditure (in comparison to private expenditure), are characterised by large voluntary pre-payment through private insurance (16), and represents inequitable access (22). This pattern is associated with a strong private sector with definite stakes in maintaining the status quo.

In the USA, there are lawsuits in process to declare the Obama reforms unconstitutional (22), and in South Africa, the press reported this as *"a warning for South Africa"* (23).

An argument for the transformation of the private sector to offer more affordable care than could be offered by schemes simply does not present a feasible alternative. There is consensus that extension of medical scheme cover to all is unaffordable and would cost up to an unprecedented 25% of GDP (16).

Considering the fact that more than 250 000 people are employed in the public health sector, in an environment with poor infrastructure, skills shortages, poor staff attitudes, low levels of patient satisfaction and management challenges (10) (12), it is clear that it is a huge challenge and through stewardship, all available resources must be applied to correct this.

Detractors have argued that because of the complexity of the transformation, the public sector cannot do this, and that both the public *and private* sectors need to be expanded to provide universal access (12).

To ensure success with the implementation of NHI, the creation of a social compact (strategic issue 1 in the Department's 10-Point Plan, Table 2, page 3) should ensure commitment by all stakeholders, which is required to harness public and private resources. Even though difficult to achieve, a collaborative approach to address the ills in the health system is most likely to be successful.

Recommendation 1: Harness available public and private sector resources through the creation of a collaborative atmosphere through a social compact (see Recommendation 2 and Recommendation 9)

The CMS proposes a range of stewardship activities in the following sections. These include the establishment of governance structures for the NHI (section 11.1.3 to 11.1.2, page 15) and better regulation of the private sector (section 11.2, page 18).

In respect of the continued regulation of medical schemes and other health insurance products during the implementation of NHI, the submission proposes interventions to strengthen these regulatory functions in paragraph 11.3 (page 22). These include proposed amendments to the Medical Schemes Act (131 of 1998) to strengthen the governance of medical schemes, to clarify various uncertainties, and to improve on various other regulatory activities mandated in the existing Act.

11.1.1 Sequence for the implementation of NHI[5]

An important first step is to continue working to ensure that the current trend of increasing public expenditure on health (Figure 18, page 41) is not only maintained, but also accelerated. Through the strengthening of the management and service delivery capacity of the public sector (see section 13, page 34), the Department of Health will demonstrate good use of resources and service delivery. An important requirement for the purchasing of services in the private sector is the development of active purchasing capacity within the NHI fund. Finally, the best way of collecting extra resources through dedicated taxes (income tax, VAT or "sin" taxes, or other innovative revenue sources – see section 16.2, page 52) should be considered and finalised.

Recommendation 2: **Prioritise the continued increase on public health expenditure, strengthen the public service delivery, develop the capacity to purchase from the private sector, and start increasing revenue collection**

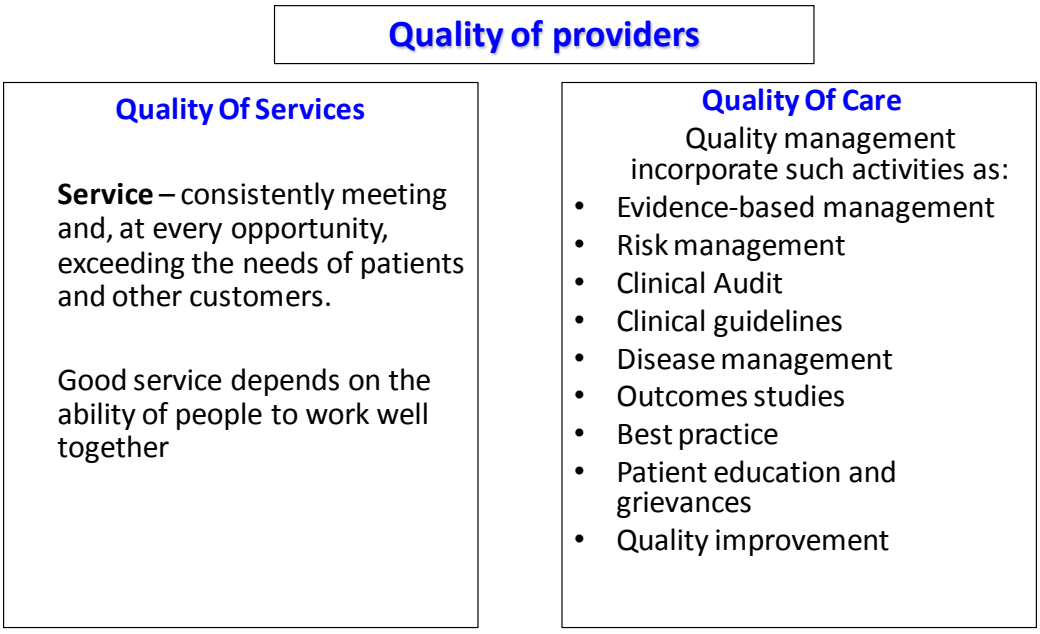
11.1.2 Clinical governance

It is critical the clinicians play an important leadership role throughout the system (24)(25).

> *"Central to the failure of the South African health care system is that the bureaucratic process has taken precedence over the clinical process. We need decentralisation at all levels, and an accountable delivery system led by health professionals"* (26).

Clinical governance is a framework through which organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish. Clinical governance demands a major shift in the values, culture, and leadership, to place greater focus on the quality of clinical care and to make it easier to bring about improvement and change in clinical practice(27).

Figure 9: **Quality of healthcare programmes**



[5] Sequencing priorities are based on an adaption of Prof Di McIntyre's proposals (16).

Figure 9 above demonstrates the quality of services and the quality of care determines the quality of providers. For clinical governance to be successful, health organisations must demonstrate the following features:

- An open and participative culture
- A commitment to quality that is shared by staff and managers
- A comprehensive programme of quality improvement systems
- Regular board level discussions
- Clear policies aimed at managing risk
- A tradition of active working with patients, users, carers and the public
- An ethos of multi-disciplinary team working
- Good use of information

The Clinical Governance Committee is the custodian of the continuous quality improvement of clinical care, must be appointed by the Board, consist of five members of whom at least two should be members of the Board. Care must be taken to avoid conflict of interest. Ensure that the committee has access to relevant information and to outside independent professional advice.

11.1.3 Governance of the NHI fund

Council discussed this arrangement but did not reach a consensus opinion. Many Council members agreed to the proposed arrangement, but some did express their reservations about the fact that the Green Paper did not propose the establishment of an NHI board, but included only advisory committees. The recommendation made in this section is therefore, based on an interpretation of governance structures that have been proven to work elsewhere.

Governance in a health insurance system includes active monitoring with a good feedback mechanism, regulation and an oversight structure (28).

Due to the fact that corruption is linked to reduced spending on operations, maintenance, medicine, schools, healthcare, and other social services, and because a high level of corruption has adverse consequences on child and infant mortality rates and on the percentage of low birth weight babies (29)(30) [6], governance structures should provide the necessary oversight to prevent corruption. Government has also indicated the intensification of the fight against crime and corruption as a priority area (see Table 1, page 2).

Recommendation 3: Consider corruption containment when designing governance structures

The World Bank has identified several mechanisms through which countries achieve good governance (28), and these include:

- Coherent decision-making structures
- Stakeholder participation
- Transparency and information
- Supervision and regulation
- Consistency and stability

[6] For example, an increase in corruption by one unit (on a scale of 0 to 10) raises the child mortality rate on average by 1.1 to 2.7 deaths per 1,000 live births (26).

Given this information, it might be prudent to have a ministerially appointed but independent board, with the powers to appoint (and dismiss) the fund executive – in concurrence with the Minister. Due to the complexity of the functions of an NHI board, it may be important to define the required technical skills and competencies statutorily. This requirement may be that the board includes individuals with knowledge and/or professional qualifications in health systems, epidemiology, clinical areas, finance, economics, actuarial sciences, human resources, legal qualifications, and clinical governance.

In respect of single-payer insurers (such as the NHI fund), external oversight mechanisms are required to ensure that the insurer is accountable for integrity, quality, and productivity (28). Such an oversight body will assist in achieving the desired state (3) of a clear separation between policy-making, and oversight and operations.

Recommendation 4: **The national NHI fund should have a governance structure that clearly separates policy-making from oversight and operations; the board must have statutorily defined technical competencies and have the power to appoint and remove the executive (in concurrence with the Minister)**

Subcommittees to the board may include the advisory committees referred to in the Green Paper, and should include a clinical governance sub-committee which could ensure that clinicians have an important role in the system (see section 11.1.2, page 14).

Recommendation 5: **The national NHI board must have advisory sub-committees, which should include a clinical governance sub-committee**

11.1.4 Governance of sub-national NHI structures

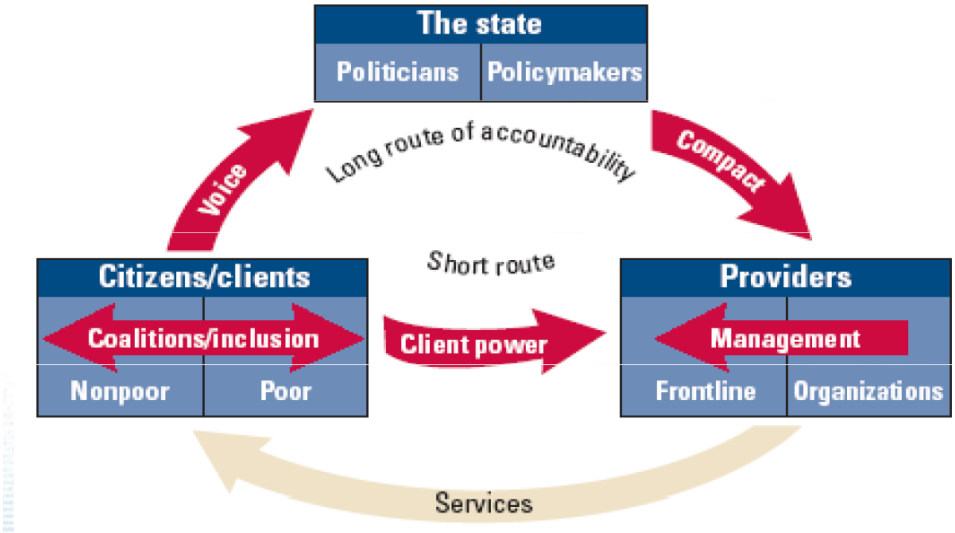
Without detracting from the advantages of having a single payer, sub-national structures should also be accountable to the lowest feasible levels. The Green Paper states that sub-national offices will be established. It is assumed that provincial and district offices will be established. It is recommended that governance structures, accountable to the local communities and the national/provincial NHI structures, are established.

Recommendation 6: **Independent governance structures, accountable to communities, should be developed for sub-national NHI structures**

11.1.5 Governance and accountability of service delivery

The purpose of Figure 10 below is to show the advantage of mechanisms for the rapid feedback by clients/citizens to service providers via a short route. To enable this, governance structures should be decentralised to the lowest feasible level.

Figure 10: Governance framework: key relationships of power (28)



Many of the shortcomings of the health system have been attributed to a breakdown of accountability structures and the absence of accountability structures at a decentralised level with excessive centralisation in decision-making (3)(15).

11.1.5.1 Leadership and management

Leadership and management will be bolstered through the implementation of an effective governance and management framework from local to national levels, with emphasis on community-level accountability (3). Additional capacity should be developed through interaction and partnership with non-governmental organisations (NGOs) and the private sector (3)(12).

11.1.5.2 Office of Standards Compliance

The CMS fully supports the Office of Standards Compliance and with its experience in the accreditation of administrators, managed care organisations and brokers, will provide assistance if required. The achievement of common basic standards in the public and private sectors (3) is important before the NHI could purchase services from either public or private facilities.

11.1.6 Decentralisation of authority to the lowest feasible levels

Given the quadruple burden of disease the country faces (31), the principal problems in the system, which are leadership, organisation, and management (12), must be addressed. The decentralisation of authority to the lowest levels has long been considered as a potential solution to the problem, and was included in the 1997 white paper (15). The CMS supports the initiative of the department to implement the required structures as part of the implementation of the NHI process.

Considerable capacity needs to be built in this area; comments in this respect are made in section 12.2.3 (page 33).

11.1.6.1 District health authorities

The CMS supports the establishment of district health authorities. It is important that these structures have governance systems, which make them accountable to the local communities where they serve, and these structures should account to and fall under the supervision of the provincial governments. In this manner, the recommendation by the National Planning Commission on devolution of authority will be realised (3) (15) District boards should be operationally independent, act in accordance with a statutorily defined mandate, and must have the powers to appoint and remove the district executive.

Recommendation 7: District health authorities should be established which must be accountable to local communities and provincial governments

11.1.6.2 Public hospitals

Public hospitals should also have independent boards, accountable to local communities, with the powers to appoint and remove the district executive.

Recommendation 8: The role of public hospital boards should be strengthened so that these boards are independent and accountable to local communities, and have the powers to appoint and remove the executive

11.2 Improved supply-side regulation in the private sector

> *"The private sector has the potential to play a positive role in improving the performance of the health system. But for this to happen, governments must fulfil the core public function of stewardship. Proper incentives and adequate information are two powerful tools to improve performance."*
>
> *World Health Organisation* (32 p. xvi)

Paragraph 12 of the Green Paper states that the negative attributes of the South African health system make it unsustainable, destructive, very costly, highly curative, and hospi-centric. The CMS proposes a range of measures to address some of these attributes in the private sector, including measures to improve the functioning of the healthcare market.

Vested commercial interests will result in resistance against many of these proposals. It is therefore important to recognise the potential positive role that the private sector could play, and sequence NHI implementation in such a manner that demonstrable benefits are visible to all stakeholders.

Recommendation 9: Demonstrate the role of the private sector to stakeholders by actively purchasing services from the private sector

11.2.1 Improve the functioning of the market

The private health sector is in need of reform to maximise its contribution to overall health system performance. The key issues are to contain price escalation, including the stimulation of competition (based on quality and price) to encourage innovation in products and services offered which could support the drive to improve primary care, and to address perverse incentives (12).

Adequate regulation of the private sector will assist in the implementation of NHI, and the current inequities, albeit in a different guise, might simply continue if the private sector is not regulated better. The drivers of prices in private sector healthcare have been disputed (12), and many negative comments were made on the previous discussion paper on determination of health prices in the private sector (33). The Department should therefore support the Competition Commission in its efforts to conduct a market inquiry into healthcare (34).

This could broaden access to quality healthcare and improve management of healthcare (12).

A range of recommendations, based on a CMS research brief (35), of which some elements are included in a discussion document on the determination of healthcare prices in the private sector (33), follows below. The Competition Commission's market enquiry[7] could be run in parallel to the processes that are required to establish a statutory pricing authority, which will support the purchasing of services in the current system as well as in the fully developed NHI (see section 18 on purchasing, page 53).

Recommendation 10: **Remove the market power imbalance in the determination of healthcare prices through the re-establishment of central bargaining in a statutory pricing regulator**

Recommendation 11: **Remove vertical relationships between hospital groups and their supply chain, including relationships with pathology groups, radiology groups, pharmacies and pharmaceutical suppliers, medical device provision, and consumables and surgicals used in-hospital**

Recommendation 12: **Remove conflicts of interest with related services that occur through ownership links, shares, inducements of any form, between specialists, emergency transport providers and general practitioners**

Recommendation 13: **Reduce market concentration and private bed proliferation in the major metropolitan areas through improvements in the hospital licensing system; licensing should require a minimum level of diversity in hospital ownership, require that a minimum level of hospital licenses are held by non-profit hospital groups, that licenses are preferentially granted to hospitals that directly employ their specialists and general practitioners, and strict population-based criteria for the establishment and licensing of new private hospitals should be applied**

Private hospitals cannot employ doctors and therefore compete with each other to attract them. This results in a hospital "arms race" (36)(37) (38)(39), whereby excess capacity is invested in private facilities and equipment. This drives up unit costs and encourages focus on specialised and hospital-based care over prevention and primary care. The existing fee-for-service funding framework provides little incentive to compete on price or innovate in delivery. Cost containment and innovation in the private healthcare sector by attracting low-cost multinational players, are less likely if these concerns are not addressed, and as long as it is not possible to employ doctors (12). The direct employment of doctors by private hospitals is a well-established and ethical arrangement that does not result in problematic conflicts of interest. Establishing "staff-model" hospitals as

[7] CMS officials have had a number of meetings with Competition Commission staff, and will continue with this engagement. During a meeting with Competition Commission Staff, it was indicated that the intention is to publish the terms of reference for such an enquiry during July 2012, and to conduct the enquiry during 2013.

competition for fee-for-service hospitals will enhance price competition amongst service providers (35).

Employment of doctors by private hospitals must be conditional and carefully monitored. Such employment should *exclude* remuneration on a fee-for-service basis and should be subject to the establishment of *clinical governance structures* within the employer. The employment of doctors, or the introduction of alternate reimbursement mechanisms such as DRGs or risk-adjusted capitation mechanisms, will fail to reduce costs if the underlying imbalance in market power is not addressed through a statutory pricing authority.

Recommendation 14: Create conditions under which private hospitals can employ specialists and general practitioners to allow for the establishment of staff-model Health Maintenance Organisations (HMOs)

11.2.2 Establish a statutory health pricing authority to stabilise cost increases, regulate aspects of private hospital activities, and support NHI purchasing

The Department of Health and the CMS have previously published a discussion document on the determination of prices in the private sector (33). This document proposed the establishment of a statutory pricing authority.

With the release of the Green Paper, the scope of this proposed authority should be reconsidered to support the introduction of NHI (see Figure 11 below).

New functions for the authority may include the regulation of private providers (see Recommendation 10 to Recommendation 13). In addition, the proposed statutory body should support the NHI purchasing function through the provision of independent technical support in the determination of risk-adjusted capitation cost weights (see section 18.2.1) as well as the determination of Diagnosis Related Groups (DRGs) cost weights (see section 18.2.2). The Medicines Pricing Committee function should also be included. It should include a strong research arm and collaborate with other agencies where appropriate.

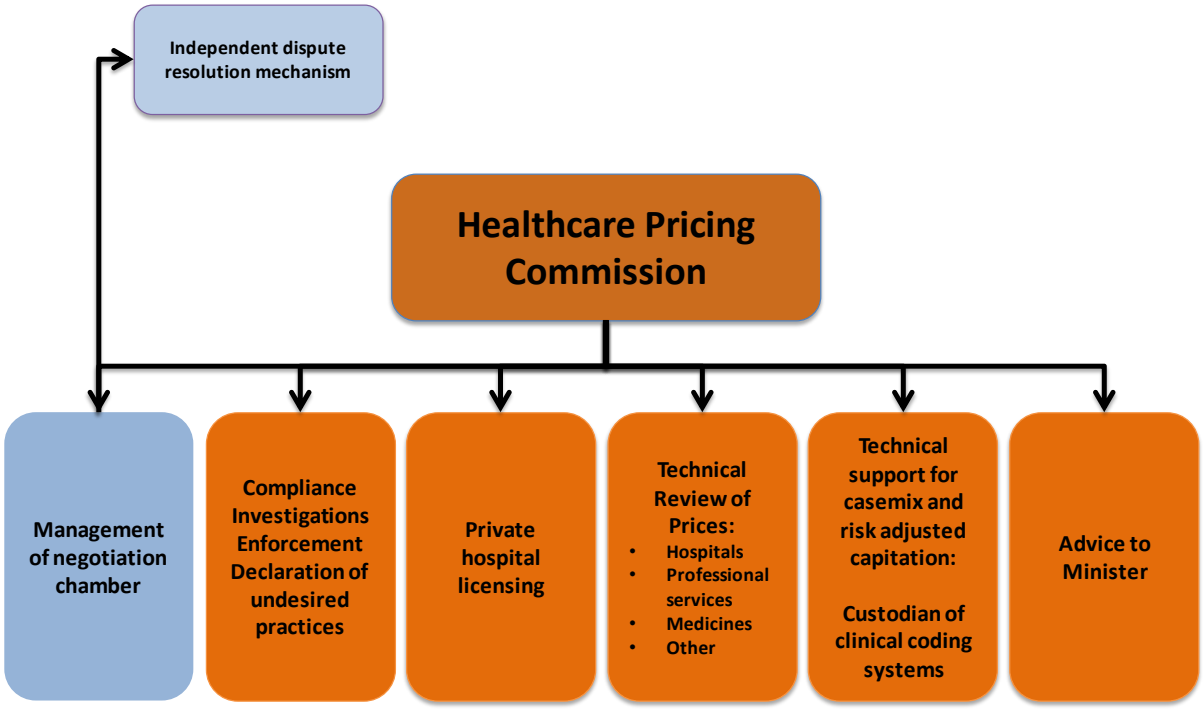
The full technical function for the development of Casemix-based remuneration systems (e.g. DRGs), and risk-adjusted per capita payment models, including custodianship of clinical coding systems, should be included in the function of this proposed authority.

Such an authority should be operationally independent of the NHI fund and the Department, and act within a strict statutory mandate, to achieve the trust of all stakeholders. The Hospital Association of South Africa (HASA) has indicated its full support for such an independent authority during discussions on this matter at the Health Portfolio Committee in Parliament on 27 July 2011.

A factor, which has contributed to the success of the South African Revenue Services, has been the operational independence it has enjoyed since its establishment (40 p. 16). Such operational independence is embodied in National Treasury's policy document on the regulation of the financial services sector, and is explained in the quotations below (41):

> ***"Principle 5a: Regulators must operate objectively with integrity and be operationally independent, but must also be accountable for their actions and performance.*** *Regulators must be empowered to work without fear or favour and be operationally independent within an approved legislative and policy framework. They must operate transparently and fairly within the law, and be accountable for their actions – meeting agreed performance objectives and targets for each year. Special mechanisms may need to be considered to protect the integrity of regulators, and avoid abuse and unwarranted interference from those breaking the rules.*
>
> ***Principle 5b: Governance arrangements for regulators and standard-setters must be reviewed, so that boards perform only governance functions.*** *The governance arrangements for all regulators must be reviewed. Where boards exist, they should be involved in governance issues only, and not policy or operational issues. Governance arrangements must ensure that regulators have operational independence, and that they can act without seeking approvals from the board when conducting their operational, monitoring, licensing or sanctioning activities. Employees of regulated entities should not be serving on the boards of regulatory bodies."*

Figure 11: Key functions of a proposed statutory pricing regulatory authority



Recommendation 15: Reconsider the functions of the proposed statutory pricing regulator to oversee a health price negotiation chamber, ensure compliance, enforcement, and the capacity to declare undesirable business practices, to issue private hospital licences, to do a technical review of health prices, to provide independent

technical support to the NHI purchasing function, and be the custodian of clinical coding systems

11.3 Continued regulation of medical schemes and other healthcare funders

Stewardship over the supply of healthcare is not enough; the regulation of funders is critical to address risk pool inequities (5).

The exact role and format of medical schemes, or private health insurance, will change over the 14-year period as the Department of Health implements NHI. An economic analysis of the 2006 General Household Survey (GHS) and Income and Expenditure Survey (IES) data by the CMS has indicated that a key constraint preventing medical scheme membership by a larger portion of the population is the affordability of medical schemes. It follows naturally that, as the NHI is implemented and public sector services improve, many lower-income households who currently can only just afford to belong to medical schemes, will forfeit their medical scheme memberships as soon as they are satisfied that the NHI offers an acceptable alternative.

In future the role of voluntary private schemes may be different, and could take the form of complementary (to offer "top-up" for additional services, or cover possible co-payments), supplementary (to potentially buy faster access, or a larger choice of providers), or substitutive insurance (where the members will have access to NHI services or private services) (16).

This increased complexity in private health insurance, including medical schemes, which will follow the introduction of NHI requires not only that the regulation of medical schemes be strengthened, but that the scope of regulation be increased to progressively better regulate other health insurance products that are not covered under the Medical Schemes Act (131 of 1998). A key element of such regulatory activities must be the protection of risk pools, to ensure that the private insurance schemes do not selectively take on younger and healthier risk profiles. This would lead thereto that younger and healthier members of the population get private cover while the NHI risk pool needs to cater for the sicker and older members of the population. Large differences between the risk profiles of different groups frequently present a problem in countries with universal access, where such inequities make universal access policies less effective (5). Improvements in health systems are incremental and it is crucial that gains that have been realised in regulating the medical schemes industry since the 1960s be not lost. Keeping a robust framework in place to regulate medical schemes will ensure achievement of this purpose.

Recommendation 16: The development of supplementary, complementary or substitutive insurance products must be carefully monitored and interventions, which should include risk adjustment mechanisms, must be instituted to protect risk pools and prevent discrimination against older and sicker members of the population

11.3.1 Amendments to the Medical Schemes Act (131 of 1998)

To strengthen the regulation of medical schemes, a number of uncertainties in the Medical Schemes Act should be clarified.

The key areas for amendments include:

1. the definition of the business of a medical scheme (to assist in the clarification of the demarcation between the business of a medical scheme and the business of ordinary commercial insurance);
2. the provisions that regulate the governance of medical schemes (to further remove improper conflicts of interest and prevalent corruption);
3. provisions which limit cross-subsidisation form young and healthy members to older and sicker members of the same scheme (to improve solidarity in healthcare funding);
4. the waiting periods and late-joiner provisions (to prevent unfair discrimination against vulnerable applicants);
5. provisions on the appeal process (to improve fairness to members of the public);
6. provisions regulating broker payments (to remove conflicts of interest and properly distinguish between marketing activities and independent advice to the public);
7. prescribed minimum benefit (PMB) provisions (to remove gaps in benefits with catastrophic financial implications for members);
8. removal of the requirement of concurrence with Council in respect of routinely performed executive duties (to improve administrative efficiency);
9. create the capacity to have accurate data on health service professionals (to assist in human resource planning); and
10. various incidental matters (to improve the regulatory capacity of the CMS).

Recommendation 17: Amendments to the Medical Schemes Act to strengthen regulation of medical schemes in support of the implementation of NHI

11.3.2 Review of the mandatory minimum benefits

The mandatory minimum benefits (MMBs)[8] (PMBs) need to be reviewed and strengthened to prevent dumping of medically insured patients on the NHI. MMBs are also required to prevent cream skimming (which would leave the NHI to take care of the sick and old while the young and healthy belong to private medical insurance). Finally, through careful design, MMBs could guide the private sector towards better-coordinated primary care and a public-interest focus. This is required to correct the current curative and commercial focus and includes the improvement of benefit definitions [9] (42), which seek to mitigate moral hazard and ensure the application of cost-effective, evidence-based and affordable healthcare interventions.

> *"Often, as was the case with unregulated private health insurance in Argentina until 1996, private insurance responds to consumer demand by focusing benefit packages on low-cost and high frequency interventions, and excluding very high-cost and low frequency interventions (catastrophic events) which are most appropriately included in pooling*

[8] The term MMBs is preferred above the current PMBs (Prescribed Minimum Benefits) in the medical schemes environment. This is an internationally used term, and the mandate might not always be by way of regulations made in terms of an Act, but other mechanisms could be employed to ensure that a population has access to a minimum set of benefits.

[9] Benefit definitions constitute clear, comprehensive descriptions of the benefits that, in terms of the provisions of the PMB regulations, must be available for specific prescribed minimum benefit conditions. These descriptions should contain condition-specific standardised entry and verification criteria, stipulate defined baskets of services, care, and goods associated with such a benefit. Benefit definitions may include formularies, and for the provision of any specific benefit, specify the setting and level of care *(including primary care)* that are most appropriate for the treatment of the relevant prescribed medical condition.

arrangements. Regulating minimum benefits for all members, including coverage of catastrophic events by each fund or through re-insurance, is necessary in these circumstances."

World Health Organisation (32 p. 111)

11.3.1 Publication of demarcation regulations

The Insurance Laws Amendment Act of 2008 has amended the Long-term Insurance Act (52 of 1998) as well as the Short-term Insurance Act (53 of 1998), and represents the enabling legislation to address the demarcation matter. This legislation gives the Minister of Finance, in consultation with the Minister of Health, the Registrar of the Financial Services Board (FSB), and the Registrar of Medical Schemes, the power to make regulations in this respect. These regulations can be made in spite of the definition of the business of a medical scheme in the Medical Schemes Act.

National Treasury has established a work group where the FSB, Treasury, the Department and representatives of the insurance industry debated the format of the regulations. The Minister of Finance approved the draft regulations, and the process of seeking concurrence by the Minister of Health started on 14 December 2010. The Registrar has given his approval for the publication of these regulations on 13 January 2011, and has asked the Minister to do the same.

These regulations could be in place by June 2012. The implementation of these regulations will prevent the cherry picking of young and healthy lives by the short-term insurance industry, and ensure that risk pools, including the NHI, are protected better.

Recommendation 18: Demarcation regulations must be adjusted over time as NHI matures to prevent the dumping of sicker and older members of the society on the NHI risk pool, preventing younger and healthier members of the public to belong to risk-rated low-risk health insurance risk pools, causing harm to other risk pools

11.3.2 Protection of risk pools

11.3.2.1 Introduction

A risk adjustment mechanism is required to improve the stability of the medical schemes environment during the development of NHI over the next 15 years. Such a mechanism will be required even after the successful implementation of NHI to prevent discrimination against older and sicker members of society. Unbalanced risk pools are problems in many universal access systems (5), and require government intervention to prevent discrimination against older and sicker members of society.

It may be argued that, with the implementation of NHI, medical schemes will disappear. This is very unlikely; even in advanced economies where there are fully developed universal access systems, private insurance remains an important part of healthcare financing[10], and must therefore be regulated in the public interest. Risk adjustment is merely incidental to the regulation of risk pools, and ***does not constitute a specific policy direction for healthcare financing***.

Many countries have addressed this problem through risk adjustment systems (see Table 5 below).

[10] For example, in June 2011 44.3% of the population had private health insurance in Australia, where the private sector *"exists more or less happily alongside the public system"* (63)

Table 5: Countries with risk adjustment systems (43)(44)

Australia	New Zealand	Sweden
Belgium	Russian Federation	Chile
Columbia	Switzerland	France
Czech Republic	United Kingdom	Japan
Germany	United States of America	Italy
Ireland	Canada	Denmark
Israel	Finland	Spain
Netherlands	Norway	Taiwan

11.3.2.2 Motivation for risk adjustment

In the absence of risk adjustment, the platform of community-rating and social solidarity is eroded, as cherry picking of good risk by some schemes through benefit design and other methods results in an increasingly unequal distribution of risk between medical schemes. This leaves vulnerable members on schemes with relatively higher risk facing increasingly unaffordable contribution levels relative to other schemes. The absence of risk adjustment also has an impact on overall health care costs. Some schemes base their competitive advantage on attracting younger and healthier beneficiaries thus having a reduced incentive to improve efficiency in the delivery of services.

Risk adjustment is defined as "*the use of information to calculate the expected health expenditures of individual consumers over a fixed interval of time (e.g. month, quarter, or year) and set subsidies to consumers or health plans to improve efficiency and equity*" (45).

In a centralised public sector system generally funded from general taxation, such as the National Health System (NHS) in the United Kingdom[11], or the NHI as proposed in the Green Paper, the management of such systems is usually organised on a geographical basis. The main purpose of risk-adjusted capitation is to offer local areas the means to secure national healthcare objectives of ensuring equal access to healthcare according to healthcare needs. Risk adjustment ensures that each authority administratively responsible for payments has the correct level of funding relative to the population it serves.

In England, a resource allocation formula allocates payments to 100 health authorities, adjusted for age, mortality, morbidity, unemployment, the elderly living alone, ethnicity and socio-economic status (see below for new developments in relation to capitated provider payments in the UK).

In New South Wales in Australia, a resource distribution formula adjusts capitation allocations to 17 area health services based on aggregate factors of mortality, education level, rurality, and individual factors of age, gender, ethnic group, and homelessness. Similar factors are used for budgetary allocations among the four regions in New Zealand, and among the 17 regional health authorities in Alberta Province in Canada.

In devolved public sector systems[12], the management of healthcare is devolved from a national (or state) level of government to a lower tier of government, with some or all of healthcare being

[11] Other examples include Italy, New Zealand, the state of New South Wales in Australia, and Alberta Province in Canada

[12] Examples include Denmark, Finland, Norway, Spain, and Sweden.

funded from local taxes. Due to variances in the health status of local populations and the relative sizes of local tax bases, this system could result in unacceptable variations in local healthcare taxation. To prevent this, intergovernmental transfers are effected, based on risk-adjusted capitation payments. This allows local governments to levy standard levels of taxes while delivering a uniform package of care to populations that have different needs due to differing demographic characteristics and health status.

Risk adjustment has important applications to ensure equitable budgetary allocations to the authorities administratively responsible for purchasing health services, to ensure equity in the case of devolution of revenue collection to local authorities, and to ensure equity in the actual payments made to healthcare providers (public or private) by purchasing authorities.

In relation to the last-mentioned point, without an adjustment for an enrolee's health status, providers have significant financial incentives to care for those in good health and to avoid those who have special needs. These incentives apply both in relation to public sector providers (keen to balance budgets, to free up financial resources for expansion, to improve facilities, and improved service provision) and private sector providers (keen to maximise profit).

Capitation rate-setting approaches which do not sufficiently account for enrolees' health status, could result in providers facing adverse financial conditions if they attract many individuals consuming a high number of (or high intensity) health services. As a result, individuals at high risk for consuming healthcare services may face restricted access to care (46). (See section 18.2.1, page 60 on the development of risk adjusted capitation models).

In the UK, capitation has been extended beyond the budgets of health authorities. It is now also applied in payments to general practices, through the fund-holding scheme, and now to primary care groups and trusts. These organisations are replacing health authorities as the main purchasers of health services. Therefore, it has been suggested that methods of funding that take into account differences in case mix will increasingly be needed to deal with large variations in prescribing rates and costs. Disputes between general practitioners and prescribing advisers about the fairness of prescribing budgets are minimised through risk adjustment. The use of risk adjustment could help reduce such problems by providing better measures of the health status and clinical characteristics of practice populations (47).

The NHI system in Taiwan is based on a publicly administered single-payer system with mandatory enrolment and universal coverage. There is a mix of public and private providers. Fee-for-service has been the major unit of payment, but the system is undergoing payment reform, centred more on the use of global budgets and making more use of case payment based on diagnostic-related groupers. Recent proposals for the reform of Taiwan's NHI system include risk adjustment mechanisms (48)(49).

Aside from ensuring equity in budget allocations and revenue collection, and proper alignment of financial and clinical incentives in payment of providers, risk adjustment has a variety of other applications, which are equally applicable in a multiple funding pool environment as in a single funding pool environment. These include providing information useful for planning and monitoring health services, and improving processes of clinical governance (42).

11.3.2.3 Implications of split risk pools for older and sicker groups

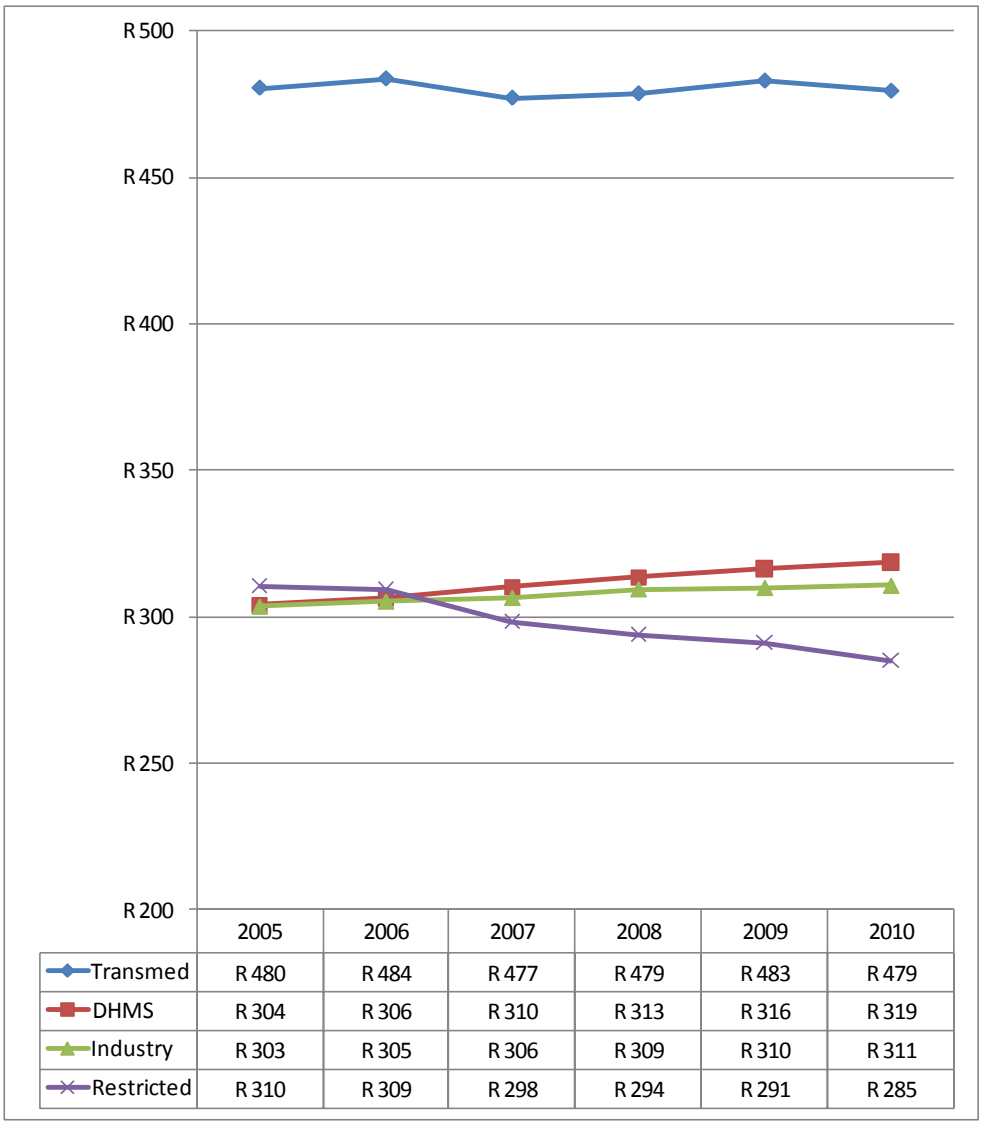
Figure 12 (page 28) demonstrates the huge impact that different demographic profiles has on selected industry groupings. The figure shows that in 2010, the PMB costs faced by the industry were about R311 per beneficiary per month (pbpm). By contrast, Discovery Health Medical Scheme (DHMS), which has less favourable age profiles, faced a cost of R319 pbpm. Restricted schemes, which have been facing a constantly reducing risk due to the impact of the Government Employees Medical Scheme (GEMS)[13] , faced a PMB cost risk of approximately R285 pbpm.

The graph glaringly demonstrates the costs faced by Transmed, a scheme with many older and sicker members; for 2010, these costs were estimated at R479 pbpm. Figure 13 (page 29) demonstrates that in 2009, Transmed faced a PMB cost risk of R483 pbpm opposed to R253 pbpm for GEMS.

These large differentials exist purely because of split risk pools.

[13] Due to its favourable age profile, GEMS faced an estimated PMB cost of R253 pbpm, opposed to the Industry average of R311 pbpm in 2009 (see Figure 13, page 27).

Figure 12: **Age-only weighting table applied to demographic profiles to estimate PMB costs from 2005 to 2010, for Transmed, DHMS, the industry, and restricted schemes (2009 prices)**



	2005	2006	2007	2008	2009	2010
Transmed	R 480	R 484	R 477	R 479	R 483	R 479
DHMS	R 304	R 306	R 310	R 313	R 316	R 319
Industry	R 303	R 305	R 306	R 309	R 310	R 311
Restricted	R 310	R 309	R 298	R 294	R 291	R 285

Figure 13: PMB costs from 2005 to 2009, for GEMS and Transmed (2009 prices)

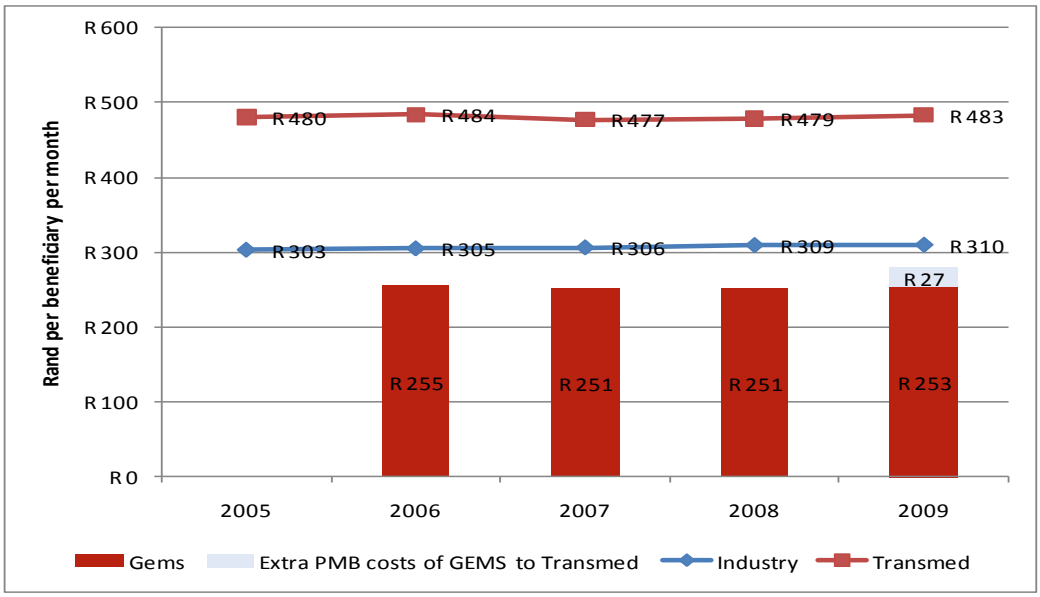
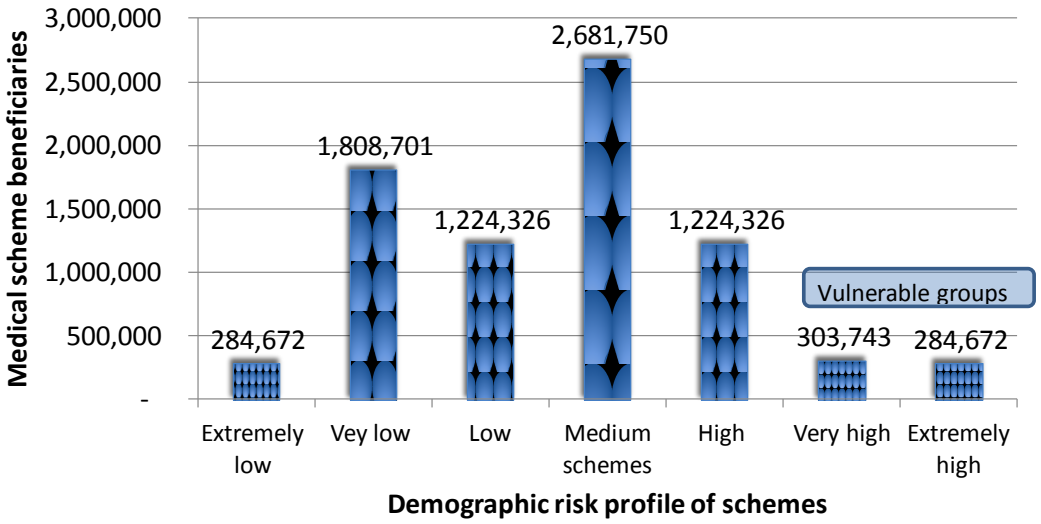


Figure 14 (page 29) shows that even though there are approximately 600 000 beneficiaries (303 743 plus 284 672) in vulnerable groups who may lose medical scheme cover, there are more than 7 million other beneficiaries who are younger and healthier who could support the older beneficiaries through a system of risk adjustment.

Figure 14: Distribution of scheme beneficiaries by risk profile



11.3.2.4 Recommendation

The NHI Green Paper is makes it clear that it will take at least 15 years to realise the full development of NHI. As the public sector improves and the NHI capacity to purchase services from the private sector develops, it is very likely that younger and healthier members will opt out of medical scheme cover before older and sicker members because they already pay taxes and do not perceive the need for cover. This will have a negative effect on the risk profile of remaining schemes in a drastic manner, which will lead to the collapse of these schemes, and the sudden dumping of

large numbers of older and sicker members on the NHI in an uncoordinated and probably chaotic manner. The impact of this will be to reverse some of the gains to the health system that have been realised through the implementation of NHI.

Risk adjustment among medical schemes, which could be implemented within three years, would not only protect older and sicker beneficiaries during the development of NHI, but would also serve the NHI by allowing a smooth and coordinated transition, and would allow the continued regulation of medical schemes after the full implementation of NHI. In addition, the methodologies applied to assess scheme risks are virtually identical to the methods that are required for risk-adjusted capitation payments. The experience with risk adjustment will speed up the development of risk-adjusted capitation payments (See section 18.2.1, page 60).

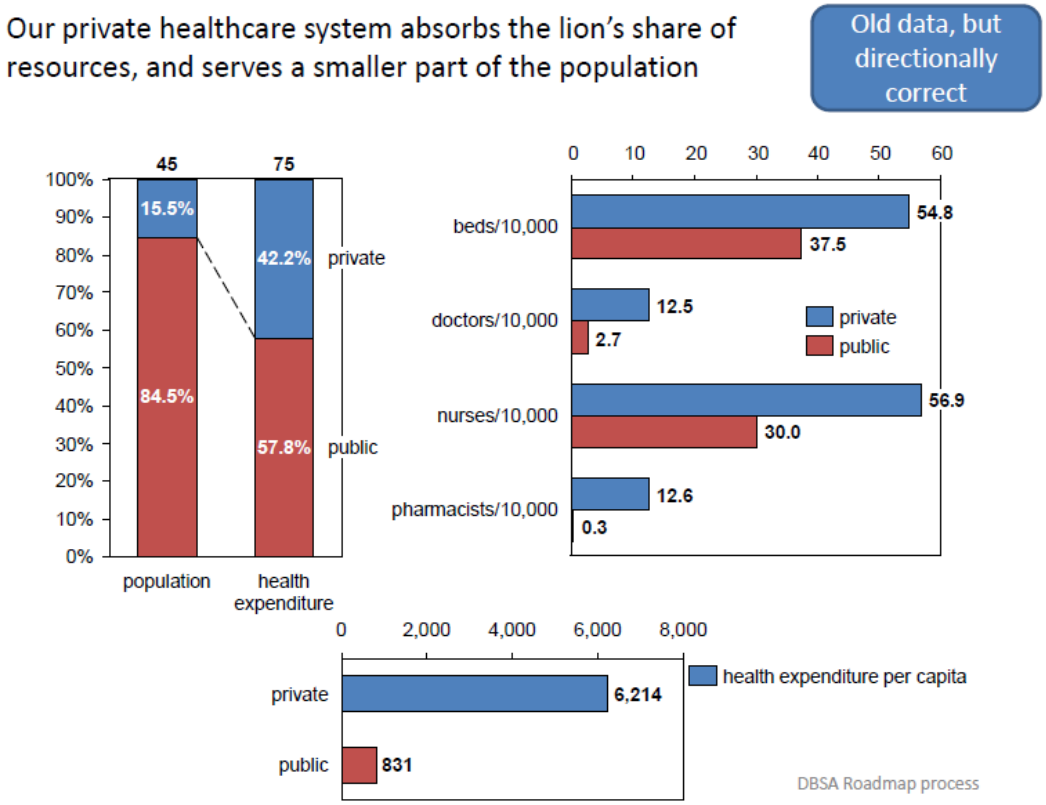
Recommendation 19: **The Department should reconsider the introduction of a system of risk adjustment; such a system would protect older and sicker members of society during the implementation of NHI and the transition process, and would continue to ensure that risk pools are properly balanced after full implementation; technical capacity is required for risk-adjusted capitation payments**

12 Creating resources (investment and training)

12.1 Current resources in the system

Figure 15 (page 31) shows the massive imbalances between the private and public parts of the health system, indicating that about 85% of the population has access to only 58% of the financial resources, resulting in large differences in health expenditure per capita.

Figure 15: Imbalances between the private and public parts of the healthcare system (10)



The graphs above are exemplified in the current situation, where Baragwanath hospital has only 2 midwives, while at least 12 midwives are required [14].

Estimating the total number of human resources in the public and private sector is a challenge. HPCSA, and other regulatory authorities, typically collects data, which indicates the total number of registered professionals, but does not distinguish between actively practising professionals and others. These data sets do therefore include registered professionals who may not be actively working all, or who may be working in other countries.

BHF keeps data, which gives an indication of professionals that are recognised to bill medical schemes, but no information is kept on whether these professionals are in active practise. PERSAL data indicates whether professional employees in the state sector are actively practising or not.

This has led to large confusion, for example, in the 2008 ANC proposal, it was indicated that the population to staff ratio is 4,193 in the public sector, opposed to 588 in the private sector. The DoH pamphlet (50) distributed during the release of the green paper indicated the rations as 7,304 and 623 respectively.

Considering the fact that the registered numbers are not indicative of the practising status of staff, and making use of information from Discovery and the Colleges of Medicine, and Econex, the population to staff ration in the public and private sectors is estimated at 2,786 and 2,376 respectively (15).

[14] Personal communication: Prof CJ van Gelderen.

Based on the above method, the following tables contain alternative numbers for human resources (15).

Table 6: Human resources in the public and private sector (15)

Health professionals	DOH		Actual (corrected)				
	Public	Private	Public	Private	Total	Public	Private
Doctors	30.0%	70.0%	11 664	7 366	19 030	61.3%	38.7%
Specialists	35.0%	65.0%	4 365	5 709	10 074	43.3%	56.7%
Dentists	10.0%	90.0%	828	2 133	2 961	28.0%	72.0%
Professional nurses	40.0%	60.0%	55 309	35 956	91 265	60.6%	39.4%
Enrolled nurses	50.0%	50.0%	25 338	14 085	39 424	64.3%	35.7%
Pharmacists	10.0%	90.0%	3 285	2 631	5 916	55.5%	44.5%
Physiotherapists	20.0%	80.0%	970	1 866	2 836	34.2%	65.8%
Psychologists	5.0%	95.0%	600	1 746	2 346	25.6%	74.4%

Table 7: Estimate of nurses for the public and private sectors (15)

	Total on register (2009)	Actual working*	Public**	Private***
Professional nurses	111 299	91 265	55 309	35 956
Enrolled nurses	48 078	39 424	25 338	14 086
Enrolled nursing assistants	62 440	51 201	35 376	15 825
Total	221 817	181 890	116 023	65 867
		Percentage of total working		
Professional nurses		100.0%	60.6%	39.4%
Enrolled nurses		100.0%	64.3%	35.7%
Enrolled nursing assistants		100.0%	69.1%	30.9%
Total		100.0%	63.8%	36.2%

*Adjusted down by 18% in accordance with the work of Econex.

**Based on Persal data applicable to 2010.

***Calculated from the difference of the total actually working and those working in the public sector.

Source: Based on Econex, December 2010.

Considering the numbers presented in Table 6 and Table 7 above, consideration should be given to improve the capacity to routinely collect this data. The CMS will make proposals to amend the Medical Schemes Act to ensure that the CMS has better control over private sector health professional data.

Recommendation 20: Better control over private healthcare resource data must be gained through an amendment to the Medical Schemes Act whereby the CMS will establish a register of privately practising health professionals

Considering the human resources the respective sectors as presented above, the inequities between the sectors are not as stark as presented in the green paper. Even if consideration is given to the fact that that many members of the public who do not belong to medical schemes make use of private service providers (51) (while not having any cover), the situation is not equitable.

12.2 Proposals towards the creation of resources

12.2.1 Investment in infrastructure, systems and skills

PPPs in relation to the development of infrastructure where is encouraged, but care should be given to the ultimate taxpayer cost when capital is raised from the private sector. Consideration should also be given to PPS in relation to hospital management, supply chain management, and even clinical services (12). For the purchasing of services from the private sector, focus should be placed on the development of purchasing capacity.

12.2.2 Building capacity to meet NHI's human resource requirements

The national planning commission (3 p. 299) has suggested that posts must be filled with skilled, committed, and competent individuals. Among others, the following is suggested:

- Increase capacity to train health professionals
- Train more health professionals to meet the requirements of the re-invigorated PHC system
- Set procedures and competency criteria for the appointment of hospital managers and set clear criteria for the removal of underperforming hospital managers

Since the internal training capacity for doctors has increased from just over 1 100 graduates in the year 2000 to 1 309 in 2008 (12), resources should urgently be directed to correct this.

Even though the recruitment of doctors from other countries, or the involvement of the private sector in the training of health professionals, particularly doctors, might sound attractive, there are definite disadvantages to such a step. The only viable long-term solution is the strengthening of local capacity to train more professionals. Section 18.1 (page 57) considers temporary solutions with part-time medical officers and specialists.

12.2.3 Resources required to manage the NHI

In addition to the skills required for service delivery on the ground, key areas where specific new capacity is required lies in the development of the skills, which are required to manage the NHI fund at the different levels, the skills required to manage the districts, and specific skills in relation to casemix remuneration and risk-adjusted capitation.

Specific financial management skills are required at the decentralised levels to improve accountability and to improve service delivery capacity (see section 13.2.1 (page34), Table 10 (page 56), and section 18.2.1.2(page 61)).

13 Service delivery (Personal and population based)

13.1 Current service delivery

Many official public statements, press reports and official documents, including the Health Road Map (10) concurs that the current level of service delivery is unacceptably low. The National Development Plan states the following:

> *"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 the different levels of services (especially hospitals) and defensive health service levels increasingly protective of turf and budgets."* (3).

The General Household Survey shows a high level of patient satisfaction in the private sector , with 92.1% of users very satisfied with services, while to only 55.9% of public sector services users were very satisfied (51 p. 18).

Provinces appear to not run their budgets well. Gauteng is not paying its bills, with the results that the National Health Laboratory Service (NHLS) is threatening to withdraw services, and essential medication is not being provided [15].

These statements support the new drive in the NHI green paper, and particularly point to governance and management weaknesses in the public sector.

13.2 Proposals towards service delivery under NHI

13.2.1 The development of revised primary care delivery systems

The 1944 Gluckman commission proposed that a core component of the health system should be health centres, which provide comprehensive primary care services (52). Private practitioners (GPs, pharmacists, physiotherapists, etc.) should come together in health centres to provide comprehensive primary care services (53).

During 1978 to 1986 Spain reformed their healthcare financing system from a social insurance model to a tax based universal access health system, and introduced primary care teams coordinating prevention, health promotion, treatment, and community care (54). Integrated primary care has also been introduced in the central Asian republics of Kazakhstan, the Kyrgyz republic, Tajikistan and Uzbekistan (55).

Figure 16 displays the eight key features and underlying principles of the Spanish health system, which have been operative since the introduction of reforms in 1978 (54). It must be borne in mind that Spain spends more health care money per capita than South Africa. In 2007, Spain spent about $2,700 per person per year on health, compared to the approximate $300 per person spent in the public health budget or $1,300 per person in the South African private sector (2010 values). It is noteworthy that the changes to their primary care system were done as part of a larger reform of their system, with increased local accountability and capacity. A parallel with our system is the

[15] Personal communication: Prof CJ van Gelderen, 15 January 2012

challenges that arise between the roles of the central and provincial (called "Autonomous communities" in Spain) authorities.

Figure 16: Eight underlying principles and key features of the Spanish system [Based on (54)]

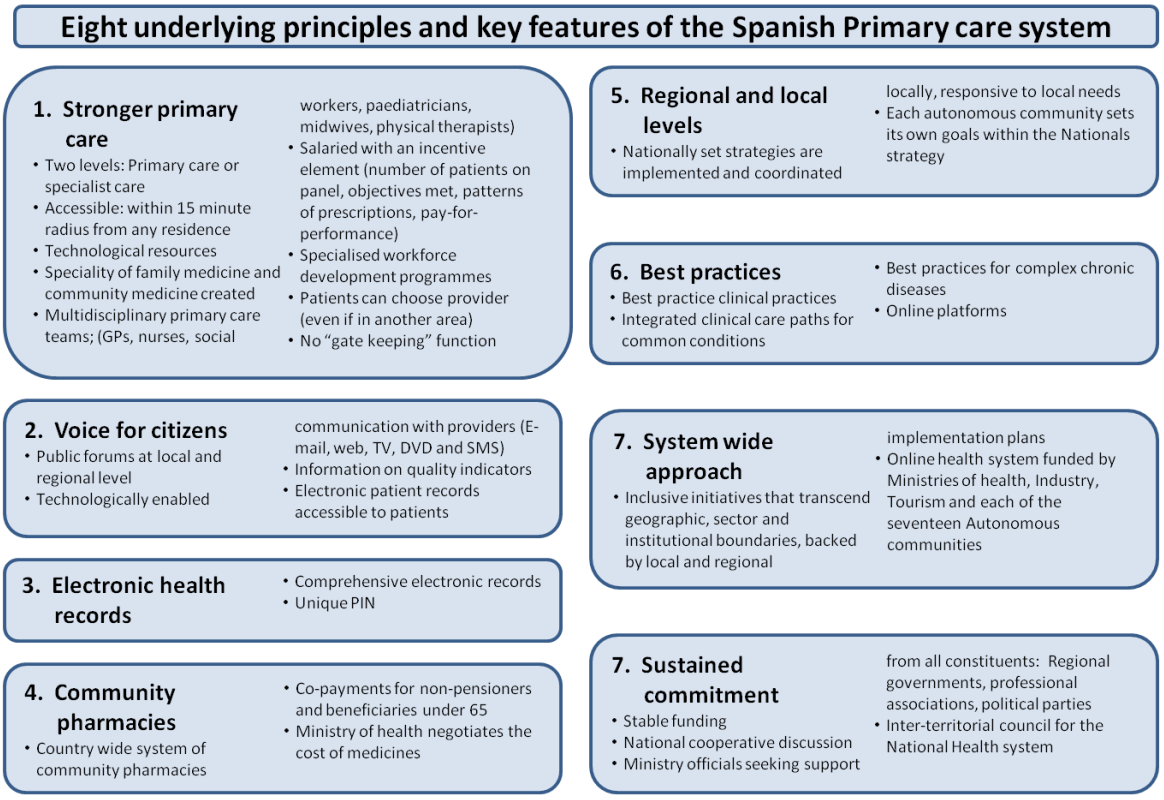
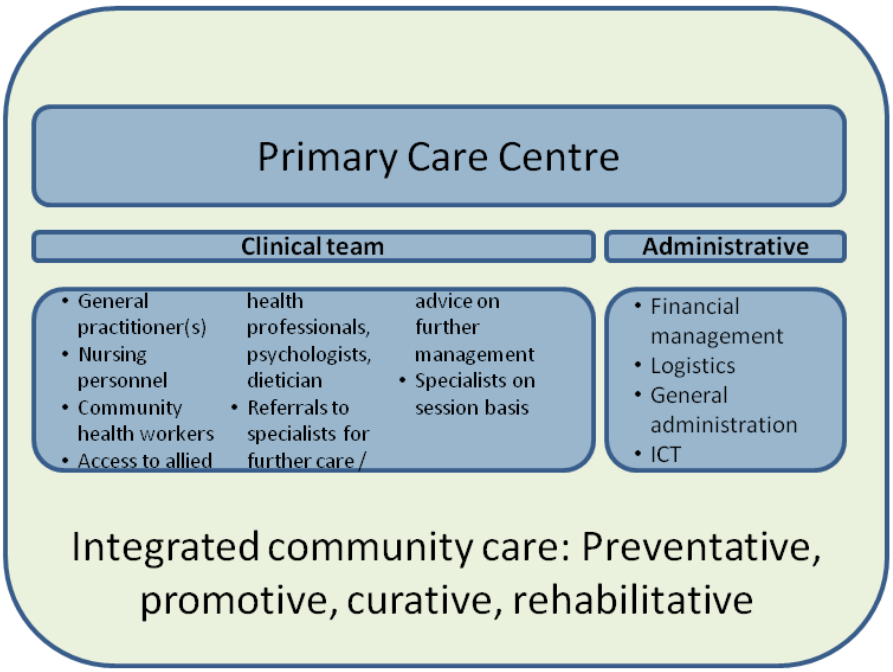


Figure 17 shows that primary care centres should provide an integrated community care function, encompassing preventative, promotive, curative, and rehabilitative care, and that these functions should be performed by a team of primary care providers including general practitioners, nursing personnel, community health workers and administrative personnel.

Ideally, these units should function as independent business units. Notably, the introduction of accountability and alternate reimbursement mechanisms requires strong financial management skills at this level.

In addition to the services provided by staff at the facility, access to specialists, allied health professionals, psychologists, dieticians, and others, must be available on a session basis or arrangements for referrals to other centres must be made where it is not feasible to provide these services at the local level.

Figure 17: Integrated primary care



13.2.1.1 Reimbursement mechanisms for consideration

Section 18.1 (page 53) presents consideration for the development of alternative reimbursement mechanisms. Critical to the revised model of primary care delivery is the decentralisation of authority with enhanced budgetary control (3).

13.2.2 Accreditation of providers and facilities

Central to the success of the NHI is the Office of Health Standards Compliance (OHSC), which will play a critical role to ensure that both private and public facilities meet a defined set of standards.

The CMS has experience in the accreditation of entities such as brokers, broker organisations, managed care organisations and, administrators and has developed systems for this process. It is suggested that an accreditation task team be constituted and CMS Accreditation specialists from the CMS Accreditations Unit to support the OHSC with this task.

Recommendation 21: Establish an accreditation task team with CMS officials to collaborate with the OHSC in the accreditation of facilities

13.2.3 Measuring outcome

Statements comparing the public and the private sector health care services are often based on non-clinical components but on hotel services. There is a need therefore to have in place a proper framework for measuring quality and health outcomes from both the public and the private sector. The CMS has recently published a discussion paper on quality and health outcomes (56) which may

be of assistance in the establishment of techniques for the measurement of health outcomes in the NHI.

13.2.3.1 Introduction

The disparities in resource availability in the public and private sectors have a significant impact on the health outcomes of the country. Literature shows that health care disparities in countries like the United States have long been noted, with particular attention paid to the gaps separating racial and economic groups. Other studies have quantified the impact of universal coverage on differences in health outcomes between these groups. In the UK where universal health care is free at the point of access, there has been quality improvements method on chronic disease management. In the UK for instance, disparities in access to high quality diabetes care are viewed as an important determinant of variations in health outcomes. To help reduce such disparities, the UK government has targeted all sectors of the population when implementing new health policies. French experience demonstrates that universal coverage can be achieved without excluding private insurers from the supplementary insurance market.

One of the objectives stated in the NHI policy document is to improve healthcare quality and outcomes for all South Africans through this freedom of choice for consumers to belong to a medical scheme, should they wish to do so. This further emphasises the need for more healthy collaboration between government and the private sector and for the private sector to contribute to the overall healthcare system objectives. There are a number of policy initiatives of the Department of Health that increase the need for some form of independent measurement of the quality of health care received by members of medical schemes. Apart from the conventional measures of quality of care, the improvement in health outcomes, as a measure of the effectiveness of health interventions offered by service providers to medical scheme members and beneficiaries, need to be evaluated. The CMS has set out a system for measuring health outcomes as part of the ongoing evaluation of health care provided to medical scheme beneficiaries. The proposal by the CMS also entails collaborative work with other role players in the industry.

13.2.3.2 Conceptual Framework: Quality Health Outcomes

Quality measures cover a large range of indicators, these indicators range from crude measures (such as unadjusted mortality rates) to more refined measures (such as readmission rates or proportion of the population using asthma medications to achieve better asthma control etc.). Ideally, a full range of measures that provides a complete picture of health care quality includes specific process measures.

For example, the number of deaths related to asthma at a hospital can suggest poor quality of treatment at that hospital, but knowing the number of deaths alone does not tell the entire story that is why process measures are as important as outcome measures in determining quality of care.

Process measures: often reflect evidence-based guidelines of care for specific conditions. They are generally considered to be within the control of the provider and, therefore, are performance indicators. Process measures are more likely to reveal actions that can be taken to improve quality, whilst outcome measures frequently relate to patient health status. Better outcomes are the ultimate objective of quality improvement, for example, lower mortality, lower hospitalisation rates, or improved test results.

13.2.3.3 Objectives of measuring Quality Health Outcomes

Quality health outcomes will enable proper judgements about the performance of the South African health system relative to other developing countries, in particular those that have universal coverage/NHI. Presenting data on quality and health outcomes in an NHI setting provides the following benefits:

- Purchasers of health care services would be able to assess the performance of different providers who serve their members
- Health provider facility managers would have information that would assist in benchmarking performance relative to other similar providers
- It would enable policy makers to monitor performance of the health system and intervene in a timely manner should there be a need to do so.

13.2.3.4 Adjustments for case- mix

In ensuring that the data is comparable, prognostic factors will be identified in relation to the defined standards and indicators. The prognostic factors will be used as underlying factors or explanatory variables to adjust for case-mix. This is critical to evaluate whether the outcome, either favourable or not is due to health systems or due to the mix of diseases and conditions.

13.2.3.5 Limitations of quality and clinical health outcomes indicators

The complexity underlying the process of collecting and interpreting quality indicators should not be underestimated. Even apparently simple indicators require in-depth analysis of competing operational definitions and generation of an agreed, detailed operational definition preferably supported by written, clarification and problem-solving guides. Clinical outcome indicators can provide insights into quality of care and highlight variations in outcome worthy of further investigation. Limitations thereof are that the information that can be drawn from some indicators does not always include the beneficiary's views about outcome. Other limitations of clinical outcomes are that they do not necessary provide definitive proof about performance or quality of care. Outcomes data should be used as a guideline or standards and should be a relative measure assessing the perceived ill practice by a provider, they need to be interpreted with caution as they may be influenced by multi-underlying factors that are not necessarily explained by the data.

14 Current financing of the healthcare system

14.1 Distribution of healthcare financing between the public and private sectors

Table 8 below shows that in 2011/12 healthcare expenditure will be about 8.7% of GDP (R255 Bn), of which 4.2% is in the public sector and 4.3% through private financing streams. This is an unusually high amount – middle income countries spend about 6% of GDP on health while the UK spends about 8% of GDP(3).

The public sector expenditure on health amounts to 14.1% of total government expenditure, falling short of the 15% Abuja target. Considering the fact that the cost of the HIV epidemic has been estimated at 0.7% of GDP, which is equal to about 2.4% of government expenditure, consideration should be given to the fact that 15% of government expenditure might not be adequate to deal with the HIV epidemic in South Africa.

In 2010/11, the medical scheme expenditure amounted to R11,602 rand per beneficiary per year, opposed to the R2,635 per capita spent by the public sector on people not belonging to medical schemes – this differs by a factor of 4.4.

It has been argued that because many people without medical scheme cover make use of the private sector, that the true percentage for those who use the private sector wholly or in part is around 35%[16] [17] (12), and the differential between the private and public sector expressed above is an exaggeration. The reality is that, even if up to 35% of the population did use the private sector, it is highly unlikely that this utilisation would make up a substantive portion of the private sector expenditure and that the services used in the private sector by uncovered individuals will almost exclusively be for low cost events. Figure 19 (page 41) shows that there are many uncovered people who do make use of private out-of-hospital services. In the extremely unlikely event that 35% of the population actually exclusively used the private sector, the amount spent per capita in the private sector would be R6,659 per annum, opposed to R3,338 in the public sector. This two-fold difference is inequitable and does not detract from the arguments for reforming the health system. Much of the differential is due to the high unit cost of services in the private sector, which should be addressed through the introduction of a pricing regulator.

16 Another estimate indicates the catchment populations for the public and private sectors as: Public: 38 million51 – 35 million52 (76% - 70%); and Private: 12 million – 15 million (24% - 30%). (15)

17 Note some items are specifically funded for in hospital trauma-related services through the Compensation Fund, the Road Accident Fund, Rand Mutual, and Mine Hospitals. (15)

Table 8: South African Healthcare expenditure in the public and private sectors 2007/08 to 2013/14 (3)

Rand million	07/08	08/09	09/10	10/11	11/12	12/13	13/14	Annual real % change [18]
Public sector								
National department of health	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	7.0%
Defence	1,878	2,177	2,483	2,770	2,961	3,201	3,377	4.3%
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	-0.7%
Workmen's Compensation	1,287	1,415	1,529	1,651	1,718	1,804	1,894	0.5%
Road Accident Fund	764	797	740	860	980	1,029	1,080	-0.2%
Education	1,833	2,134	2,350	2,503	2,653	2,812	2,981	2.3%
Total public sector health	71,440	85,154	99,469	109,769	122,426	132,165	140,719	6.3%
Public sector increase on previous year		19%	17%	10%	12%	8%	6%	
Private sector								
Medical schemes	65,468	74,089	84,863	96,482	104,008	112,120	120,866	4.9%
Out of pocket	14,694	15,429	16,200	17,172	18,202	19,294	20,452	-0.4%
Medical insurance	2,179	2,452	2,660	2,870	3,094	3,336	3,596	2.6%
Employer private	1,041	1,172	1,271	1,372	1,479	1,594	1,718	2.6%
Total private sector health	83,382	93,142	104,994	117,896	126,783	136,344	146,632	3.8%
Donors or NGOs	3,835	5,212	6,319	5,787	5,308	5,574	5,852	1.1%
Total	158,657	183,508	210,782	233,452	254,517	274,083	293,203	4.9%
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	
Public per family of four per month real 10/11 prices	710	767	837	878	922	937	939	

14.2 Key trends in the public sector

Figure 18 (page 41) shows that the growth in expenditure by provincial departments in growing at a faster rate than the growth in expenditure by medical schemes. The implementation of the proposals in section 11.2 (page 18) and section 11.3 (page 22), which will contribute to control expenditure in the private sector, will accelerate this positive trend. An increase in public expenditures to achieve the 15% of total government expenditure in accordance with the Abuja agreement, will further support the correction of the inequitable funding. Such increased funding could be motivated through increased performance (see Recommendation 2, page 14).

[18] This percentage was recalculated based on the latest inflation figures and represent the annual real percentage change form 07/08 to 13/14

Recommendation 22: **Considering the quadruple burden of disease in the country (31), the 15% of total government spending (Abuja target) might be too low**

Figure 18: **Trends in expenditure by provincial health departments and medical schemes**

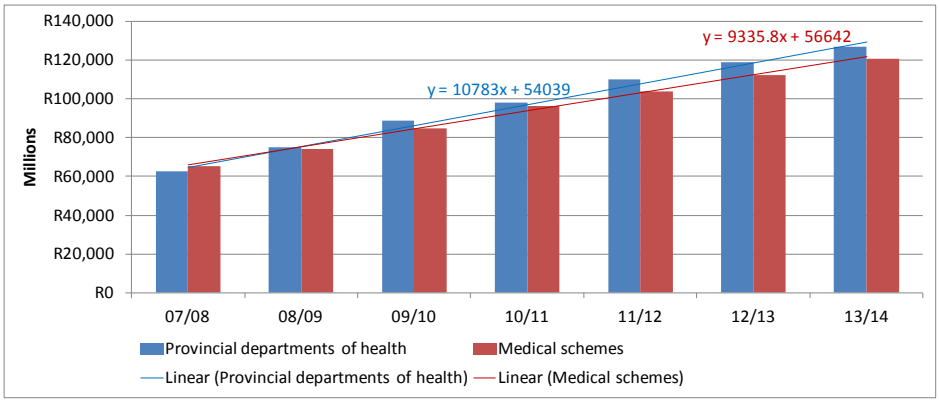
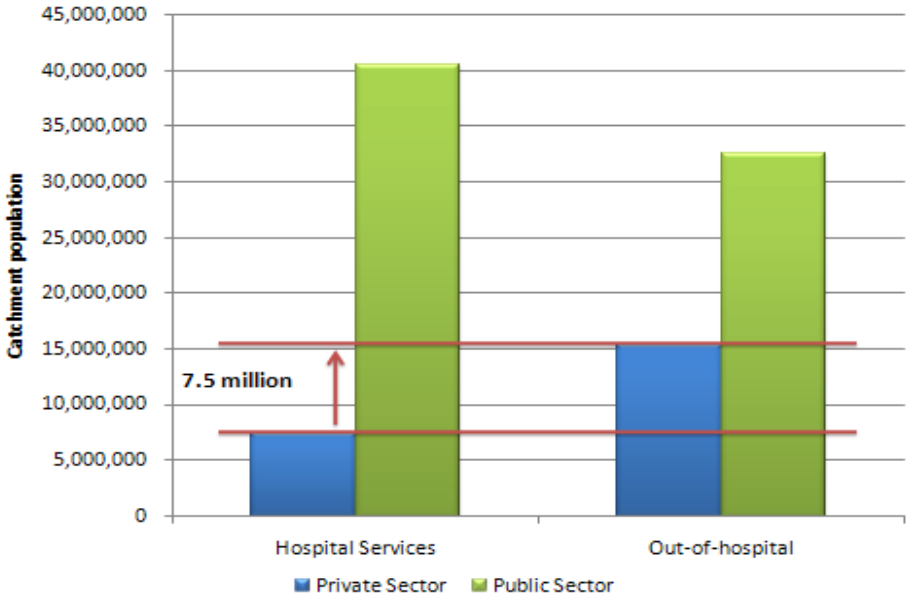
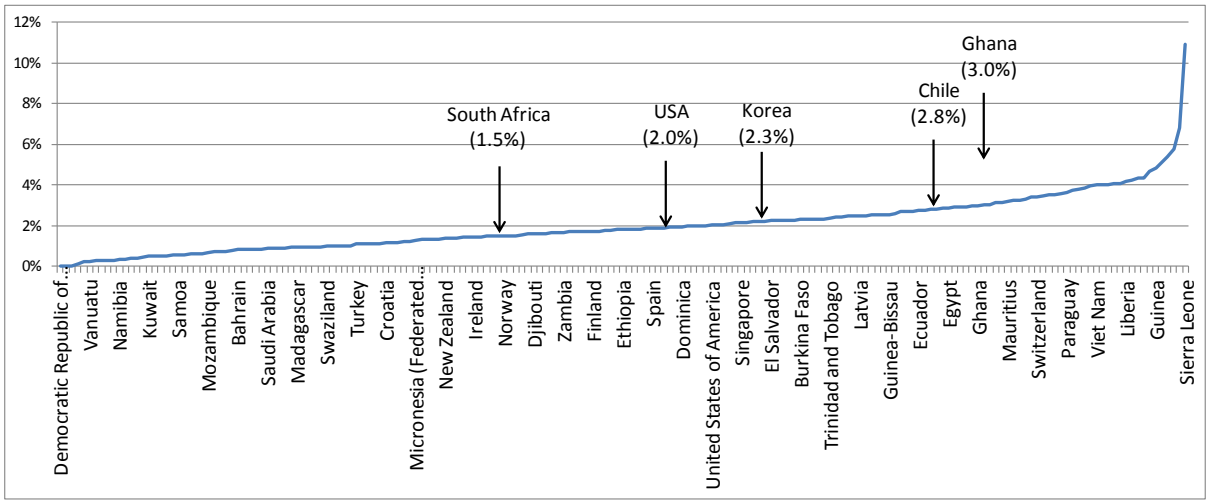


Figure 19: **Estimated catchment populations for public and private sector hospital and out-of-hospital care (2007)[19]**



[19] Based on the 2006 GHS

Figure 20: Out of pocket expenditure as a percentage of gross domestic product (57)



14.2.1 Financial barrier to access

Currently, members of the public who earn more than R6,000 per month, or households with an income above R8,333 per month, are liable to the full cost of public hospitals services. The means test has not been adjusted since 2006 (58).

Recommendation 23: The means test at public hospitals should at least be adjusted to keep up with inflation since 2006. In view of the NHI development, consideration must be given to gradually remove the means test

14.3 Key medical scheme performance characteristics

14.3.1 Extent of medical scheme cover

The press frequently reports on the fact that medical schemes do not cover full costs and that members of medical schemes constantly need to make co-payments to have all of their healthcare needs met.

Many schemes cover day-to-day expenses almost exclusively from a Rand-for-Rand cover component (such as day-to-day benefits or medical savings accounts), and as soon as these are depleted, members have to pay for these benefits out of pocket. Some schemes make use of "self-payment-gaps," whereby, after a certain threshold has been reached, members have to make payments up to level of the next threshold, and further claims for that particular year will then be paid from the risk pool.

Figure 21: Incomplete cover even in high-end medical schemes (59)

Many members are dissatisfied with this arrangement (59). Note that, even though irritating, in comparison with catastrophic health events, the total cost of day-to-day care per household is not material. The social impact of not having cover for catastrophic events is that many households will become insolvent. Day-to-day care does not result in insolvencies (unless these are lifetime chronic conditions - the PMB chronic conditions are covered in full, while many medical schemes offer extended cover for other chronic conditions).

Figure 20 above shows that out-of-pocket payment, which is the most regressive form of healthcare financing, amounts to only 1.5% of GDP in South Africa, way below the international median. The corresponding percentages in the USA, Korea, Chile, and Ghana are 2.0%, 2.3%, 2.8%, and 3% respectively. This low South African percentage *includes* the out-of-pocket payments to private providers by the public who are not covered by medical schemes. Note that many members who do not belong to medical schemes make use of private providers (51 pp. 83, table 5.5)(12)(15). Through the implementation of NHI and improved service delivery in the public sector, this percentage will reduce.

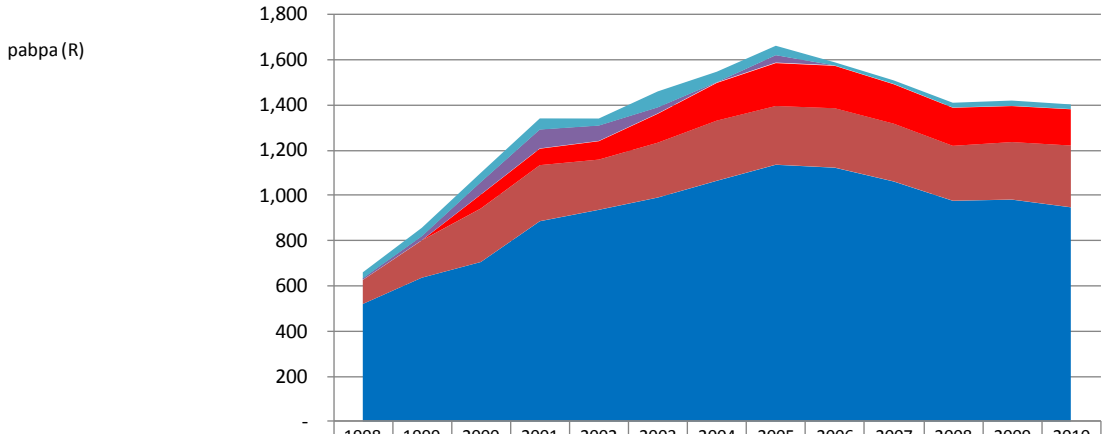
14.3.2 Medical scheme costs

Paragraph 33 of the green paper (1 p. 11)states that there are very high administrator fees, broker costs and managed care costs, and that these increases have resulted in wage inflation.

Figure 22 (page 44) shows that the bulk of non-health costs are due to administration costs, and amounted to R949 pabpa in 2010. This part of the costs were R521 pabpa in 2000, when the office of the CMS was established, and then grew dramatically to peak at R1,137 pabpa in 2005. Various actions and interventions by the CMS has lead thereto that this, and other non-health costs have been reduced to 2002 levels in 2010. Further reductions in these costs are possible through improved governance and broker regulation.

Recommendation 24: **The Medical Schemes Act must be amended to improve governance in medical schemes and to improve broker regulation. This will lead to further reductions in non-health costs**

Figure 22: **Non-healthcare expenditure per average beneficiary per annum 1998-2010 [based on (21 p. 181)]**



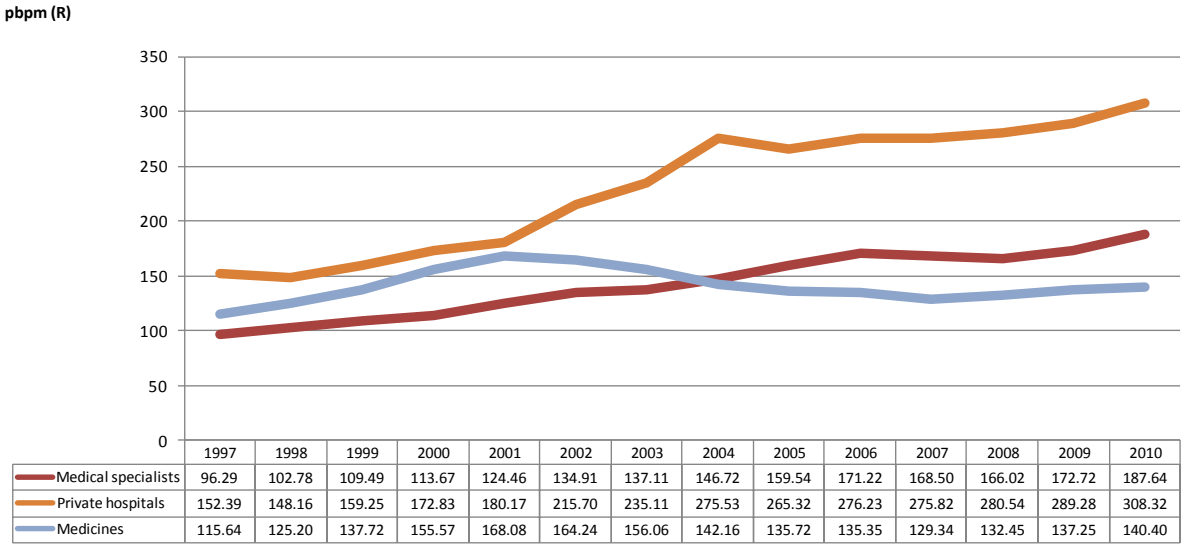
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Impaired receivables	27	38	41	49	31	71	46	42	14	16	21	23	20
Nett reinsurance	7.8	18.6	55.2	83.9	68.2	27.1	1.7	33.0	(0.4)	0.0	0.2	0.1	(0.0)
Broker fees and distribution costs	-	-	61	73	81	128	167	190	188	174	169	159	160
Managed care: management services	106	165	236	248	222	242	266	260	263	256	243	254	273
Administration (Risk+Savings)	521	637	707	887	938	992	1,066	1,137	1,124	1,063	978	983	949

Figure 23 (page 45) shows the cost pbpm for private hospitals, specialists and medicine in 2010 prices. These are the key components that drive cost inflation in the private health care sector.

Medicine costs have been reduced from R168.08 in 2001 to R140.40 pbpm in 2010. These reductions are due to the medicine pricing regulation which were introduced and maintained in this period, but have not yet been fully implemented. This illustrates the effectiveness of regulatory action in curbing cost increases. In contrast, specialist and hospital costs have been increasing in tandem at a steep rate.

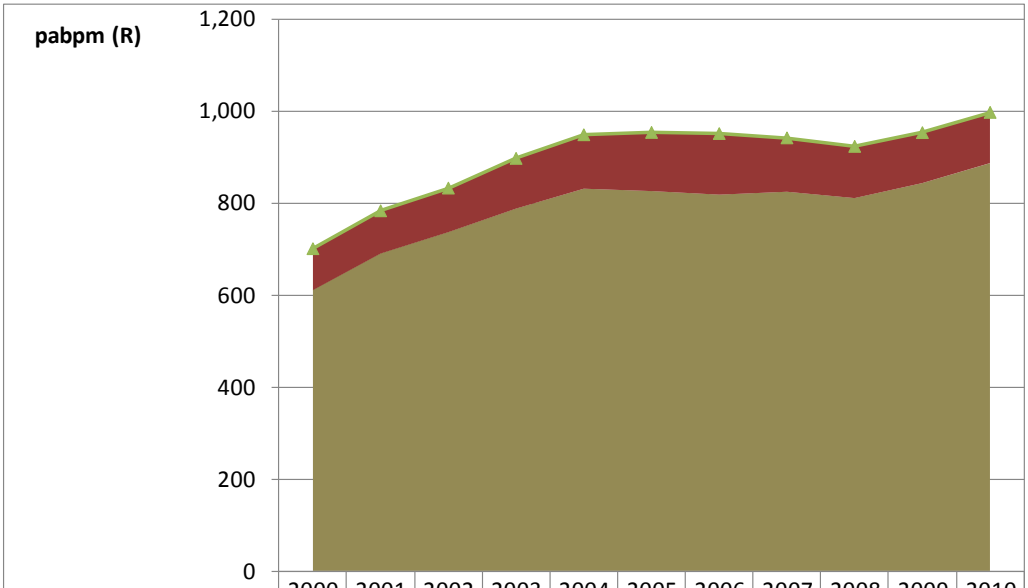
Recommendation 25: **The introduction of a pricing authority must be expedited to contain costs in the private sector. Such steps will speed up the ability for the NHI to purchase services from the private sector**

Figure 23: **Total benefits paid per beneficiary per month for private hospitals, specialists, and medicine [Based on (21 p. 163)]**



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Medical specialists	96.29	102.78	109.49	113.67	124.46	134.91	137.11	146.72	159.54	171.22	168.50	166.02	172.72	187.64
Private hospitals	152.39	148.16	159.25	172.83	180.17	215.70	235.11	275.53	265.32	276.23	275.82	280.54	289.28	308.32
Medicines	115.64	125.20	137.72	155.57	168.08	164.24	156.06	142.16	135.72	135.35	129.34	132.45	137.25	140.40

Figure 24: **Risk and medical savings accounts contributions 2000-2010 (2010 prices). [Based on (21 p. 171)]**



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Savings contributions	89.7	92.7	95.8	109.4	117.7	127.9	133.1	117.5	112.7	110.1	110.8
Risk contributions	611.8	691.1	737.4	788.4	831.4	826.3	818.6	824.9	811.1	843.6	886.9
Total contributions	701.5	783.8	833.2	897.8	949.1	954.2	951.7	942.3	923.8	953.7	997.7

Figure 24 (page 45) shows that over the seven-year period from 2004 to 2010, total contributions have increased from R949 to R998 pbpm, amounting to a 5.1% real increase over the period. Note that in 2008, the total contributions were R923.8, which is 3% less than the R949 in 2004. Over the 11 years covered in the graph, there was a 42% real increase.

The preceding graphs show that contribution increases have been stable since 2002. This coincided with the implementation of the CMS, which was able to better manage scheme costs.

14.3.3 Reduction in number of schemes, increase in total number of beneficiaries

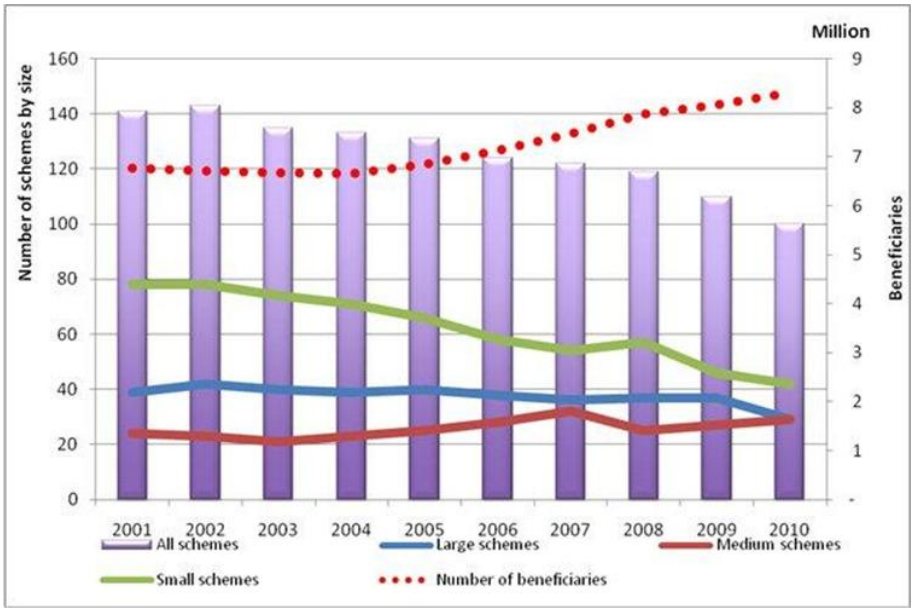
It is of significance to note that while the number of medical schemes has decreased from 180 in 2001 to 102 in 2009, the number of beneficiaries has remained stable and in fact started increasing after the implementation of GEMS. Medical schemes have consolidated through a process of natural attrition in an effort to confront the problem of overpriced healthcare services. The stability in beneficiary numbers demonstrates an increase in the willingness and ability to pay for healthcare by the population.

Note that in this period, there were a number of amalgamations and liquidations, which are related to the absence of system of risk adjustment. Section 11.3.2 (page 24) shows the impact of GEMS on open schemes, who have lost young and healthy members to GEMS but have retained the sicker and older members. Section 14.3.2 (page 43) shows that the cost increases were not that dramatic (but indicates that cost increases in hospital and specialist costs should however be regulated)

The Medical Schemes Act, which is a reflection of government policy, places a minimum requirement of 6,000 members per scheme, this and other provisions of the Act was successful to support healthy consolidation, while the number of beneficiaries grew steadily over a prolonged period (in spite of the 2008 recession).

Figure 25 below shows the number of schemes in the last ten years, as well as membership of schemes. Even though the number of schemes has substantially reduced, membership is rising – in recent years it has been largely due to GEMS. However, even from 2001-2005, membership remained stable even though number of schemes was reducing.

Figure 25: Number of medical schemes and medical scheme beneficiaries (2001 - 2010) [Based on (21 p. 157)]



Many restricted schemes liquidated/amalgamated in the last ten years due to low membership but with high solvency. About 36 schemes liquidated, and 26 new schemes registered from 2000 to 2010, resulting in a net loss of 10 schemes. From 2008 to 2010, ten schemes liquidated, of which four liquidated voluntarily and six liquidated due to financial reasons.

14.3.4 Inequities in medical scheme cover

By contributing to a medical scheme from their own income, income earners remove 8.3 million people from using state services. This reduces the burden on the state and will assist with the implementation of NHI. A failure to maintain and strengthen the current regulatory framework for medical schemes may lead to an increase in anti-selection in medical schemes. Those who are young and healthy may reduce their current medical scheme cover or exit the environment altogether with the expectation that by the time they are older and sicker NHI will be in place. This would expose the NHI scheme to excessive utilisation in its first few years of inception thus threatening its viability.

Recommendation 26: Migration of medical scheme members to the NHI should be done in a co-ordinated manner to prevent the overloading of the currently pressurised public sector

14.3.4.1 Unfair burden of funding on older and sicker medical schemes

Section 11.3.2 (page 24) shows the impact of GEMS on open schemes, which have lost young and healthy members to GEMS but have retained the sicker and older members, and exemplifies the fact that there are no cross subsidies from younger and older schemes to sicker and older schemes.

14.3.4.2 Geographical and racial inequity in medical scheme cover

Figure 26 (page 48) demonstrates the geographical inequity in medical scheme cover. According to the July 2010 General Household Survey publication (51), 17.6% of South Africans are covered by medical schemes.[20] However, only 8.6% of the Limpopo population are beneficiaries of medical schemes, while 26.5% of the Gauteng population are medical scheme beneficiaries.

[20] Using CMS data applied to the 2011 midyear population estimates by StatsSA, 16.4% of South Africans are beneficiaries off medical schemes. The higher percentage reported by StatsSA may be due to people having medical insurance who report that they belong to a medical scheme. This difference is however not material.

Figure 26: Proportion of the population covered by medical schemes by province (51)

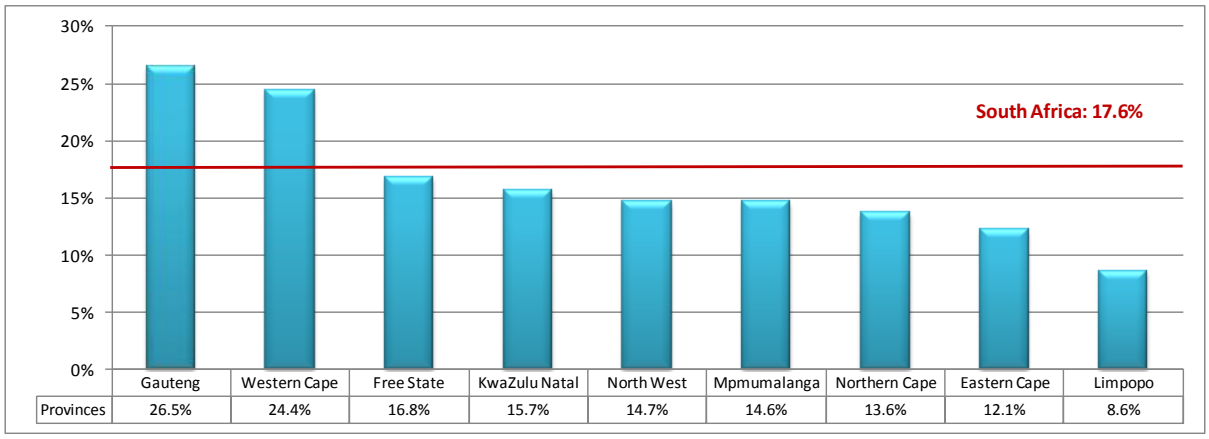
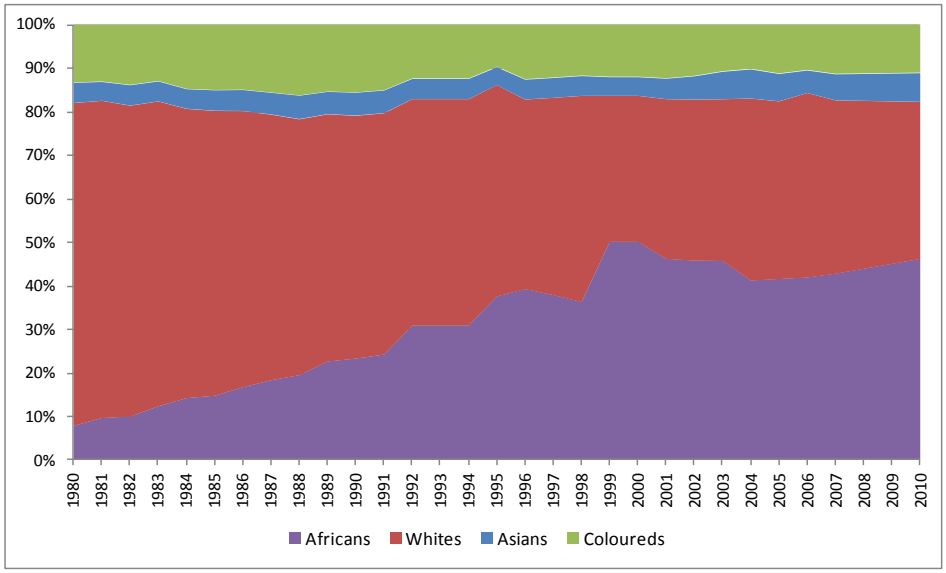


Figure 27 (page 48) shows the proportion of medical scheme beneficiaries by race from 1980 to 2010, and demonstrates that in 1980, only about 8% of medical scheme beneficiaries were African, and that this proportion has increased to 46% in 2010. In 1980, 74% of medical scheme beneficiaries were White, this number declined to 36% in 2010.Table 9 (page 49) shows the actual numbers of medical scheme beneficiaries in 1980 and 2010, and indicates that the number of Africans who are beneficiaries of medical schemes have increased from about 200,000 in 1980 to 3.8 million in 2010. The number of whites who were covered has declined from 3.2 million to 3 million over the 30-year period.

Figure 28 (page 49) shows that 71% of the White population are beneficiaries of medical schemes, while only 10% of the African population belong to medical schemes.

Figure 27: Proportion of medical scheme beneficiaries by race (1980 - 2010)[21]

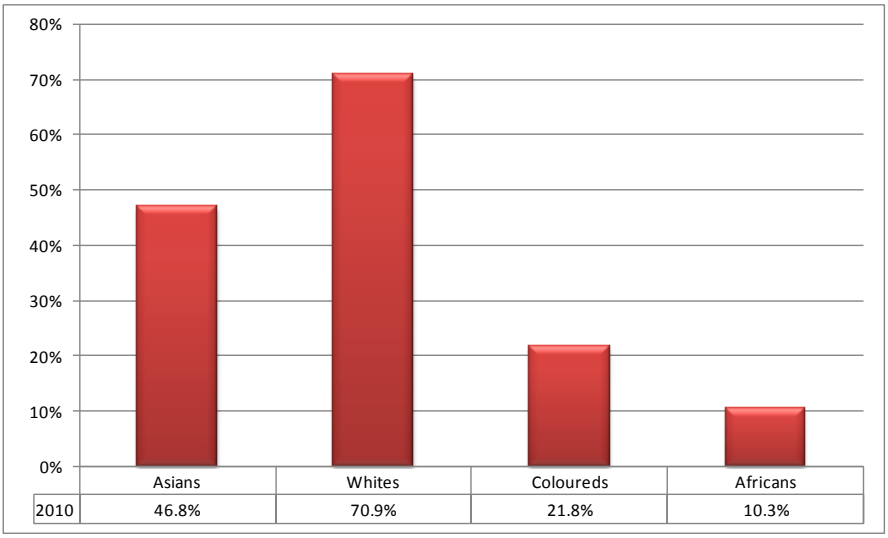


[21] Council for Medical Schemes Annual Reports to 1999 and October Household Survey and General Household Survey data form StatsSA from 2000 to 2010

Table 9: Total number of medical scheme beneficiaries by race (1980 and 2010)[22]

	1980	2010
Africans	202,104	3,841,437
Whites	3,211,542	3,002,812
Coloureds	575,076	918,026
Asians	340,534	553,444
Total	4,329,256	8,315,718

Figure 28: Proportion of the population covered by medical schemes by race (51)



15 Financing (collecting, pooling and purchasing) healthcare in the fully developed NHI

This following sections comments on the collecting, pooling, and purchasing functions in accordance with the WHO health system performance framework Figure 3 (page 8). Since services are financed for a defined population, this section comments on the registration of the population and the population that will be covered under NHI

15.1 Registration of the population

The registration of the population for NHI is a mammoth task, and results in problems even in developed countries such as the Netherlands[23].

Instead of developing the systems and infrastructure required for this, it might be more cost effective if the South African Identity document could be adapted for this use. It is important to consider the use of smart-card technology and biometric identification techniques for this purpose.

Special provision should be made for all legal residents, who are not always entitled to an ID.

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22 2010 estimates are based on the 2010 General household survey numbers (48) which were adjusted to correspond with the 2011 CMS Annual report (21). 1980 numbers are based on actual reported data.

23 Personal Communication: Dr Marlene Roefs

Recommendation 27: Consider adapting the South African Identity document for use in NHI. Smart card and biometric identification technology should be applied. Provision should be made for legal residents who do not qualify for a South African ID document

15.2 Population coverage under NHI

15.2.1 Introduction

The NHI green paper stipulates that NHI will cover South Africans and legal permanent residents. Short-term residents and foreign students will be required to obtain compulsory travel insurance and must produce evidence of this upon entry into South Africa. Refugees and asylum seekers will be covered in line with provisions of the Refugees Act, 1998 and International Human Rights Instruments that have been ratified by the State.

15.2.2 Current policy responses to migration in South Africa

15.2.2.1 The Constitution

The South African Constitution guarantees everyone access to healthcare and everyone in the country regardless of his or her legal status is guaranteed access to emergency health care.

15.2.2.2 Refugees Act

Under the Refugees Act, refugees and asylum seekers are entitled to the same basic health services that South Africans receive from time to time.

15.2.2.3 HIV and AIDS and STI National Strategic Plan for South Africa (2007-2011)

The National Strategic Plan identifies refugees, asylum seekers and foreign migrants as marginalised groups that need to be protected from discrimination.

15.2.2.4 ART and Revenue Directives of the National Department of Health

Refugees and asylum seekers with or without a permit that do access public health care are exempted from paying for ART services irrespective of the site or level of institution where these services are rendered

15.2.3 Limitations under population coverage

15.2.3.1 Students, short term visitors and economic migrants

The NHI documents stipulate that short-term visitors and students will be required to obtain travel insurance and must produce this upon entry into the country. The largest number of migrants entering South Africa is from other African countries. Apart from rare exceptions, private health insurance in Africa occurs on low membership, contributions, and coverage scale. The NHI document does not mention whether private health insurance will be available in the country for those without private health insurance in their home countries. In countries like Australia, private health insurance is available for visitors and students and must meet certain requirements such as hospital cover, access to listed drugs and ambulances services.

15.2.3.2 Refugees and asylum seekers

Although NHI document guarantees refugees access to healthcare services through the Refugees Act, most government healthcare officials are unaware of refugees and their rights or are simply dismissive thereof. Many refugees and asylum seekers are therefore unable to access basic services and equal treatment because frontline service providers are unaware of their rights. This has been evident in some facilities denying access to the comprehensive HIV and AIDS care to migrants without permit.

15.2.3.3 Undocumented migrants

Undocumented migrants are the most vulnerable group when it comes to accessing healthcare services. The Refugees Act guarantees access to healthcare services for refugees and asylum seekers leaving the majority of migrants who cannot legalise their stay with challenges in access healthcare services. The NHI document does not mention how this vulnerable group will access healthcare services.

15.2.4 Recommendations

Countries (such as South Africa) facing migration challenges have an increasing need to develop and implement national health policies that incorporate a public health approach to the health of migrants. Promoting equitable access to health protection is a key factor to improving migrants' health and integration in host countries. Therefore, policies related to migrants' health should be multi-disciplinary and multi-sectoral to promote coherence in different sectors that might affect migrants' ability to access health services.

Recommendation 28: **The NHI policy document should clearly define which services refugees and asylum seekers will have access to and how undocumented migrants will access healthcare services. In different countries coverage for ranges from full access, partial access or no access**

Recommendation 29: **Provision should be made for short-term visitors and students with no health insurances in their home countries to obtain private health insurance in South Africa**

Recommendation 30: **Healthcare personnel should get proper training about migrants' rights to access healthcare services**

Recommendation 31: **Measures should be put in place to deliver services that are linguistically comprehensible to migrants**

15.2.5 Lessons from other countries

15.2.5.1 Students, visitors and economic migrants

In The Netherlands, employees paid from abroad, long-term visitors, international NGO's and employers of Embassies are not entitled to the Dutch Health Insurance and have to enrol for a private health insurance. Migrants who take on a part-time job or a paid internship have to take out a Dutch public healthcare insurance. People below a certain income level can receive a financial contribution towards their costs through the Healthcare Allowance.

15.2.5.2 Undocumented migrants

In the last decade, migrant health has featured at the top of the agenda of Portugal ministries and their Presidency. In 2001, legislation guaranteeing that undocumented migrants who had been in the country for more than ninety days would access health care services regardless of their legal status was introduced. In addition to this initiative, the Office of the High Commissioner for Immigration and Ethnic Minorities developed a migrant integration programme that encompassed labour and professional training, housing, education and health. The creation of integration centres, telephone lines in various languages, promotion of access to migrant-friendly health centres and hospitals and development of an Immigration Observatory were further introduced as a way to integrate migrant health in the country.

16 Collection of funds

16.1 Costs of NHI

Simply applying medical scheme costs to the entire population, even when adjusting for the different risk profile, does not provide a clear indication of the costs of NHI. Nevertheless, Annexure A (page 79) does comment on the underlying data that is required for a full costing exercise in the new environment.

Since the first few years will be devoted to the strengthening of the public sector, this period should be used to develop and pilot the purchasing function. The results emanating from such pilots will provide more accurate information that could guide further rollout of services.

16.2 Potential taxes to fund NHI

The regressive nature of VAT practically excludes this mode of taxation as a funding source for NHI.

The following section is quoted from the KPMG report on the economic impact of NHI(8):

> *"If the additional average R10.4 billion per annum required for the roll-out of NHI is to be funded from additional tax revenue over the period of 2012 to 2025, the following are the estimated once-off increases in the tax rates for the taxes under consideration:*
>
> - *Revenue collected from personal income tax would need to increase by an estimated 5%22. This would imply that tax assessed as a percentage of taxable income would increase from 21.8% to 22.9%*
> - *Revenue collected from VAT would need to increase by an estimated 6%. This would imply that the current 14% VAT rate would have to increase to 14.8%.*
> - *Revenue collected from sin taxes would need to increase by an estimated 46% in order to collect an extra R10.4 billion rand. Particular items such as cigarettes would increase by R4.47 for a box of 20. Unfortified wine would increase by R0.80 and fortified wine by R1.47 for a 750 ml bottle. A bottle of spirits with an average of 40% pure alcohol would increase by R12.8224.*

17 Pooling of funds

Section 11.3 (page 22) has made proposals on stewardship towards the strengthening of the regulation of medical schemes and other healthcare funders. The key matters raised in that section

which are critical to protect risk pools are the demarcation regulations and work towards the development of a risk adjustment mechanism.

This will address the current fragmentation of existing risk pools in the private sector. Fragmentation of risk pools is a concern in virtually all health financing systems (5).

18 Purchasing

Strengthening the capacity to actively purchasing services is a key requirement for the implementation of NHI. The introduction of a single payer will maximise purchasing power, and like SARS (40), should be freed from core public service constraints. The purchasing function should buy from more autonomous public providers, and contracting private providers, and must be subjected to transparent governance mechanisms to ensure that the new monopsony purchaser remains accountable (5). Active purchasing will support the efficient and equitable delivery of quality services, which would meet identified needs and remunerate with alternate reimbursement methods with significant market power(16).

18.1 Provider payment mechanisms

Provider reimbursement mechanisms have a direct influence on provider behaviour and costs, quality and accessibility. These are key elements and provider payment systems must therefore be considered carefully when systems are reviewed. Figure 29 (page 54) shows that these systems are broadly classified along two dimensions, the first being the degree whereby provider activity influences his income (being either fixed or variable). In variable systems, such a fee-for-service system, the provider has an ability to influence his income. The second dimension considers whether the providers' *actual* cost experience influence the payment or not. In retrospective systems, such as the current system of line-level fee for service in private hospitals, allows private hospitals to pass on much of the actual costs at a line level to schemes (or patients), with no incentive to control these costs. In prospective systems, payments are determined up front without consideration of the providers' actual cost experience.

Figure 29 (page 54) shows that retrospective variable systems (such as a fee-for-service hospital billing system [quadrant 1]), leads to strong incentives for increasing marginal costs and overproduction with a large financial risk on the payer.

Prospective variable payment systems, where full cost recovery is not guaranteed upfront (such as elements of the fee for service system in place for professional services [quadrant 2]), incentivise production until marginal returns equals marginal cost, and that there is a degree of risk sharing between the provider and funder because the volumes are not known up front. A prospective fixed system, such as simple capitation or line budgets, produces strong incentives to reduce costs and largely place the financial risk on the provider.

Figure 29: **A summary of characteristics and incentives (assuming profit maximisation) in payment systems according to the retrospective/prospective and variable/fixed dimensions. [Adapted from (60)]**

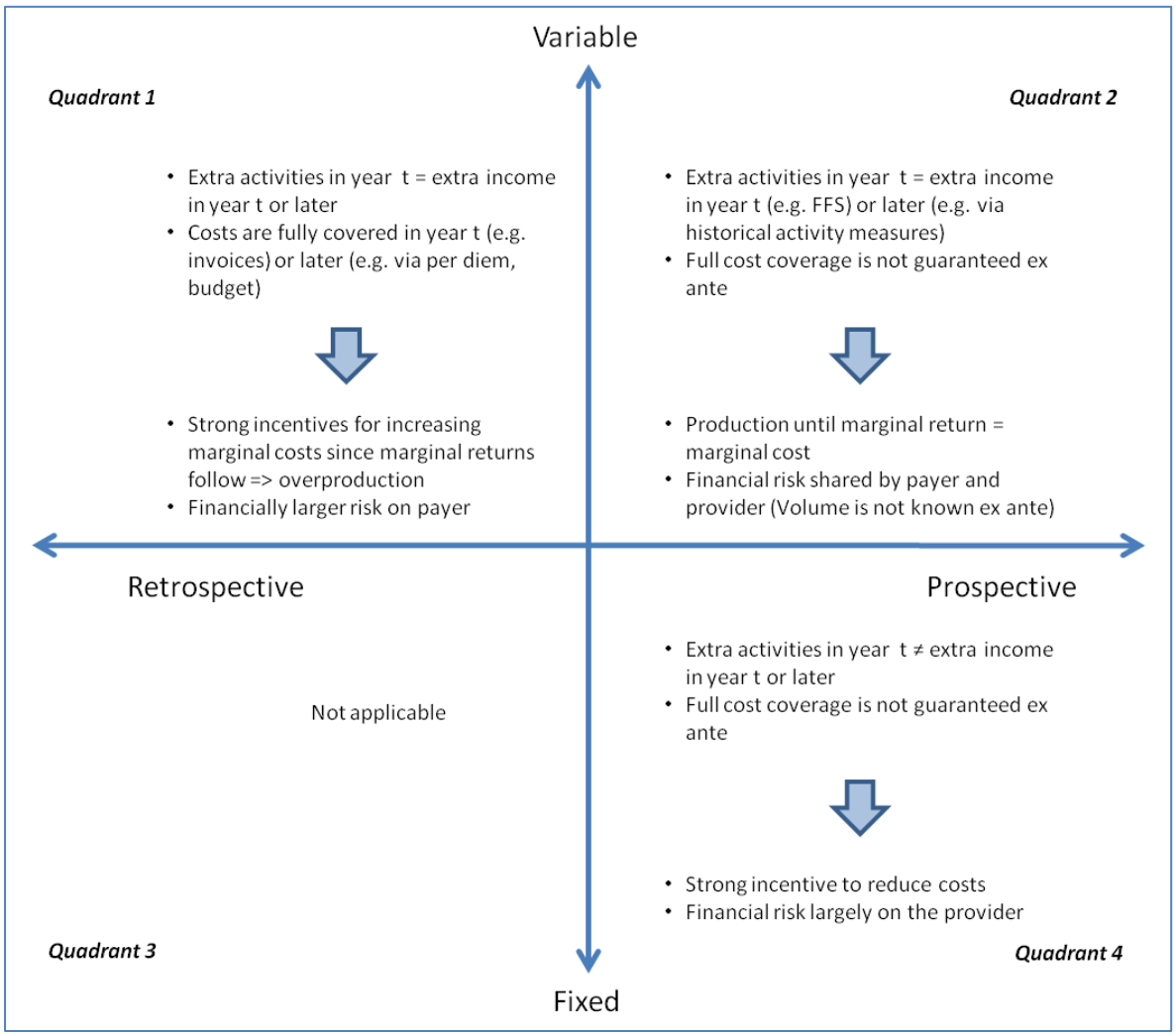
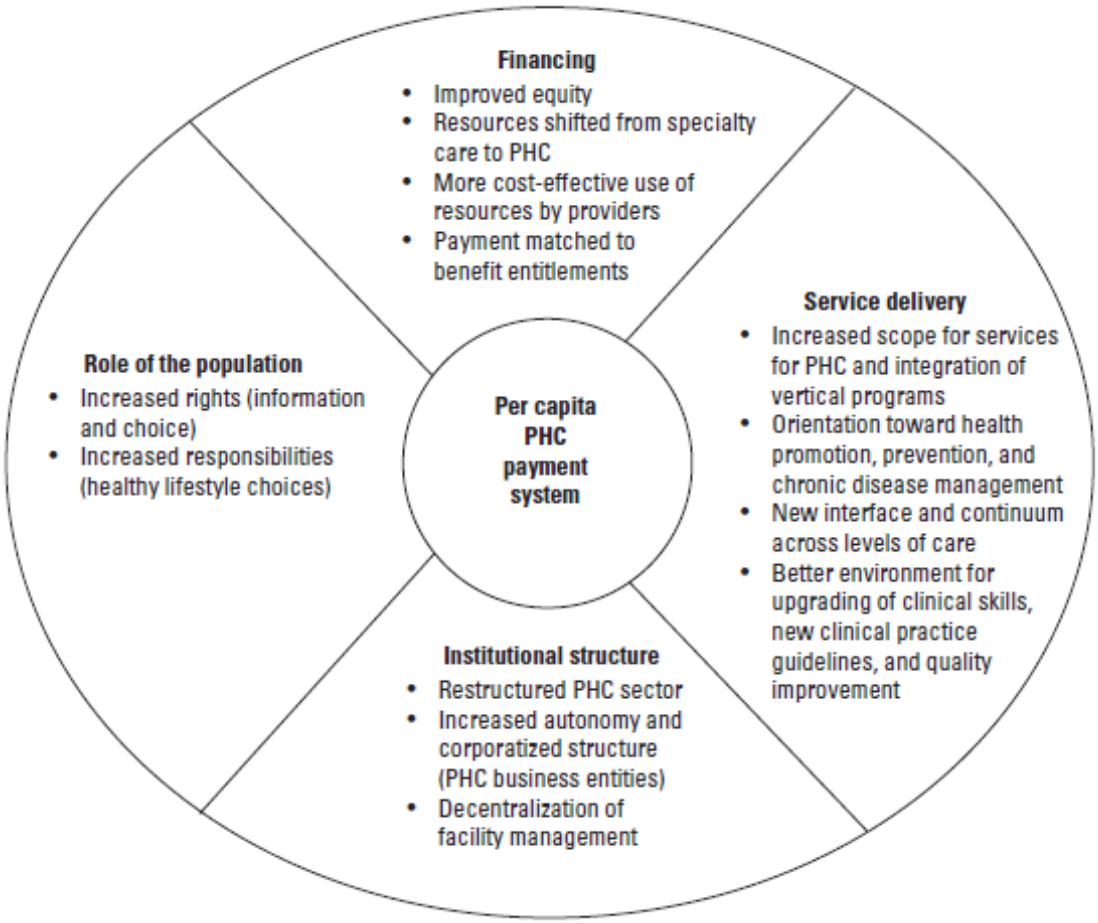


Figure 30: Axes of per capita PHC payment system impact (55 p. 30)



18.1.1.1 Requirements for the introduction of an integrated primary care delivery model and the introduction of active purchasing

Table 10 (page 56) lists the respective elements and comments on items that should be considered in respect of each element.

In respect of time frames, it is important to note that these changes are difficult to achieve in the short or medium term since they are contingent on other structural changes that can only be addressed through longer-term reforms. As an example, in Spain, where more than six times the financial resources are applied to healthcare (in comparison to South Africa), the reform was introduced *"rapidly"*[24] over a period of thirty years. The reforms in the middle Asian countries were introduced quicker after independence from the Soviet Union in the early 1990's (55 p. 98)

Figure 30 (page 55) shows that the choice of a purchasing system has an impact on four axes: service delivery, the financing of care, the institutional structure, and the role of the population.

[24] "From 1978 on, Spain rapidly expanded and strengthened its primary health care system, offering a lesson in how to improve health outcomes in a cost-effective manner. The nation moved to a tax-based system of universal access for the entire population and, at the local level, instituted primary care teams coordinating prevention, health promotion, treatment, and community care. Gains included increases in life expectancy and reductions in infant mortality, with outcomes superior to those in the United States." (51 p. 1432)

It therefore follows that overall changes to the health system is a determinant of the effective implementation of reforms to the primary care system.

A key element of the reforms is the requirements that must be met before a purchasing authority is capable of entering into contracts with providers. This is largely dependent on the devolution of authority to a lower level, with the concomitant development of the appropriate governance and accountability structures. Such devolution may be achieved by the current two tiers (National and Provincial) with a third tier, which could include the metropoles where these exist. The current capacity in districts is not adequate to do such contracting, and it would require extensive capacity building before this capacity becomes available and affordable.

Table 10: Prerequisites for the development of integrated primary care and active purchasing

Prerequisites for the development of integrated primary care and active purchasing	
Element	***Comments***
Establishment of a strong localised governance structure	• For the decentralisation of procurement to take place, strong governance structures are required at the district level, to oversee an accounting officer at the local level • Health systems are vulnerable to corruption, particularly in respect of procurement and human resources. Both these functions must be developed for integrated primary care centres to function as business units. • This should be a district Council / Board meeting fit & proper criteria • Critical to the revised model of primary care delivery is the decentralisation of authority with enhanced budgetary control (3).
Time frame: The need for pilot testing	• The full scale implementation of active purchasing and integrated primary care requires many years, and is dependent on the elements included in this table • The development of pilot sites can be done rapidly • It is essential to pilot different approaches to purchasing primary care services from private providers – there is considerable potential risk involved from both the purchaser and providers' perspective and it is necessary to carefully evaluate the feasibility of different approaches through piloting, monitoring and evaluation.
Overall changes to the health system	• Changes to the primary care delivery model requires overall system changes, and particularly requires the allocation of the purchasing function to a devolved authority with local accountability structures prior to effective contracting. (Note the interdependence shown in Figure 30, page 55)
Ability to contract: Improve equity with equal access for equal need	• Requires the devolution of authority and the development of a appropriate governance and accountability frameworks • Requires technical understanding of the services purchased and the potential impact of incentives on provider behaviour • Requires well developed skills in financial management and data for the introduction of fair capitation systems to ensure that access for equal need is equitably resourced
Skills available to develop integrated PHC centres	• Considerable re-skilling of GPs may be required to play the enhanced integrated primary care role(61), which requires a team approach • The establishment of integrated primary care centres as independent business units requires enhanced administrative, and in particular, financial management skills
Scope of business practises / regulatory impediments	• A key potential obstacle to the development of these models is the current HPCSA (and related professional councils) regulations that prevent sharing of fees and employment of health professionals in certain circumstances – these barriers need to be addressed. • EDL medicines bought on state tender should be made available to private group practices via the NHI procurement mechanisms, and practitioners should prescribe from the EDL (with peer committees considering whether to allow treatment of specific patients outside of the EDL).

18.1 Comments on the purchasing of GP, specialist and hospital services from the private sector

18.1.1 Comments on RWOPS, sessions, and state employment

There appears to be consensus that Remunerated Work Outside the Public Sector (RWOPS) frequently leads to abuse, with doctors rather paying attention to work outside the sector where they get additional remuneration. AngloGold Health Service did a similar experiment by allowing mine medical officers and specialists to use improved facilities on the hospital grounds to see medical scheme patients. Even though AngloGold had a very strong work ethic, and medical personal were held accountable for their work to a very high degree, doctors neglected their mine patients in favour of medical aid patients, and the practise was stopped after two or three years.

It may appear that a simple solution for the purchasing of the services of GPs and specialists in the private sector may be through sessional appointments. Before considering the dynamics around dual practise, it is important to note that, even if it were possible to attract vast numbers of GPs and specialists to work in the public sector, sessional appointments by themselves could be problematic in other areas.

Previous experience with the district surgeon type practises and sessional doctors in rural hospitals have presented problems in surprising areas, such as the selling of state tender medicines to private patients[25].

It must however be noted, that it would be difficult, to manage sessional doctors on a vast scale. Quality management and alignment with the objectives of the employer are likely to lead to problems. In spite of the fact that financial considerations are not always the only factor in deciding on where to be employed, most doctors are likely to gravitate to the best-remunerated arrangement.

In consideration of the report by Ashmore (62), it is worthwhile to note that doctors do dual practice (DP) out of "financial reasons of necessity" as opposed to "financial reasons of choice." In both instances, full time doctors engage in private work because of the better remuneration in the private sector.

In respect of "non-financial reasons of choice" (62) :

> *"Non-financial reasons of choice thus often centered around the job satisfaction that a mixture of public and private work provided. While the private sector was attractive due to being better resourced, doctors often also enjoyed the public sector because of its 'collegiality', versus the 'competitiveness' of the private sector. Others enjoyed academic research and teaching in public, as well as the more challenging pathology. Public sector patient interaction was noted to be attractive too in that one is 'shielded' from 'too much' patient contact by registrars and interns."*

[25] On a smaller scale, but equally disturbing is the use of hospital equipment (sonar machines, ECG machines) or disposables (electrodes, syringes etc.) by sessional doctors in their private rooms. These problems are not restricted to the practice of appointing sessional doctors - many other ways exist whereby state disposables, medicine, or equipment could illegally end up in the private sector.

In respect of "non-financial reasons of necessity" (62) :

> *"... notable was the lack of theatre time for surgeons in the public sector, who could make up for this by working in the private sector, and thus often saw the additional job as an extension of their first. Some also felt the public sector provided inadequate exposure to the latest drugs and technologies, as well as greater 'freedoms' from the 'rule-constrained' public sector."*

The report further indicates that the reasons to stay in the public sector seemed to centre on constraint, however, rather than positive incentives to work in the public sector. Notably was a lack of trust in the administration (62).

The report mentions that doctors might be willing to work more in the public sector if better-remunerated flexible contracts were available. Doctors might be enticed back to the public sector on a part-time basis through carefully planned, flexible public sector contracts in the short- to medium-term. However, doctors moving from full-time employment in the public sector onto attractive part-time contracts could result in fewer skills available in the public sector (62).

Considering the above, it appears that the use of sessional appointments provides a limited short to medium term solution, but does not solve the problem of the availability of doctors on a large scale or in the long term. In the long term, structural systemic changes to the health system addressing both the financial and the non-financial reasons elucidated above, must be found.

18.1.2 Purchasing of diagnostic services

Private hospitals, or rather the radiology groups associated with private hospitals, could potentially supply diagnostic tests for high technology and high cost investigations, such as PET scans. Careful consideration must however be given to the fact that a key element of competition in the private hospital sector is competition for specialists. In accordance with the "arms race" phenomenon, specialists are attracted to hospitals with excess capacity (including diagnostic equipment), which drives up costs in the private sector (35)(36)(63). Purchasing of these services from the private sector could therefore exacerbate the already very high level (64) of high technology use in the South African health system.

18.1.3 Purchasing of surgical and inpatient services

In this respect, consideration must be given to the "arms race" phenomenon mentioned in section 18.1.2 above. Private hospitals are most likely willing to provide available spare capacity. This would however require considerable organisation and capacity by the purchasing authority. Private hospitals provide only accommodation, theatre, and nursing services. Clinical and diagnostic services, and logistic services such as transport, would have to be purchased separately from other providers, and considerable coordination would be required for such state patients in private hospitals.

A feasible option would be to purchase defined services in respect of surgical procedures such as cataract removals or hip replacements. Because different providers are involved, it would still require considerable organisational capacity in the purchasing authority. In these instances, case based remuneration agreements must be developed.

Recommendation 32: **The establishment of strong localised governance structures are required prior to the introduction of decentralised purchasing or the establishment of integrated primary care business units**

Recommendation 33: **A clearly defined comprehensive primary care package (incorporating vertical programmes) must be purchased from integrated primary care providers in the medium to long term**

Recommendation 34: **The purchasing function for primary care must be assigned to the lowest feasible level in the medium to long term. This may be a yet-to-be developed organisation, but could be existing structures. The current capacity at the district level is inadequate, and capacity should therefore be developed at the provincial level. Where metropoles exist, capacity to do active purchasing of primary care could be developed at this level.**

Recommendation 35: **Central to the purchasing function is the existence of a suitably mandated authority that is a capable to contract with primary care providers for the provisioning of a well-defined package of primary care services. During the piloting phase, work must commence to establish such authorities**

Recommendation 36: **In the short term, before the introduction of capitation based integrated primary care, it is important to pilot test the approach. Preferably in more than one province in rural and metropolitan areas simultaneously. Until exemption is obtained from the HPCSA in respect of group practices, and until state tender drugs are available, the model can be tested with state employees in a state facility. Clear monitoring and evaluation criteria must be developed upfront. Purchasing and contracting capacity should be developed during the pilot test; extensive reliance must be placed on the World Bank "How-to" manual in this respect (6)**

Recommendation 37: **During the pilot phase, remuneration must be on a salaried basis, and work must start on the introduction of salaries with incentives. These incentives could consider FFS and / or performance (which could include outcome, preventative activity, and community-based work)**

Recommendation 38: **1. Remuneration for privately practising doctors doing session work should ideally be at the same hourly rate as similarly quailed and experienced full time employees. GPs should be appointed on a sessional basis where specific tasks could be performed to augment clinical services. Specialists should be available on a sessional basis to provide further training and advice on the management of complex patients**

Recommendation 39: **Extensive consideration must be given to the administrative and management skills required for the functioning of primary care centres as business units. Course contents and training material for the future training of general and financial managers must be developed during the piloting phase**

Recommendation 40: **During the pilot phase, the centres would have to start on a line level budget. Work must start to develop the most appropriate capitation models, and shadow budgets must be maintained. Such shadow budgets must be initially based on raw capitation, with risk adjustments being done as more information about the served population is collected**

Recommendation 41: **Consideration must be given to "freedom of choice" in the development of enrolment databases**

Recommendation 42: **Sessional appointments will continue to alleviate staff shortages at state hospitals. In the short term, remuneration must be adjusted to equal the hourly rates of full time public sector employees**

Recommendation 43: **In the short to medium term, RWOPS must be abandoned and sessional appointments must continue to alleviate staff shortages. Structural and systemic solutions addressing the underlying problems (financial and non-financial) can only be in place in the long term**

Recommendation 44: **Great care must be taken in the utilisation of diagnostic and inpatient services in the private sector and should be used in the short term only to address immediate shortcomings in the public sector (See section 18.1.2, page 58)**

Recommendation 45: **Where specific surgical procedures are purchased privately, this must be done on a per case payment basis (See section 18.1.3, page 58)**

18.2 Development of prospective payment methods

18.2.1 Developing a risk adjusted per capita payment system

18.2.1.1 Primary health care payment systems

Table 11 (page 61) lists the typical payment mechanisms for primary care as being a line item budget (as is currently used in the public sector), fee-for-service (as used by private GPs), and per capita payments.

Note that “raw” per capita payments lead to undesired behaviour by primary care providers, with a tendency to provide fewer services than what is required, to refer to other providers (hospitals or specialists), cream skimming (activities to attract and select of lower risk patients), or generally unresponsive behaviour. Such capitation does have the desired effect of incentivising lower expenditure on high technology and promotes lower cost promotive and preventive activities.

Table 11: Primary health care payment methods, characteristics, and incentives (55 p. 4)

	Characteristics			
Payment method	*Payment rate set prospectively or retrospectively?*	*Payment to providers made prospectively or retrospectively?*	*Payment based on inputs or outputs?*	*Incentives for providers*
Line-item budget	Prospectively	Prospectively	Inputs	Underprovide services; refer to other providers; increase inputs; no incentive or mechanism to improve the efficiency of the input mix; incentive to spend all remaining funds by the end of budget year
Fee-for-service (fixed-fee schedule and bundling of services)	Prospectively	Retrospectively	Outputs	Increase the number of services including above the necessary level; reduce inputs per service
Fee-for-service (no fixed-fee schedule)	Retrospectively	Retrospectively	Inputs	Increase number of services; increase inputs
Per capita (and see chapter 1 this volume)	Prospectively	Prospectively	Outputs	Improve efficiency of input mix; attract additional enrollees; decrease inputs; underprovide services; refer to other providers; focus on less expensive health promotion and prevention; attempt to select healthier enrollees

It is important to consider the health policy context with the refinement of existing payment mechanisms or the introduction of new systems (55 p. 28) :

> *"The role of the PHC sector in the health system also sets the stage for the entire interaction between the government, purchasers, providers, and the population throughout the health care system. Therefore, the financing of PHC and the provider payment system(s) that are used plays a critical role in driving health system change well beyond that of financial incentives. It is critical that a per capita PHC payment system be designed in the context of broader health policy goals, the current capacity of the system, and the desired or expected changes in the system."*

The broader health system goals are therefore critical in determining the methods of payment, and the development of a per capita PHC payment system.

18.2.1.2 Developing a per capita payment system

In developing a per capita system, it is likely that it would have to start with a simple per capita rate, which may have the undesired effects of cream skimming and unresponsive behaviour by providers. Refinements are therefore required to capitation to include incentives to stimulate positive behaviour.

This may constitute a system whereby a portion of the remuneration (say 40%) of the fee is capitated, 50% is based on a FFS structure [to encourage productivity/responsiveness], and 10% is allocated to quality/preventative services.

In setting a capitation rate, it is clear that a well-defined PHC package of services must be agreed to. Mechanisms for setting the PHC pool and calculating the base per capita rate must be available. To prevent cream skimming and to allow for fair determination of payment rates, risk adjustment coefficients must be calculated. In its simplest form this may be done by defining specific rates by age and gender groups (see (55 p. 51)), but this requires consideration of health status as well, particularly where large differences in the health status of different groups are observed.

The World Bank "How-to" manual gives details on the development of an enrolment database (including the requirements for allowing the public to choose their own providers), the calculation of each provider's per capita budget, and the link between PHC per capita payment and the health system axes, with more details on the experience from four central Asian republics (55). The manual places heavy emphasis on the development of skills, in particular financial management skills (55 p. 62), which are required for the introduction of such revised mechanisms (55 p. 67):

> *"There is a strong justification to create a separate staff position of finance manager for the PHC providers to assist the clinical director to carry out the new financial and general management functions. Where providers are small, it may be most cost effective to include only part-time positions or to share a position among several providers."*

18.2.2 Developing a Casemix remuneration system for hospitals

The Green Paper proposes that accredited providers at the hospital level will be reimbursed using global budgets in the initial phases of implementation with a gradual migration towards diagnosis related groups (DRGs) with a strong emphasis on performance management (paragraph 103). The health system in South Africa uses different payment-mechanisms to reimburse providers. These payment mechanisms include reimbursement system for services provided and global budgets in the private and public health care sectors, respectively.

Modifications in the payment mechanisms can be used as a base to introduce health reforms that are aimed at, for example: improving hospital management and quality, separating the functions of financing and provision of health services, increasing transparency, inducing efficiency, decentralising, and increasing coverage levels. Any payment mechanism is dependent on the availability of solid information.

Structuring and organising of the services in an efficient way, according to patient needs, and providing the right incentive for both patients and insurers is a challenge faced by many health systems. In South Africa, the global budgets payment mechanism in the public sector is likely to exacerbate the inefficient use of resources. The situation is not better in the private sector where fee-for-service payment mechanism is the norm. Here the provider is incentivised to maximise the number of medical services (see Figure 29, page 54). The risk lies with the payer. The payer may include the patient in the case of copayments. This payment mechanism is likely to have negative effects on the system that may include no prevention of ill health, use of high technology and quality, induced demand, "corruption," price discrimination and inequality. The private sector also uses capitation as a form of a mechanism of payment. The capita payments are usually made on an unadjusted basis. This then leads to the provider carrying all the risk.

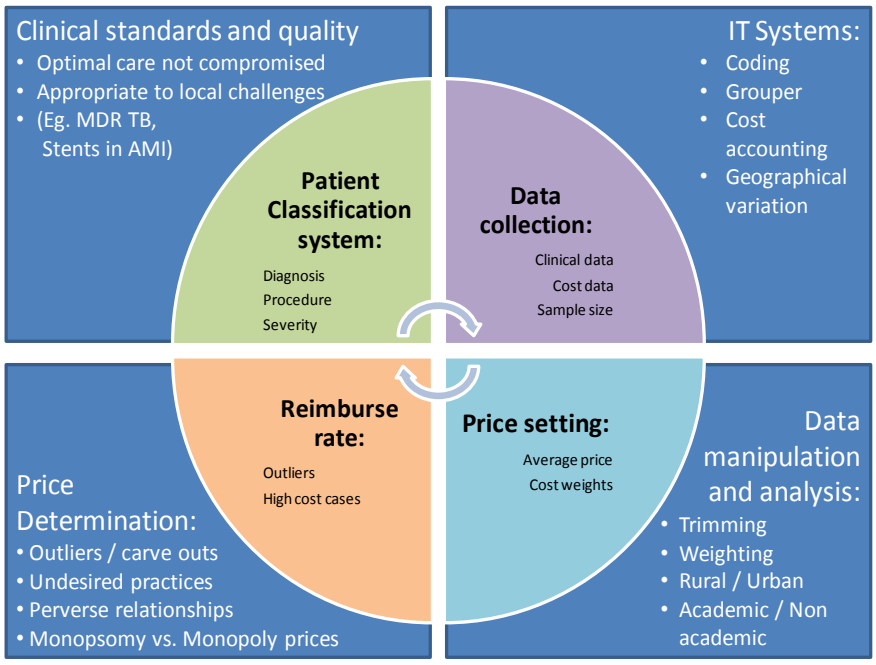
Many countries around the world use (Prospective Payment System) PPSs for to reimburse healthcare providers, especially hospitals. One option for a hospital PPS is to have a patient classification system to group hospital cases and apply predefined fees for each type of these cases. The most common patient classification system used for PPS is the system of DRGs. The United States Health Care Financing Administration (HCFA) first introduced the DRG system for PPS in 1983, making their own classification system named HCFA-DRG. Several European countries, including Portugal, Austria, and Italy, followed in the 1980s and 1990s, and they usually used locally adapted HCFA-DRG systems. In central and eastern Europe, Hungary was the first country to implement a DRG system in 1993.

There are currently three major versions of the DRG in use: basic DRGs (65), All Patient DRGs (66), and All Patient Refined DRGs (67). The basic DRGs are used by the Centers for Medicare and Medicaid Services (CMS) for hospital payment for Medicare beneficiaries. The All Patient DRGs (AP-DRGs) are an expansion of the basic DRGs to be more representative of non-Medicare populations such as paediatric patients. The All Patient Refined DRGs (APR-DRG) incorporate severity of illness subclasses into the AP-DRGs.

Figure 31 below demonstrates that, along with the development of clinical and quality standards, price determination and data manipulation and analysis, IT systems (see section 19.2.2, page 67) make up an essential building block for the development of Casemix remuneration systems.

At a nationally compatible level , IT systems must cater for at least the underlying procedural and diagnosis coding systems, the grouping of cases (such as DRGs) must be done by grouper software, and key cost items must be captured.

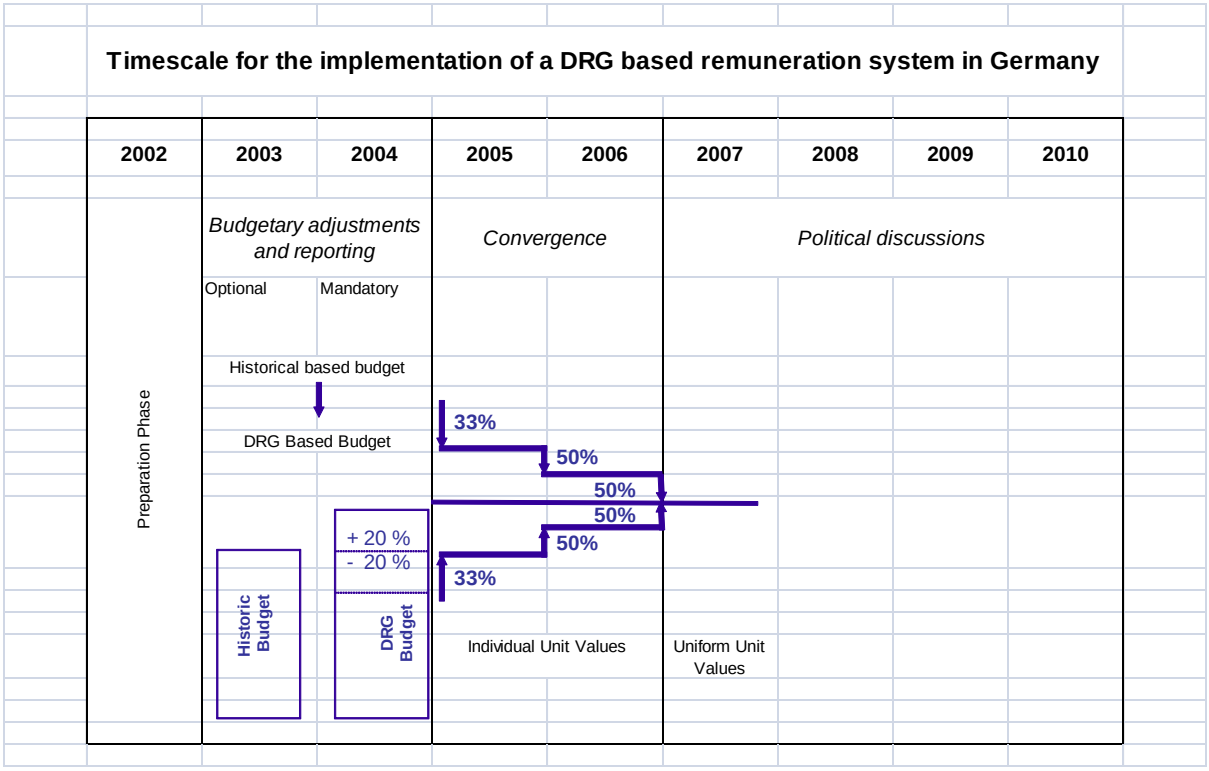
Figure 31: **Essential building blocks for the implementation of Casemix based remuneration (Adapted from (68))**



The implementation of DRGs require the development of hospital boards and the ability to purchase services, the full implementation of the OHSC, the implementation of underlying diagnosis and

procedure codes, and should then be followed by a parallel period where actual funds are allocated on a global budget, with gradual migration towards DRG payments only (see Figure 32, page 64)

Figure 32: Migration from Global Budgets to DRGs in Germany



18.3 Clinical coding systems

18.3.1 ICD-10 Coding: Experience in the Private Sector

18.3.1.1 Introduction

This section highlights key considerations in the private health sector, in particular lessons learned over the past few years to inform the NHI implementation. Data presented in this document is sourced from variety of sources on ICD-10 from the CMS publications. The NHI Policy document refers underlying procedural and diagnosis coding systems. There are many coding systems for diagnosis and procedures around the world. Some of these coding systems are country specific. However, many countries tend to use the ICD or its derivatives. This system was developed as collaboration between the World Health Organisation (WHO) and 10 international centres in order that medical terms reported by medical and other personnel can be grouped together for statistical purposes.

The ICD coding is used for a variety of other purposes including but not restricted to standardising definitions: e.g. underlying cause of death, live births, maternal deaths and many others. In South Africa, this coding system is currently being used by certain healthcare funders and health service providers for the classification of diseases for purposes of clinical risk management, claims processing and benefit design. It is used in both the private and public sectors in South Africa and since July 2005 it has been mandatory for accounts from healthcare practitioners to medical

schemes to contain ICD-10 codes. Medical Schemes Act provides key drive for the standardisation of health information in the private sector.

Regulation 5f of the Medical Schemes Act indicates that a provider of healthcare is required to submit a diagnostic code to a funder / administrator for re-imbursement. The regulation does not stipulate that the diagnostic code must be an ICD-10 code; however, ICD-10 is the recommended diagnostic code for SA. The requirements for medical scheme claims have prompted significant consultation and decisions in relation to the implementation of ICD-10 as the national diagnosis-coding standard. In this respect, the work of the ICD-10 Implementation Task Team, jointly convened by the NDoH and the CMS and involving relevant stakeholder groups over the years has provided a model for meaningful and useful cooperation between the public and private sectors on health information issues.

18.3.1.2 Challenges to implementation of coding systems

The shortage of experts with adequate expertise in ICD-10 might pose a problem to the implementation of the coding system. In addition, lack of financial resources (manuals, funds for training, etc) has also been identified as an area of possible concern; particularly in the Public sector thus need to be strengthened further for consideration in an NHI implementation process.

The introduction of any coding system requires an investment in human capital and information technology systems. These are issues that would need to be considered. Ideally, a Co-ordination Committee consisting of stakeholders from various groups within the health sector should be put in place. This Committee will play an advisory role and might also help monitor trends and developments around the coding system. Inputs on Uniquely South African conditions need to be monitored.

Another key challenge is resistance for Physicians to obtain training and also resistance to upgrade IT systems. Training of coders is an essential ingredient to the improvement of the quality of coding. Training impacts on the important elements of coding such as: reliability, validity, completeness and timeliness. Standards for training courses need to be put in place and accredited coding specialists should ideally conduct training. Nevertheless to do this, experts will have to cost this package, which will be challenging for a number of reasons. On the one hand, using public sector data will be difficult because ICD 10 coding (diagnosis codes) are not routinely used and collected.

Privacy patient confidentiality has also been the challenge in the implementation of ICD-10 coding, this nearly sabotaged the process. The other challenge with regards to implementation in South Africa is that Phase 4 of the implementation process has been postponed indefinitely. The implementation phase would seek to address ICD-10 validation aspects, for example gender validations, followed by the implementation of ICD-10 sub-sets and age edits where possible. Proper clinical validation of diagnostic against procedure/pharmaceutical codes also still need to be implemented.

18.3.1.3 ICD-10 compliance data in the medical schemes

The implementation of the ICD-10 coding system is being conducted in phases on an ongoing basis. Currently, the average level of compliance with inclusion of a valid ICD-10 code in claims to medical schemes ranges from 70% to 97% as determined through compliance statistics submitted to the

National Task Team on ICD-10 by medical schemes. However there are challenges with regards to these data. Some of the challenges relate to resistance in providing correct ICD-10 codes by some providers the providers and some medical schemes do not reject claims and this is not consistent with coding standards per circulars communicated by the ICD-10 National Task team through the office of the Registrar. Some schemes system do not adequately capture ICD-10 related data, this is seen in data presented on rules or guidelines that schemes use to reject claims.

18.3.1.4 Success factors of ICD-10 coding

As it would be anticipated in any implementation phase, there would be challenges. However there are tremendous strides and success factors that have been noted over recent years. Some of these include a healthy collaboration between the National department of Health and all the stakeholders in the private sector. Co-ordination and oversight of the process by the CMS, NTT has been excellent and the move towards housing or formation of the standards body has also been a major achievement. Recent and accomplishments include a number of documents produced by the National Task Team; these are the Coding Standards document, National Training standards, Code of conduct for coders and the Privacy and Confidentiality document. Lastly, the development of the MIT that all stakeholders utilise as their coding tool has been a great achievement; however these would need to be constantly updated. With respect to collaboration between the NDOH and the private sector, it is envisaged that partnership continues in consideration of the success factors thus far and for consideration of the NHI process.

18.3.1.5 Benefits of adopting ICD-10 coding and the NHI/ Universal coverage

Literature shows that access to good health care is empirically associated with better care outcomes. Unfortunately in South Africa, nearly 43 million lives, which is equivalent, uncovered lives in the US. Countries with universal healthcare coverage are challenged to provide their populations with equitable and efficient access to care. An improved data set of detailed information can serve to facilitate access to care. The U.S. healthcare system faces quality concerns attributed to medical errors, fragmented care, and inadequate systems, further compounding the cost and quality balance. In addition to its payment implications, the new systems represent notable opportunities for hospitals and health systems to code more accurately and contribute to healthcare quality improvement initiatives. The more refined record-keeping and quality measurement the new system will allow will also drive public reporting of quality improvement metrics. A recent study conducted by the Rand Corporation (commissioned by the National Committee on Vital and Health Statistics) presented both the benefits and expenses of adoption of ICD-10. Benefits are grouped into five major categories:

- More accurate payment for new procedures
- Fewer miscoded, rejected, and improper reimbursement claims
- Better understanding of the value of new procedures
- Improved disease management
- Better understanding of healthcare outcomes (not fully evaluated)

The study also illustrates other potential benefits of switching to or implementing ICD-10, these included accurate information generated by ICD-10-CM and PCS can provide key metrics for monitoring some of the most important and pressing healthcare issues in the United States issues related to cost, quality, and access to care. Thus despite challenges with regards to implementation,

there are success factors and benefits of using coding systems in an NHI sphere however limitation of such need to also be taken into account.

19 Role of IT systems in the NHI environment

19.1 Service delivery

For effective service delivery, the IT system should have modules to serve patient registrations and clinical records, materials management (Logistics, pharmacy, theatre stock etc), a billing and accounts receivable components, general ledger, cost accounting functionality, and should comply with national standards.

19.2 Purchasing

Recommendation 46: An IT system supportive of the active purchasing function is critical to ensure the implementation of NHI

19.2.1 Contract management

Complete contract management capabilities should be included to support purchasing from public and private providers.

19.2.2 Casemix / DRGs / risk adjusted capitation

Most private run information systems serve the fee for service environment. To introduce capitation and casemix based remuneration systems, a different focus is required.

To enable the allocation of costs to cases, the following must be catered for in the IT system architecture:

- Diagnosis and procedure coding systems
- Pharmaceutical and Surgicals coding system
- This data would typically reside in materials management / pharmacy system, and would populate billing / costing modules
- Laboratory system
- Data extracted from the laboratory system must strengthen the diagnosis and procedure codes to accurately measure outcome (in pay-for-performance systems)
- Cost accounting
- The ability to allocate all costs (overheads and direct costs) to individual patients is critical for the correct assignment of cost weights to specific patient groups (DRGs)
- This requires that the system is able to allocate labour costs to individual patients as well, and poses a particular problem therein that the cost accounting module must be populated with data from PERSAL.
- Geographical variation
- Geographical variations in costs are a function of labour, training, and other costs. Geographical location identifiers are therefore critical in the system architecture.
- Data warehousing capabilities
- An important element of an IT system that is required to support prospective payment mechanisms is the data warehousing capacity of a system.
- Data warehousing comes at a high cost, it requires a specific platform for the extraction and transformation of data into normalised tables, in a multidimensional architecture.

20 List of recommendations

Part III: Impact of the implementation of the draft NHI policy on the CMS's strategy

21 Consideration of Existing CMS strategy

The CMS has developed the recently submitted strategic plan, annual performance plan, and budget in consideration of the proposed NHI. Table 12 (page 73) presents the CMS's fourth strategic goal as follows: *"CMS provides influential strategic advice and support for the development and implementation of strategic health policy, including support to the NHI development process"*

Clearly, the implementation of NHI will have an impact on the operations of the CMS, and the legislated mandate of the Council will have to be reconsidered from time to time to ensure that the CMS functions remain relevant in a changing environment.

21.1 Possible future roles for the CMS

The regulatory experience built up during the 11 years of the CMS's existence will have to find expression in the new environment.

Continued regulation of medical schemes, or "health insurance products" will continue to be required. Most developed economies with well-developed universal access mechanisms still have surprisingly large percentages of the population having "private health insurance" cover. Due to the commercial imperatives, whereby health insurers would select preferred low risk individuals if left to their own devices, it is essential to regulate the environment to protect vulnerable groups.

The CMS has experienced the impact of risk pool splitting on vulnerable individuals, and has developed knowledge on how to recognise these effects, and may in future play a role to manage interventions to protect vulnerable groups. It might be required that the CMS establishes regional offices to meet future requirements.

The exact nature of the required regulation will become clearer as the implementation of the NHI progresses.

21.2 CMS roles over the short, medium and long term

It is very unlikely that the CMS role will change significantly in the immediate future, but as the public sector is strengthened over the next five years, consideration should be given to the potential impact this might have on medical scheme risk profiles.

The environment must be monitored carefully during this build up. Interventions to prevent the dumping of large numbers of beneficiaries on the improving public sector must be developed and implemented timeously to prevent damage to the developing NHI.

The first major impact on the CMS will be visible in the medium term. At this stage it would be apparent how medical schemes will change, and how these should be regulated. It is unlikely that the regulatory efforts would be much diminished since the environment is likely to become more complex with the adjustments to medical schemes, and health insurance products.

In the longer term, with a fully developed NHI, regulation might be simplified. Naturally, the full implementation of the NHI is largely dependent on the improvement of inequity in South Africa.

Table 12: CMS Strategic Goals

Goal 1	**Access to good quality medical scheme cover is maximised**
Statement	Ensure that at all times barriers to scheme access are minimised and that coverage provided by schemes is of a high standard. Improved risk pooling is achieved through enhanced community rating, open enrolment, and prescribed minimum benefits. By 2013, firm policy recommendations must be incorporated in government policy and proposals towards amendments of the Medical Schemes Act must be made to implement these arrangements.
Goal 2	**Medical schemes are properly governed, are responsive to the environment, and beneficiaries are informed and protected**
Statement	Ensure that at all times medical schemes are governed in the interests of beneficiaries by ensuring that the principles of good corporate governance are fully adhered to and that appropriate action is taken against corporate governance failures. By 2013, amendments to the Medical Schemes Act must be in place to strengthen the governance provisions, and governance failures are addressed prior to scheme failures. Ensure that at all times medical schemes are sensitive to the specific needs of beneficiaries, are financially sound, offers protection against catastrophic financial incidents. Schemes must also be sensitive and to broader social considerations through the introduction of appropriate regulatory measures and their enforcement. By 2013, the Council must have a well functioning system to cater for the electronic filing of scheme rules, near real-time financial monitoring, and a well functioning composite risk index system. Through the control and coordination of the availability of information emanating from regulated entities, their education and training activities, participation in public discussions, and the publication of material in lay and official publications, the CMS will contribute to ensure that members, their dependants, and the public are informed of their rights. By 2013, the CMS will have an updated version of communication guidelines, which schemes must adhere to, most schemes' marketing material will be analysed before release, and scheme communication with members will be monitored.
Goal 3	**CMS is responsive to the needs of the environment by being an effective and efficient organisation**
Statement	Through the improvement of: complaints regimes, information collection and dissemination, financial and other best practice monitoring systems, the effective internal organisation of the office including improved IT systems, enhanced human resource policies and procedures, adherence to financial management, and other internal measures, the CMS will constantly adapt and upgrade its way of doing business. To improve its efficiency, the CMS will reduce the proportion of the budget allocated to support functions to less than 40% by 2013.
Goal 4	**CMS provides influential strategic advice and support for the development and implementation of strategic health policy, including support to the NHI development process**
Statement	Through reviewing the needs of the environment, the CMS, and government will constantly collect and upgrade the collection of information for the purposes of ongoing and strategic review of the private health system. Through its privileged position in the health system, the CMS will form strategic relations with regional and international institutions, consult, research, and collate information for the purposes of influencing stakeholders and to provide strategic advice to government; as well as provide technical assistance to major strategic health reforms. By 2013, the CMS will have completed at least one major project to support this goal.

22 Works Cited

1. **Department of Health.** National Health Insurance in South Africa. Policy paper. *Government Gazette.* Pretoria : s.n., 2011. Vol. 554, no. 34523.
2. **World Health Organization.** The Health systems performance framework. *World Health Organization Regional Office for Europe.* [Online] [Cited: 22 April 2010.] http://www.euro.who.int/healthsystems/20070323_1.
3. **National Planning Commission.** *National Development Plan: Vision for 2030.* Pretoria : s.n., 2011. ISBN 978 0 621 40475 3.
4. **Health Economics Unit.** Module 2 Topic 9 commentary: Financing and organisation. *Post graduate diploma in Health Economics, Commentary: Module 2, topic 9.* Cape Town : University of Cape Town, 2010.
5. **Kutzin, Joseph.** *A Global Perspective on Health Financing for Universal Coverage.* Johannesburg : World Health Organisation, 2011. Presentation at the December 2011 Conference on National Health Insurance in Johannesburg: Lessons for South Africa.
6. **Van den Heever, Alex.** Personal communication. *Lorenz curve for South Africa based on 2006 GHS.* Pretoria : s.n., 2009.
7. **Government Communications.** Government's programme of Action: Ten priority areas for 2009 to 2014. *Government communications.* [Online] 3 June 2009. [Cited: 22 February 2010.] http://www.gcis.gov.za/resource_centre/multimedia/posters_and_brochures/brochures/poa2009.pdf.
8. **Byl, Sven, Krugel, Lullu and Sexwale, Grace.** *Funding NHI: A spoonful ofsugar? An economic analysis of the NHI.* Johannesburg : KPMG, 2011.
9. **Krech, Rüdiger.** *Social Determinants of Health.* s.l. : World Health Organisation, 2011. Presentation at the December 2011 Conference on National Health Insurance in Johannesburg: Lessons for South Africa.
10. **Development Bank of Southern Africa.** Health Roadmap. *Development Bank of Southern Africa.* [Online] Development Bank of Southern Africa, November 2008. [Cited: 12 March 2010.] http://www.dbsa.org/Research/Documents/Health%20Roadmap.pdf.
11. **Department of Health.** Strategic Plan 2009/10 - 2011/12. *Department of Health.* [Online] 29 June 2009. [Cited: 11 March 2010.] http://www.doh.gov.za/docs/misc/stratplan/2009-2011/chapter2.pdf.
12. **Johnston, Sandy and Spurret, David.** *Reforming Healthcare in South Africa. What role for the private sector?* [ed.] Ann Bernstein. Johannesburg : The Centre for Development and Enterprise, 2011. Vol. CDE Research no 18. ISBN 978-0-9869860-0-0.
13. **McIntyre, Di.** NHI - A public good? Cape Town : Unpublished draft, June 2010.
14. **Van den Heever, Alex.** Trends in govenrment policies and programmes, with specific emphasis on jnational health insurance. Pretoria : Unpublished draft, February 2010.
15. —. Evaluation of the Green Paper on National Health Insurance. *Helen Suzman Foundation.* [Online] December 2011. [Cited: 11 01 2012.] http://www.hsf.org.za/siteworkspace/gp-review-alexvdh-dec2011-vf-1.pdf.
16. **McIntyre, Di.** *Options for South Africa: Financing.* Health Economics Unit, University of Cape Town. Johannesburg : Department of Health, 2011. Presentation at the December 2011 Conference on National Health Insurance in Johannesburg: Lessons for South Africa.

17. **Donaldson, Cam and Gerard, Karen.** Alternatives for funding health care. *Economics of health care financing: The visible hand.* s.l. : Macmillan Press, 1993.
18. **The World Bank.** The World Bank Data. *The World Bank.* [Online] [Cited: 23 April 2010.] http://data.worldbank.org/data-catalog.
19. **Harrison, David.** *An Overview of Health and Health care in South Africa 1994 – 2010: Priorities, Progress and Prospects for New Gains. A Discussion Document Commissioned by the Henry J. Kaiser Family Foundation* to.* s.l. : Not published, 2009.
20. **Statistics South Africa.** General household survey 2010 (Revised version). *Statistics South Africa.* [Online] 3 August 2011. [Cited: 12 01 2012.] http://www.statssa.gov.za/publications/P0318/P0318June2010.pdf. Statistical release P0318.
21. **Council for Medical Schemes.** *CMS Annual Report 2010-2011.* Pretoria : Council for Medical Schemes, 2011. ISBN 978 0 621 40011 3.
22. **Westmoreland, Tim.** *Lessons from the USA: A Broken System That We Hope to Repair.* O'Neill Institute on Health Law, Georgetown University Law Center. Johannesburg : Department of Health, 2011. Presentation at the December 2011 Conference on National Health Insurance in Johannesburg: Lessons for South Africa.
23. **Kirby, Neil.** Challenge to Obama health reforms is a warning for SA. *Business Day.* [Online] 26 April 2011. http://www.businessday.co.za/Articles/Content.aspx?id=141080.
24. **Mountford, James and Webb, Caroline.** *When clinicians lead.* s.l. : McKinsey & Company, 2009.
25. **The King's Fund Commission.** *The future of leadership and management in the NHS.* s.l. : The King's Fund, 2011. Report from The King's Fund Commission on Leadership and Management in the NHS. ISBN: 978 1 85717 620 9.
26. **Spurrett, David and MacFarlane, Marco.** *A nation's health in crisis. International experience and public–private collaboration.* Johannesburg : The Centre for Development and Enterprise, 2010. ISBN: 978-0-9869860-0-0.
27. **Council for Medical Schemes.** Clinical Governance Module. *Council for Medical Schemes.* [Online] [Cited: 12 January 2012.] http://www.medicalschemes.com/files/Board%20of%20Trustee%20Material/Clinical_Governance_Module.pdf.
28. **Osewe, Patrick.** *Governance of Health Insurance Systems.* World Bank. Johannesburg : Department of Health, 2011. Presentation at the December 2011 Conference on National Health Insurance in Johannesburg: Lessons for South Africa.
29. **Webster, Chris.** Corruption and the Smallholder: A Review of Current Literature and Research. *World Agricultural Education and Information System Project.* [Online] [Cited: 10 January 2012.] http://www.worldaginfo.org/files/Corruption%20and%20the%20Smallholder1.pdf.
30. **Abed, George T. and Gupta, Sanjeev.** The Economics of Corruption: An Overview. *International Monetary Fund.* [Online] [Cited: 10 January 2012.] http://www.imf.org/external/pubs/nft/2002/govern/index.htm#chp1.
31. **The Lancet.** Health in South Africa. *The Lancet.com.* [Online] Elsevier Properties S.A., 25 August 2009. [Cited: 8 August 2010.] http://www.thelancet.com/series/health-in-south-africa.
32. **World Health Organization.** *The WORLD HEALTH REPORT 2000. Health Systems:Improving Performance.* Geneva : The WORLD HEALTH REPORT 2000. Health Systems:Improving Performance, 2000. ISBN 92 4 156198 X.
33. **Department of Health and Council for Medical Schemes.** Discussion document, The Determination Of Health Prices In The Private Sector. *Council for Medical Schemes.* [Online] Council

for Medical Schemes, 2 November 2010. [Cited: 18 December 2011.] http://www.medicalschemes.com/files/Health%20Price%20Determination/DiscussionDocOnPriceDetermination.pdf.

34. **Visser, Amanda.** Business Day. *Competition Commission may probe healthcare.* [Online] 30 12 2011. [Cited: 30 12 2011.] http://www.businessday.co.za/articles/Content.aspx?id=161831.

35. **Council for Medical Schemes.** Evaluation of Medical Schemes' Cost Increases: Findings and Recommendations. *Council for Medical Schemes.* [Online] 17 June 2008. [Cited: 13 March 2010.] http://www.medicalschemes.com/publications/ZipPublications/Research%20Briefs/Report_on_Cost_Inc.pdf.

36. *Is hospital competition wasteful?* **Dranove, David, Mark, Shanley and Carol, Simon.** 2, Summer 1992, Rand journal of Economics, Vol. 23, pp. 247-262.

37. *Price and Concetration in Hospital Markerts: The Switch from Patient-driven to Payer-driven competition.* **Dranove, David, Shanley, Mark and White, William D.** April 1993, The journal of Law and Econimics, Vol. XXXVI, pp. 179-204.

38. *Revisiting the Realtionship between Managed Care and Hospital Consolidation.* **Town, Robert J, et al.** s.l. : Health Research and Educational Trust, pp. 219-238.

39. **Feldstein, PJ.** The Market for Hospital Services. *Health Care Economics.* s.l. : Thomson Delmar Learning, 2005, 11, pp. 258-295.

40. **Doherty, Jane and Gilson, Lucy.** South African Health Managers Speak Out. Lessons for Innovative Health Management in the Public Sector, 2011. [Online] 2011. [Cited: 7 January 2012.] http://heu-uct.org.za/courses/degrees-and-diplomas/postgraduate-diploma-inhealth-management/.

41. **National Treasury.** A safer financial sector to serve South Africa better. *National Treasury.* [Online] 23 February 2011. [Cited: 17 01 2012.] http://www.treasury.gov.za/search.aspx?cx=018115738860957273853%3Aj5zowsrmpli&cof=FORID%3A11&q="a%20safer%20financial%20sector%20to%20Serve%20South%20Africa%20better".

42. **Council for Medical Schemes.** Invitation to participate in the Prescribed Minimum Benefit (PMB) benefit definition project. *Council for Medical Schemes.* [Online] 13 September 2010. http://www.medicalschemes.com/files/Circulars/Circular45Of2010_20100914.pdf.

43. *Capitation and Risk Adjustment in Health Care Financing: An International Progress Report.* **Rice, N and Smith, P.C.** 1, Oxford : The Milbank Quarterly, 2001, Vol. 79.

44. **Van de Ven, W.P.M.M. and Ellis, R.P.** Risk Adjustment in Competitive Health Plan Markets. [ed.] A.J. Culyer and J.P. Newhouse. *Handbook of Health Economics.* s.l. : Elsevier, 2000.

45. **Department of Social Development.** *Transforming the Present – Protecting the future: Consolidated Report of the Committee of Inquiry into a Comprehensive System of Social Security for South Africa.* 2002. http://www.doh.gov.za/docs/reports/2002/inquiry/risk.pdf.

46. **Shenkman, E and Breiner, J.** Characteristics of Risk Adjustment Systems. *National Association of Children's Hospitals and Related Institutions.* [Online] January 2001. http://www.childrenshospitals.net/AM/Template.cfm?Section=Homepage&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=11460.

47. **Majeed, A, Bindman, A and Weiner, J.** Use of risk adjustment in setting budgets and measuring performance in primary care. *BMJ.* [Online] 15 September 2001. http://bmj.bmjjournals.com/cgi/content/full/323/7313/607. 323(7313): 604–610.

48. **Chang, H.** *Quality-Based Payment- Taiwan's Experience.* Powerpoint presentation by Taiwan Bureau of National Health Insurance, 6 June 2004. http://www.academyhealth.org/2004/chang3.pdf.
49. *Healthcare Utilization Patterns And Risk Adjustment Under Taiwan's National Health Insurance System.* **Chiang, T, Chang, R and Hsieh, C.** 2002, J Formos Med Assoc, Vol. 101, pp. 52-9. http://homepage.ntu.edu.tw/~ihpm/en/chiang2002-1.pdf.
50. **Department of Health.** National Health Insurance. Healthcare for all South Africans. *Department of Health.* [Online] August 2011. [Cited: 13 January 2012.] http://www.doh.gov.za/docs/publicity/2011/nhi_english.pdf.
51. **Statistics South Africa.** *General household survey 2010 (Revised version).* Pretoria : Statistics South Africa, 2011. Statistical release P0318.
52. **McIntyre, Di.** NHI – A public good? (Unpublished draft). [book auth.] Health Sytems Trust. *South African Health Review.* s.l. : Health Sytems Tust, 2010.
53. —. *Report on Purchasing Sub-committee meeting, 7-8 June 2010.* 2010.
54. *Renewing Primary Care: Lessons Learned From The Spanish Health Care System.* **Borkan, Jeffrey, et al.** 8, 2010, HEALTH AFFAIRS, Vol. 29, pp. 1432–1441.
55. **The World Bank.** *How-To Manuals: Designing and Implementing Health Care Provider Payment Systems.* [ed.] John C Langenbrunner, Cheryl Cashin and Cheryl O'Dougherty. Washington DC : The World Bank, 2009. ISBN: 978-0-8213-7815-1.
56. **Council for Medical Schemes.** Discussion document, Measuring quality & health outcomes in medical schemes: Methodology, Criterion and Technical specification. *Council for Medical Schemes.* [Online] 2011. [Cited: 18 December 2011.] http://www.medicalschemes.com/files/Discussion%20Papers/FrmwrkMeasuringQuality_HealthOutcomesSchemes.pdf.
57. **World Helath Organisation.** Health expenditure, Health expenditure ratios. *Global Health Observatory Data Repository.* [Online] 2011. http://apps.who.int/ghodata/#.
58. **Department of Health.** Uniform Patient Fee Schedule, appendix H (applicable to all provinces). [Online] 2006. http://www.doh.gov.za/docs/programmes/2006/appendix-h.pdf.
59. **Du Preez, Laura.** Mind the self-payment gap on higher medical scheme options. *Personal Finance.* 8 January 2011.
60. *A typology for provider payment systems in health care.* **Jegers, Marc, et al.** s.l. : Elsevier Science Ireland Ltd, 2002, Health Policy, Vol. 60, pp. 255–273. PII: S0168-8510(01)00216-0.
61. **Hugo, Jannie.** GP's in SA 2010. [Presentation]. Johannesburg : South African Medical Association GPPPC Indaba, 31 July 2010.
62. **Ashmore, John.** *Report for NHI Purchasing Sub-Committee. Summary of Preliminary Findings from Qualitative Interviews on Dual Practice among Doctors in Two Hospitals in Cape Town.* Cape Town : Unpublished draft, 2010.
63. *Is Hospital competition socially wasteful?* **Kesseler, Daniel P and B, McClellan Mark.** 2, s.l. : The MIT Press, May 2000, The Quarterly Journal of Economics, Vol. 115, pp. 577-615.
64. **Development Bank of South Africa.** *A ROADMAP FOR THE REFORM OF THE SOUTH AFRICAN HEALTH SYSTEM.* s.l. : Unpublished, 2008.
65. **Inter-American Conference on Social Security.** he Diagnosis Related Groups (DRGs) to Adjust Payment-Mechanisms for Health System Providers. [Online] November 2005. [Cited: 25 December 2011.] http://www.ciss.org.mx/pdf/en/studies/CISS-WP-05122.pdf. CISS/WP/05122.

66. **Averill, et al.** *ALL PATIENT REFINED DIAGNOSIS RELATED GROUPS (APR-DRGs) Version 20.0 .* 2003.
67. *Changing patient classification system for hospital reimbursement in Romania.* **Radu, CP, Chiriac, DN and Vladescu, C.** 3, June 2010, Croat Med J, Vol. 51, pp. 250-8.
68. *The ABC of DRGs in Europe.* **Scheller-Kreinsen, David, Geissler, Alexander and Busse, Reinhard.** 4, Winter 2009, Euro Observer, Vol. 11.
69. **Mooney, Gavin.** *Australia and NHI: Lessons – but no wizadry – from Oz.* Johannesburg : Department of Health, 2011. Presentation at the December 2011 Conference on National Health Insurance in Johannesburg: Lessons for South Africa.

Annexure A: Comments on the Costing of NHI

Comments on the costing of NHI

The benefits are unfortunately not clearly defined in the published green paper document on the National Health Insurance Policy paper of 12 August 2011. It is difficult to cost the NHI if the benefits are not clearly defined. However, NHI includes a "comprehensive range of health benefits." In order to cost NHI following must be known:

- The target population (number of lives per age band, gender, province, district, etc.)
- The prevalence for the individual events per 1 000 lives
- The cost for each event (treatment cost)

The target population is the approximately 50 million lives in South Africa. In order to understand the cost per live, province or district the NHI needs to collect certain demographic information at beneficiary level. All this information per beneficiary must be kept in a beneficiary registry. Below is a typical list of information that should be captured at beneficiary level:

- NHI Number (Uniquely identifier for each of the 50 million lives)
- First name
- Initials
- Surname
- Title
- Gender
- Date of birth
- Date of death
- SAID
- Passport
- Relationship (Adult, child, etc.)
- Physical street address
- Physical suburb
- Physical city
- Physical postal code
- Physical country
- Postal PO Box
- Postal suburb
- Postal city
- Postal post code
- Postal country
- Home phone
- Work phone
- Cell phone
- E-mail address
- Taxpayer number
- District
- Closest clinic
- Closest provincial hospital

From the demographic information, different risk profiles could be modelled for the different provinces/districts. The risk profiles are crucial in the allocation of the funds. The demographic information is also crucial in the prevalence calculations.

For every event or condition (for example hospital admission, maternity, HIV, etc.) it is important to have an estimate of the prevalence. Once the prevalence is known, it is possible to calculate the overall cost of the NHI.

The data from the private medical scheme industry could be used to estimate the prevalence and cost if the information is not available in the public sector. CMS has just finished the costing of the Prescribed Minimum Benefit package based on 2009 data. The PMB's are a different set of benefits as envisaged in the NHI, but it is also a fairly comprehensive set of benefits and there is definitely information available that could be used to inform the NHI process. The funding mechanism for the NHI would not be the same as used in the private sector, but the cost estimates from the private sector could be used as a baseline (upper limit) to model the costs associated with the different services. The data used for the costing study was also classified by a grouper. The grouper was used in identifying all claims for the same incident of illness over the duration of the illness into a single episode of care.

Annexure B: Summary of universal coverage systems in six developed and developing countries

Annexure Table 1: The Netherlands

Netherlands: Universal coverage through multiple health insurers			
Financing system	Provider payment	Supply side regulation	Other key features of the reform
Income-related contribution payment to the tax collector low income beneficiaries receive a government subsidy Tax collector transfers contributions to a Risk Equalisation Fund Government pays premium for children under age 18	Risk –adjusted capitation payment	Promulgation of Health Care Prices Act and Exceptional Medical Expenses Act to enabled government to control price and supply of medicine as well as physician fees and their total revenues	Adequate system of risk Equalisation Product classification and pricing Incentives for consumers and providers to encourage cost effective use of health care services Outcome and quality measurements Consumer education Market competition Challenges :- Difficulty in enforcing mandatory participation 1.5 % of insured beneficiaries do not pay monthly premiums

Annexure Table 2: France

France: Social security & universal health care through mutual benefit associations (health insurance schemes)			
Financing system	Provider payment	Supply side regulation	Other key features of the reform
Contributions from employees and employers as a proportion of wages and salaries Coverage extended to retired people, those on early retirement benefit and unemployed people. The contribution rates for health insurance have steadily increased to cover spending on health care, Specific taxes (cars, tobacco, alcohol) Taxes on the pharmaceutical industry	Reimbursement of primary health care practitioners and specialist is based on a per –service reference price. Physicians with more than 4 years experience have an option of setting their own fees Some specialists are salaried employees of the hospitals and are allowed to take private patients with limitations.	National negotiated fee schedule Budget setting and budget targets (ceilings) to limit expenditure at the level of the individual institution Physician profiling to monitor behaviour Audit of physician practices	Benefits depend on contributions Differences in contributions and benefits between the employed , self employed, retired, and unemployed 85% of the population have **supplementary cover** that covers co-payments and services not covered under universal coverage. Restore GP`s as gate keepers Computerised patient records Use of cheaper generic drugs Challenges Increase in unemployment Aging of the population Over utilisation Official rates provide basis for reimbursement by the health insurance funds, whilst the fees actually charged by providers in certain cases are higher than official rates. France health care system is the third most expensive system in the world 10%-40% copayments (which can defeat equity goals) Rapid increase in health care costs Massive deficit

Annexure Table 3: Chile

Chile: Universal coverage : through social insurance (health insurance schemes)			
Financing system	Provider payment	Supply side regulation	Other key features of the reform
Solidarity-based financing system including :- Pre-existing FONASA funds Temporary increase in the consumer tax from 18 to 19% Public funding for health care of people without an income Compulsory contributions for independent workers Tobacco tax Customs revenues Sale of the state's minority shares in public health enterprises potential increases in co-payments Budget increases from economic growth potential reallocations of resources from other sectors	Per capita payment for public PHC providers	Private health insurances law regulated the unilateral increase by the ISAPREs of the health plan cost, as well as the "skimming practice," reducing the possibility of the insurance companies to drop out risky affiliates (Chile, 2005).	A medical benefits package consisting of a prioritised list of diagnoses and treatments "with Explicit Guarantees" for 56 health conditions, Verification Study, with defined methodology and implementation procedures for universal coverage were promulgated. To mitigate fiscal pressure, the reform was implemented in stages and considered the progressive addition of medical conditions to the list of priority diseases Challenges : Private sector turns away chronically ill patients Healthy benefits exhausted Free riding in the public sector

Annexure Table 4: The United Kingdom

UK: National Health Service			
Financing system	Provider payment	Supply side regulation	Other key features of the reform
General tax	Hospital reimbursement is informed by Payment by Results (PbR) --Providers are paid according to their performance. --Payment reflects outcomes, not just activity, also includes incentive for better quality. ---Specialist are salaried employees of the NHS hospitals PHC payment :- --Primary health care practices enter into contractual agreements with primary health care trusts. These practices are reimbursed through capitated amount per patient. --Some GP's are paid through salaries	Private providers are licensed by the Department of Health Quality and safety of care offered by health care providers, currently undertaken by the Care Quality Commission National tariff for most hospital activity	Government's objectives are to reduce mortality and morbidity, increase safety, and improve patient experience, NHS organisations encouraged to achieve efficiency gains NHS organisations going through a period of capital constraint. Preventive approach and home care prioritised over curative hospital based approach. Large cuts in administrative costs Increase in quality through implementing best practice and increasing productivity Public participation important Challenges The cost of new treatments Ageing population Financial pressure increase

Annexure Table 5: Brazil

Brazil: Universal coverage through a mixture of private and public health care			
Financing system	Provider payment	Supply side regulation	Other key features of the reform
General tax including social security contributions (employers and employees), tax on financial transactions	Under SUS (public health system) physicians and other health care providers receive a fixed salary. under PAS workers within each cooperative are paid an income which is tied number of hours worked	Brazilian health care is regulated through *macro and micro regulation model.* *Macro regulation* involves strategic plans , priority setting, social control, budget definitions *Micro regulation* involves regulation of operation of the public and private health care systems. It includes service network, monitoring utilisation and reimbursement Use of provider networks whose services are regulated through:- Profiling of private providers Use of guidelines for services delivery linked to norms and standards Inter-sectoral collaboration between health and social sectors in controlling expenditure by private providers Use of financial evaluation methods	Universal health care include use of Family health Program which brings health care closer to communities The use of Family Health Program has been recorded to have been a success towards expanding access to health care services. Deployment of health care workers to densely populated areas to expand access Challenges Inadequate quantity or quality of public health care providers in poor remote areas Inadequate access to high–quality public care Transportation costs serve as barrier to wards access for the poor Shortage of health care professionals

Annexure Table 6: Colombia

Colombia: Universal coverage through health social security; -Increasing equity of access,- Mandatory health insurance for everyone - comprehensive coverage (benefit package)			
Financing system	Provider payment	Supply side regulation	Other key features of the reform
Healthcare system divided into 2 operation : Contributive Regime (CR) relies on wage contributions Subsidised Regime (SR), relies on three distinct funding mechanisms:- Social contributions Transfer from central government to regional entities resources owned by each regional entity	Primary health care is reimbursed through capitation. Most specialist and hospital care is paid for either by service packages offered or through a fee-for-service basis. Use of fee schedules, adjusted for inflation, as ceilings for price negotiations	Health facilities deliver health services through a regulated list of medicines and medical treatments that all users of the healthcare system have access to. This list is called Plan Obligatorio de Salud (POS), the Obligatory Health Plan.	Delivery of health care is integrated as part of social services. Social solidarity and cross subsidy principles embedded in the Colombian health system Shift from supply-side subsidies to Demand-side subsidies of health services, and by increasing public hospitals efficiency through re-structuring programs. Health social security reform lead to a decrease in out of pocket expenditure from 56% to 6 % (1993-2006) The institutional makeup of the health system appeared as more important in determining level of coverage than how much money is actually spent on health. In Colombia's case, the institutional makeup of the health system is more important in determining level of coverage than how much money is actually spent on health. Challenges Institutional and political difficulties, in the implementation of a radical transformation within the national health system POS list provides limited health care cover Most patients sue their healthcare providers for refusing to cover certain treatments or medicines not included in the POS citing a constitutional right to access to health care services Explosion in costs for the government and the private healthcare providers due to litigation