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Committee Report No 6

Various social security aspects of the South African Health System

6.1 Introduction

Transformation of the health system in South Africa has been and remains an urgent priority for the democratic government. South Africa has introduced significant policy shifts and institutional changes to deal with the underlying problems of an inequitable race-based system. Through its primary healthcare approach, the government prioritised the needs of women and children by extending free healthcare for children under the age of six and pregnant women. The free healthcare programme was thereafter extended to all South Africans using public primary healthcare facilities. At hospital level, payment for services is means tested, and indigent citizens are entitled to receive free services

Health interventions are critical in determining how governments address issues of capability poverty. In the design of social security reform, health indicators are used to identify the extent to which deprivation and exclusion from essential health services affect the life chances of people. This section of the report addresses key strategic policy areas and sets out a medium- to long-term approach to address the underlying challenges in access to healthcare.

Healthcare provision constitutes an essential component of a minimum package of goods and services for the development and advancement of people. Moreover, given the history of unequal allocation of resources, high levels of poverty and unemployment, a central policy objective is to achieve equity in, and access to, healthcare services. The relationship between public and private health provision and the roles and responsibilities that are located in these environments are examined by the Committee to ensure the sustainable, equitable use of resources in the interests of all.

An overview of developments in South Africa's health system indicates that the reform direction and approach developed and proposed in the 1995 National Health Insurance (NHI) Paper remains a valid point of departure for ongoing reform. This requires that South Africa move, over time, toward an NHI system that integrates the public sector and medical schemes within the context of a universal contributory system.

This chapter specifically addresses a number of areas identified by the Committee to be of particular importance from a strategic point of view. These are ultimately drawn together to form an integrated reform path.

6.2 Evaluation of current policy context

6.2.1 Public sector

6.2.1.1 Background

The public health sector remains characterised by a fair degree of operational inflexibility, complicated in certain respects by the introduction of fiscal federalism (from 1997 onward). From a strategic point of view, opportunities to effectively integrate the non-contributory with the contributory environment, within short- medium- and long-term are compromised. Aside from this, basic inefficiencies also result and take the form of poor productivity, low staff morale and reduced quality of care.

6.2.1.2 Linkages between policy development and implementation

Although institutional provision is created for the development of national policy, limited connection exists with provincial health systems. The decentralisation of the health budget within the context of fiscal federalism implies the decentralisation of health policy. As a consequence most national policy implemented at a provincial level only relates to relatively minor issues that can be informally agreed to by all provinces at a national level.

6.2.1.3 Decentralisation of operational responsibility and accountability

The public health system combines a decentralised policy development process with highly centralised levels of operational responsibility. This division of responsibility between policy and operational responsibility is potentially perverse and dysfunctional.

6.2.1.4 Raising revenue from voluntary and mandatory contributions

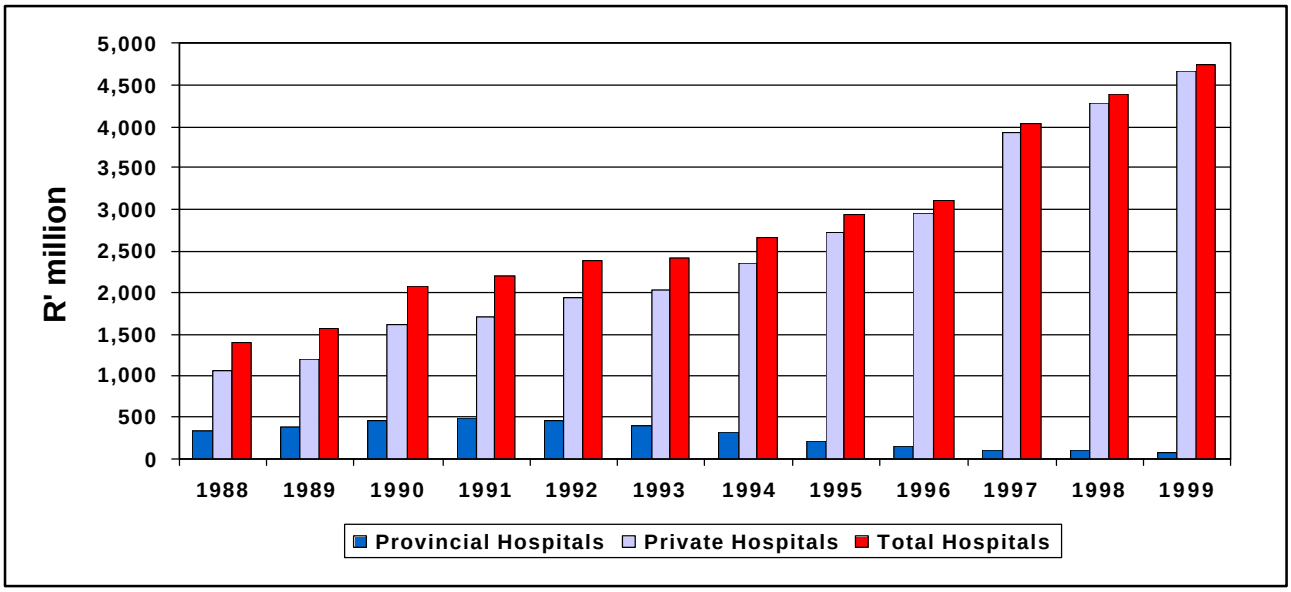
The approach to financing public health services, and hospitals in particular, makes it virtually impossible for effective cost-recovery to occur when services are provided to higher income groups. In order to prevent the under-funding of public health services, when they serve people not provided for in the general budget, cost-recovery should occur. The current system of public finance does not accommodate efficient cost-recovery options within the public service.

The national-provincial split in health funding and policy results in a disjuncture that may limit the efficiency of mandatory contributory options (i.e. social or national insurance) designed around the use of public sector services. Analysis of similar arrangements elsewhere point to the need for centralised institutional arrangements to raise the funding and reimburse health services. Without a unified system allocating the health budget to provinces, the required centralisation of the contributory system could clash irreconcilably with this arrangement.

The Committee is concerned that as provinces would receive the money conditionally from the contributory system, but have discretion over the funding from general taxes, differences will occur between basic services and enhanced services provided through the contributory environment.

Without resolving this issue a contributory system dedicated to the public sector may prove discriminatory and serve very limited public policy objectives (figure 6.1).

Figure 6.1: Real total medical scheme expenditure on public and private hospitals (1995 prices) 1988 to 1999



(Source: Council for Medical Schemes Statutory Returns 1988-1999)

6.2.1.5 User fees

The application of means tested user fees for hospital services to uninsured patients using public hospitals is both discriminatory and operationally flawed. Apart from the fundamental inability of public hospitals to apply the *exclusion principle* (i.e. a service is provided only on the basis of payment), which is a prerequisite for the operational efficiency of any system of user fees; and a requirement to apply a means at point-of-service, which is administratively unworkable. The sheer volume of patients seen makes individual billing of uninsured patients in all settings (public or private) administratively impossible.

The introduction of a revised policy on hospital tariffs (the uniform patient fee system or UPFS) although an improvement upon previous tariff systems is a palliative measure and will achieve little in the way of cost-recovery for the public hospital system and public policy in general without addressing the fundamental issues. The tariffs do serve some purpose in charging medical schemes, or social insurance funds such as the Road Accident Fund (RAF). However, public hospitals themselves will see little of the increased revenue, and structural flaws relating to billing out-of-pocket patients, the application of the exclusion principle, and the application of the means test cannot be overcome merely through adjusting the tariffs.

6.2.1.6 Budget allocations

The allocation to the health service is declining in real terms on a per capita basis. This results in staff reductions and capacity problems. The reduced quality of service available in the public sector

creates a privatisation by default, with only the private health system as an alternative. The absence of any real choice of sector for higher income groups results in the monopoly pricing of both medical services and medical scheme contributions. Public sector budget cuts have been one of the most significant contributors to increases in overall health spending.

6.2.1.7 Equity

The achievement of equity on an inter-provincial basis is made very difficult due to the existence of the fiscal federal system. Furthermore, the strict division between the public and private sector disallow any coherent subsidy framework that can span both systems in a workable fashion.

6.2.1.8 Human resources

The rigidity of human resource regulation has resulted in a significant deterioration in morale and capacity within many elements of the public sector. This has had a more severe impact on the health system that is already complex and multi-disciplinary. Staff retention in critical areas of the health service is now difficult both as a consequence of inadequate budget, remuneration and career opportunities (table 6.1).

Only 45,5 per cent of all professional nurses work in the public sector. Over the past 10 years general practitioners have also moved out of the public system with a shift from 38,3 per cent in 1989 to 22,5 per cent in 1999.

At present only 37 per cent of all surgery-related specialists function within the public sector. Seventy five per cent of all anaesthetists work exclusively in the private sector.

Table 6.1: Distribution of healthcare professionals between the public and private sectors

Key healthcare staff		Public**		Private*	
	Total	Total	%	Total	%
Period: 1989/90					
Medical officer (GP)	12 889	4 936	38,3%	7 953	61,7%
Specialist	5 595	1 891	33,8%	3 704	66,2%
Pharmacist	8 262	909	11,0%	7 353	89,0%
Dentist	3 111	218	7,0%	2 893	93,0%
Period: 1998/99					
Professional nurse***	90 923	41 401	45,5%	49 522	54,5%
Staff nurse	33 039	21 008	63,6%	12 031	36,4%
Nursing assistant	51 583	22 550	43,7%	29 033	56,3%
Total nursing	175 545	84 959	48,4%	90 586	51,6%
Medical officer (GP)***	15 376	3 458	22,5%	11 918	77,5%
Specialist***	6 136	1 741	28,4%	4 395	71,6%
Pharmacist	9 599	1 210	12,6%	8 389	87,4%
Dentist	3 482	471	13,5%	3 011	86,5%

(Sources: *Sodelund *et al*, 1998, and **PERSAL 1999)

*** These data were adjusted to full-time equivalents according to average salary costs and total expenditure for these personnel categories in 1998/99. Many doctors and some nurses only work part-time and therefore the Persal information used without adjustment distorts the actual number employed.

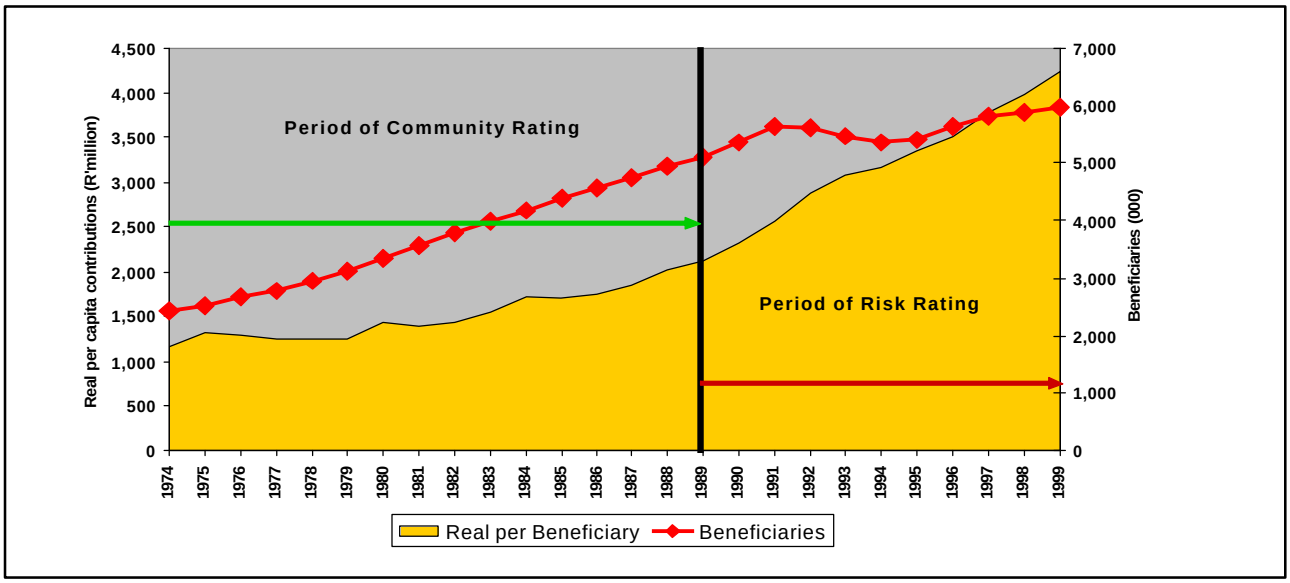
6.2.2 Private sector

6.2.2.1 Cost increases

The private sector is characterised by chronic cost increases linked to the fee-for-service reimbursement of providers and a high degree of market concentration within the service provider market (which prevents cost containment resulting from competition between service suppliers). Recent trends also show that people are in a weak bargaining position relative to open medical schemes. As a consequence consumers face an inelastic demand for medical scheme cover, which is taken advantage of. This takes the form of over-charging administration fees, the extraction of underwriting surpluses from schemes using quota share reinsurance agreements, and the paying of excessive commissions to brokers in competition for market share.

The Committee also notes that cost increases appear to have been exacerbated by the period of risk rating (1989-1999). The apparent cause, consistent with international experience, is that price competition between schemes occurs on the basis of risk-selection (targeting the young and healthy for cover and excluding the rest) rather than confronting the primary provider induced cost escalations (figure 6.2).

Figure 6.2: Real per capita contribution increases, 1974-1999: constant 2000 prices



6.2.2.2 Links to the public sector

It is likely that a market for lower cost public sector services would develop, given cost pressures driven by over charging in the private sector. However, the inability to contract due to public sector policy and procedure is a key constraint despite a potential willing market for public hospitals.

6.2.2.3 Low-cost contributory environment

The development of a low-cost market for medical scheme cover is hindered by the following:

- A highly concentrated provider (hospitals and key medical personnel) market.

- The inability of medical schemes to formulate contracts for improved amenities at public hospitals, or for other relevant public health services, due to public sector inflexibility.
- The existing tax subsidy only serves to reduce the cost of cover for higher income groups.

6.2.2.4 Risk selection

Evidence suggests that a significant degree of residual risk-selection continue to exist in the medical schemes market. In the absence of any system of risk-equalisation, this will cause instability between medical schemes.

6.2.2.5 Tax subsidy

The value of the tax subsidy made available to the private health system is substantial and is estimated at R7,8 billion. It currently lacks clear public policy objectives with associated identifiable positive outcomes. The subsidy therefore needs to be reconsidered within a broader subsidy reform framework.

6.2.2.6 Demographic structure of medical schemes compared to public sector users

The demographic structure of medical schemes imply a differently structured health system to that of the general population. This creates concerns about the resulting efficiency of the health system as a whole given the substantial resource allocation bias in favour of the medical scheme market. The different profiles between the medical scheme and non-medical scheme demographics also suggest that the health service will be differently focused in the two instances.

For the non-medical scheme population 59,4 per cent of the total health costs are needed for the population below 35 years of age by contrast with the medical scheme population where 48,1 per cent is needed. The medical scheme population needs around 60,5 per cent of its health services focused on the 25 to 84 age group by comparison to the non-medical scheme group which requires only 47,6 per cent. As health resources are heavily biased toward servicing the medical scheme population these differences result in a very different overall health system from that suggested by the demographic profile of South Africa (table 6.2).

Table 6.2: Estimated cost emphasis of health sectors based on age profiles

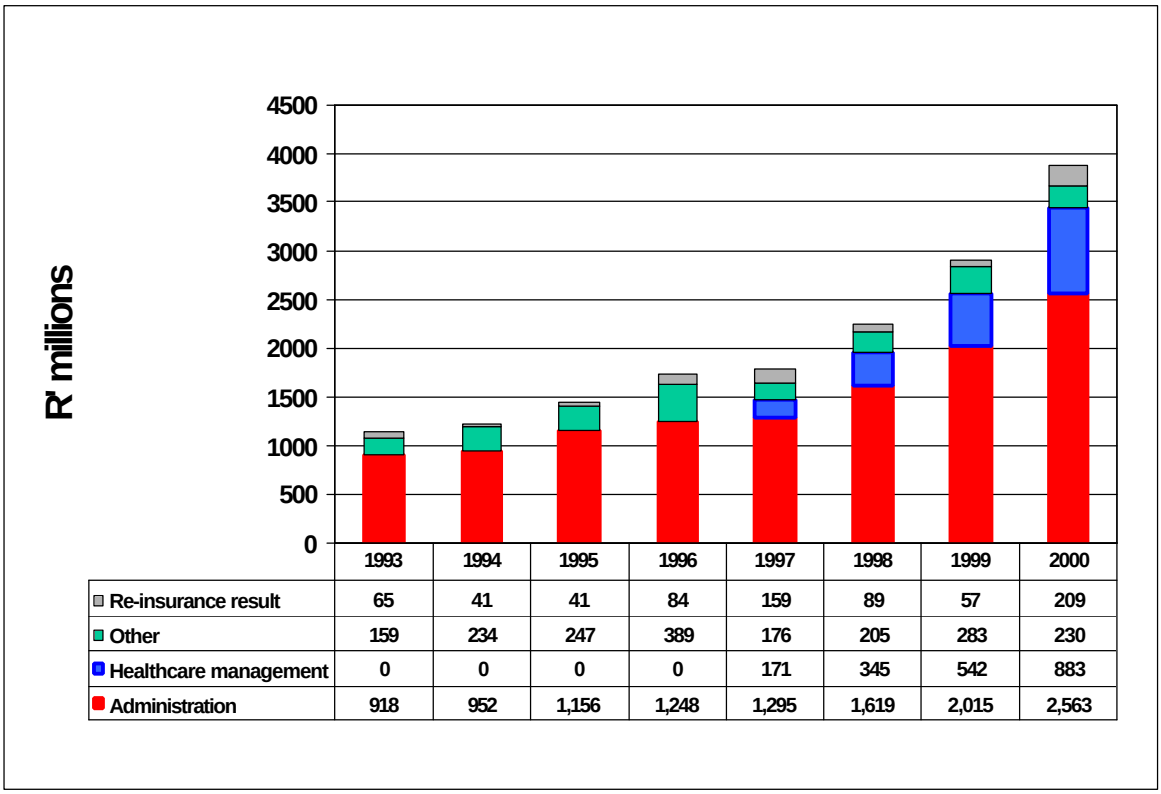
	Medical scheme	Non-medical scheme	Overall
Below 35 years	48,1%	59,4%	58,7%
25-84	60,5%	47,6%	49,5%

6.2.2.7 Intermediaries

Intermediaries do not always act in the best interests of scheme members and the public at large. This includes instances where administrators abuse their influence over schemes under their management; where brokers blackmail administrators into paying kickbacks to retain members; and where managed care arrangements are merely structured to extract additional fees from schemes. The shift of members between schemes is largely induced by broker activity, rather than active

decisions of members. Thus schemes are incurring substantial increased costs, for no added value to the environment. Overall non-medical expense related expenditure, which includes administrative expenditure and broker fees, is the fastest growing cost-driver in the private health market (figure 6.3).

Figure 6.3: Non-medical expense-related expenditure for registered medical schemes: 1999-2000



	1993	1994	1995	1996	1997	1998	1999	2000
Re-insurance result	65	41	41	84	159	89	57	209
Other	159	234	247	389	176	205	283	230
Healthcare management	0	0	0	0	171	345	542	883
Administration	918	952	1,156	1,248	1,295	1,619	2,015	2,563

(Source: Council for Medical Schemes)

6.2.2.8 Unfair discrimination

There is evidence of significant discrimination against people with chronic conditions in open medical schemes. Currently the prescribed minimum benefits do not protect members from this form of abuse. As most people who suffer from chronic conditions are in older age cohorts this amounts to unfair discrimination on the basis of age.

6.3 Stakeholder Views

6.3.1 Overview

The views of a range of stakeholders were obtained on various aspects of the health system as well as the possibility of some form of mandatory contribution for health cover. On the whole, dissatisfaction was expressed with the current public health service. Many groups, including employers, supported the strengthening of the public sector, particularly access to hospital services, as important for the future. A willingness to contribute over-and-above existing contributions was expressed by many, but only on condition an improvement in the public service occurred first.

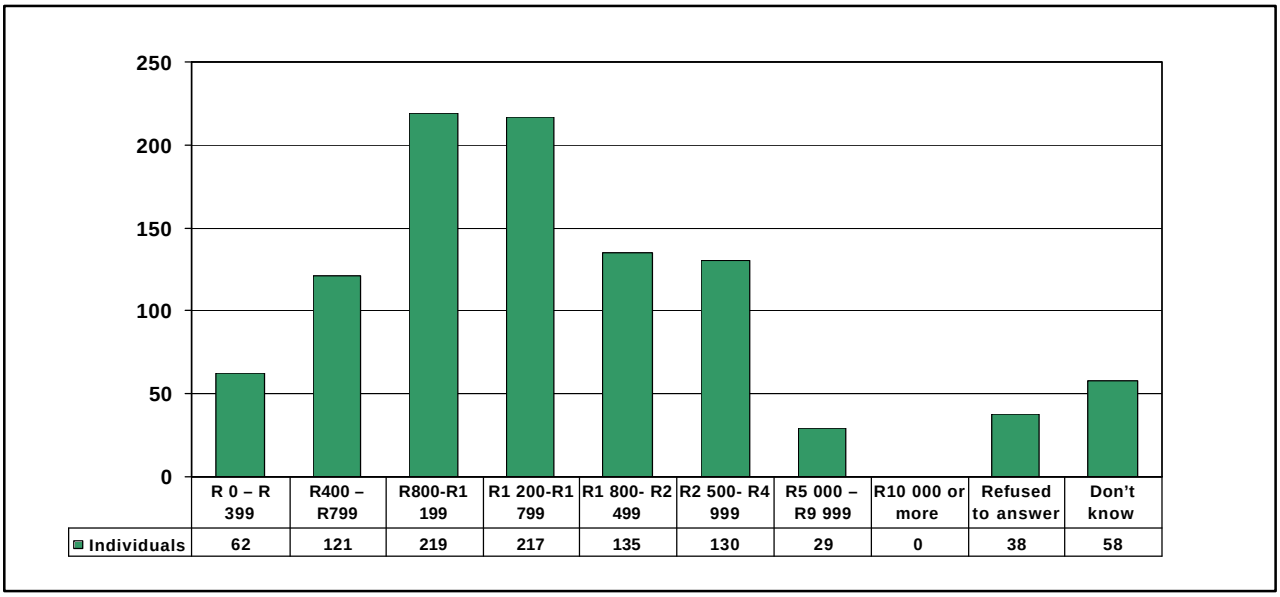
Many supported the idea of some form of enhanced amenity within the public sector for contributors. Enhanced services, offered on a differential basis, received qualified support.

6.3.2 Willingness to pay

Many groups are willing to pay a small fee (pre-paid) provided the public sector improves its services first. Opposition to payment of such a fee did not emanate from potential contributors, but rather from the national Treasury (since this could have implications with regard to the tax regime-earmarked taxes are opposed) and certain (but not all) trade unions (near-poor should not cross-subsidise the very poor). The latter trade unions supported a universal earmarked tax provided they could choose to fund these services in the private sector. Other trade unions supported the idea of a contribution provided they received something in return. They were supportive of these services being in the public sector. Evidence of the functioning and benefits of a low cost contributory system is provided by the clothing workers.

A willingness and ability to pay survey (W&A study) conducted by the Department of Health sampled the views of around 1 000 individuals of varying incomes (figure 6.4) on various aspects of their willingness and ability to contribute to a social health insurance fund focusing on public hospital services.

Figure 6.4: Willingness and ability to pay study—distribution of respondents by income



(Source: Department of Health, August 2001)

Over 94 per cent of respondents in the W&A study felt it was appropriate to pay for public hospital services. Up to 45 per cent felt that public hospital services would improve if there were some form of additional payment. Another 36 per cent felt people should pay for what they use. (Table 6.3).

Table 6.3: Willingness and ability to pay study: reason for willingness to pay for public hospital services

Reason	N	%
Public hospitals provide value for money	40	4.7
I think people should pay for what they use	305	36.0
Services will improve at public hospitals if we all pay something	382	45.1
I believe in Masakhane (civic duty) so it is our duty to pay	77	9.1
You have to pay otherwise they send you a lawyers letter demanding payment	14	1.7
Other (please specify)	30	3.5
Total	848	100

(Source: Department of Health, August 2001)

6.3.3 Ability-to-pay

Interviewees and stakeholders were not able to give a clear comment on this issue as no contribution level was put to them. However, it was felt that if a pre-paid contributory system were created they would probably voluntarily pay if they had access to improved services.

The W&A study found that 77 per cent of respondents were able to pay when last receiving care at a public hospital. Given that 61 per cent of respondents come from the income groups R0-R2 000 per month, this indicates that a significant number of low-income groups are able to pay at least something toward their healthcare (table 6.4).

Table 6.4: Willingness and ability to pay study: able-to-pay when last receiving care at a public hospital

Able to pay	N	%
Yes	608	76.9
No	161	20.4
Can't remember	22	2.8
Total	791	100

(Source: Department of Health, August 2001)

The W&A study suggests that 73 per cent of respondents are willing to use and pay for public hospitals (table 6.5).

Table 6.5: Willingness and ability to pay study: willingness to use and pay for public hospital care

Opinion	N	%
Willing to use public hospital, not willing to pay	56	5,6
Not willing to use public hospitals	166	16,5
Willing to use public hospitals, willing to pay	732	72,6
Don't know	55	5,5

(Source: Department of Health, August 2001)

6.3.4 Earmarked tax

There were differences among government officials as to how they would understand an earmarked tax for health services. The national Treasury saw these as part of the general tax system, and therefore any earmarked tax will have to be offset by a reduction of budget. Health officials saw an earmarked tax as replacing some tax funding, but also providing new funding. The rationale for new funding arises from the following:

- The willingness to make an additional contribution
- The recovery of funds that should have been raised from the point-of-service billing of existing users
- The need for full-cost recovery for new users of the public system.

The W&A study found that a significant proportion of the population (90 per cent) interviewed were willing to accept a compulsory system of public hospital cover if services were improved. (table 6.6). However, if no services were improved only 9,5 per cent were willing to contribute. The introduction of mandatory cover of any form must involve a discernable improvement in hospital services. The results are similar where a payroll deduction is proposed (table 6.7).

Overall 55,9 per cent of respondents in the W&A study felt that members of medical schemes should be excluded from any mandatory payroll deduction versus 34,8 per cent who thought they should be included. (table 6.8).

Table 6.6: Willingness and ability to pay study: support for compulsory membership if public hospital Insurance

	No		Yes		Don't know	
	N	%	N	%	N	%
Support if the public hospitals stay as they are	903	89,5	96	9,5	10	1,0
Support if public hospitals are improved	85	8,4	908	90,0	16	1,6
Support if scheme members get differential treatment	402	39,8	567	56,2	40	4,0

(Source: Department of Health, August 2001)

Table 6.7: Willingness and ability to pay study: support for compulsory payroll deduction for covering public hospital costs

	No		Yes		Don't know	
	N	%	N	%	N	%
Support if the public hospitals stay as they are	878	87,0	110	10,9	21	2,1
Support if public hospitals are improved	104	10,3	874	86,6	31	3,1
Support if scheme members get differential treatment	418	41,4	533	52,8	58	5,8

(Source: Department of Health, August 2001)

Table 6.8: Willingness and ability to pay study: support for payroll deduction with exemptions for medical aid members

	No		Yes		Don't know	
	N	%	N	%	N	%
Support for payroll deduction with exemptions for medical aid members	351	34,8	564	55,9	94	9,3

(Source: Department of Health, August 2001)

6.3.5 Funding of the public sector

Apart from the national Treasury, there is a general consensus (employers, trade unions and workers) that the public sector is under-funded which encourages all who can pay to use private sector services.

6.3.6 Tiering

Although there was some variation in the responses from trade union members, there was a large degree of support for *differential amenities*. There was, however, no support for *differential services*. Table 6.9 reports the responses on the W&A study toward differential amenities.

Table 6.9: Willingness and ability to pay study: attitude towards a differentiated public health service

	Strongly agree		Agree		Unsure		Disagree		Strongly disagree	
	N	%	N	%	N	%	N	%	N	%
Payers should be treated first	185	18,3	204	20,2	47	4,7	422	41,8	151	15,0
Payers should get nicer wards	163	16,2	287	28,4	40	4,0	424	42,0	95	9,4
Payers should be able to make appointments	1	0,1	218	21,6	365	36,2	53	5,3	296	29,3
Payers should have TVs in their rooms	133	13,2	316	31,3	102	10,1	369	36,6	89	8,8
Payers and non-payers should get same care	358	35,5	294	29,1	109	10,8	162	16,1	86	8,5
Won't use public hospitals regardless of improvements	45	4,5	33	3,3	92	9,1	414	41,0	425	42,1

(Source: Department of Health, August 2001)

6.3.7 Improvement of public sector services

Employers, union representatives and workers indicated that reasonable improvements in the public sector will probably result in their shifting away from expensive private cover. Some unions were adamant that improvements to the public system should precede any introduction of a contributory system. Key problems raised were: shortages of medicine; poor physical condition of facilities; facilities are not clean; poor service delivery; rude staff; lack of doctors at clinics; and insufficient staff.

6.3.8 Injection of funds

Quite a few respondents (including employers and trade unions) raised the issue of a one-off injection of funds to provide a face-lift to public sector services to initiate a contributory system.

6.3.9 Phasing

There was universal support for a phased approach to implementation with an initial focus on creating a voluntary contributory environment. This could either be via a voluntary social health insurance (SHI) or a low cost medical scheme. A few supported the idea that the development of a low-cost contributory system begin with public sector employees.

6.3.10 Revenue retention at facility level

The inherent logic of revenue retention at the facility level was accepted by all groups, including the national Treasury. However, there was uncertainty amongst other government officials concerning the true position of the Treasury Department.

6.3.11 Benefits

Employers felt that contributions and not benefits should be defined. Certain trade unions felt they should be allowed to opt for private primary care and a contribution toward public hospital service. Certain trade unions did not want any restriction on their choice of service provider.

6.3.12 Concluding remarks

The various responses show that both stakeholders and members of the public are not opposed to making a proportional contribution to ensure guaranteed access to government hospitals. They do, however, wish to see major improvements to public facilities prior to such payment being affected.

Respondents generally supported some form of tiering (or differential amenity) in exchange for a proportional contribution. However, there were reservations about the implications this may have for equity.

6.4 Strategic elements of the health system affecting equity

6.4.1 Overall level of funding for the health system

The overall level of funding going to healthcare is determined partially by government policy (general tax funding and off- and on-balance sheet subsidies) and partly by voluntary contributions (medical schemes). Where funding is either tax-based or mandatory, services are largely shared. Where voluntary contributions occur, services are provided on an exclusive basis. The overall level of funding within tax-based or mandatory systems can have a significant effect on whether services are accessed on a shared or on an exclusive basis. If funding levels are too low, more services will be available in the *exclusive* rather than the *shared* public system. Apart from the equity considerations, this could also result in significant organisational inefficiencies and additional costs.

Government can affect capacity through:

- Directly taxing income earners more to fund an increased public service
- Create a mandatory contributory environment in which a greater degree of equity is achieved within specified income groups
- Permit the use of funds from the voluntary contributory environment to promote the expansion of services in the shared service or public environment.

Currently, there is no strategic focus by government which attempts to account for the implications of higher or lower levels of funding for the public system. Such a strategic focus is also constrained through the partial federalisation of the health function.

6.4.2 Income-based cross-subsidies

Income-based cross-subsidies are generally achieved through the tax system, or mandating insurance in a manner that closely follows normal tax principles. *In essence people pay according to their means, but receive benefits according to their needs*. The following instruments are important within the South African context:

- The level of general tax funding for public services
- Subsidies to the private sector (tax subsidies versus on-balance sheet per capita subsidies)
- Contributions to medical schemes (flat-rate versus income-based)
- Mandating contributions to either social health insurance or medical schemes.

It is the conclusion of the Committee that the redesign of the income tax subsidy represents the most important short- to medium-term measure for achieving minimum required income-based cross-subsidies across the entire health system, both public and private. (This is discussed further in section 7.)

6.4.3 Health-related cross-subsidies

Health-related cross-subsidies are achieved differently (from an organisational point of view) in public sector settings where services are subject to physical planning processes compared to insurance environments where access is entitlement-based.

The objective of the public sector is to achieve an equitable distribution of services on a regional basis within budget constraints.

Within insurance-based systems cross-subsidies are protected from those who are healthier to those who are sicker in order to prevent their systematic exclusion from cover. Health funds (medical schemes) must also be protected from the consequences of having disproportionately sicker groups of people where this arises.

The public sector has the following instruments:

Inter-regional resource allocation: here financial resources are allocated explicitly to achieve equity objectives. However, the current fiscal federal environment prevents this from being achieved on an inter-provincial basis through national policy. There is also no clear framework for dealing with local government and district services.

- *Minimum norms and standards* This instrument can be used to create and implement a UPFS, or to impose conditions on provinces limiting their discretion to allocate funds elsewhere.
- *Conditional grants*: Conditional grants can be used to ring-fence allocations consistent with policy objectives linked to the achievement of equity.

Within contributory environments (medical schemes in South Africa) the following instruments are available:

- *Open enrolment*: which prevents any individual or group from permanent exclusion from cover
- *Community rating of schemes* which prevents exclusion on the basis of health risk status (as contributions are determined on the basis of the average cost of the group and not of the individual)
- *Risk-equalisation between schemes* which balances out the implications of uneven distributions of sicker groups between schemes.

6.4.4 Basic essential service and benefits

In order for equity to have practical meaning it must be expressed in terms of actual services or conditions which must be provided on an equitable basis. Policy instruments may differ between public non-contributory and private sector settings. Nevertheless, the principles remain the same.

Public sector The public sector has to define minimum services primarily through the establishment of a minimum basic package of services. This can be expressed practically in terms of policy through the establishment of service norms and standards to which members are entitled.

Private sector The Medical Schemes Act No.131 of 1998 introduced prescribed minimum benefits as a policy instrument for defining minimum allowable levels of medical scheme cover. This involves a positive list of conditions and treatments.

Requirements for the future There is no integrated approach as yet to defining the basic essential minimum services between the public and private sectors. Ultimately both systems will need to provide a minimum core set of services which are consistent with one another. Once rationally defined, government will have to establish clear mechanisms for ensuring that the desired entitlements can be met in an equitable manner in both settings.

6.4.5 Concluding remarks

Given that South Africa is a developing country, it has to confront great income disparities, and resource constraints. The consequent set of required instruments for achieving a coherent and integrated system of subsidies needs to cater for complex relationships between and within the public and private sector settings. The nature of healthcare provision is such that it naturally diverges from equity irrespective of whether publicly or privately funded.

6.5 NHI as an option for South Africa

6.5.1 Universal systems

6.5.1.1 Overview

The Committee finds that there are no off-the-shelf health systems for individual countries to select from. Final systems depend on linking the central objectives and principles underlying policy with available resources and systems. Middle-income countries may therefore incorporate the same ultimate principles and objectives as that of an industrialised country, but will have to deal with very different resource and willingness to pay constraints. The Committee took note of the fact that many European systems evolved their national universal systems from various employer or voluntary schemes or funds. Smaller risk-sharing systems evolved into larger and gradually more mandatory risk pools. Three stylised universal systems are illustrated here which characterise ultimate objectives from a systems point of view. Provided all groups are equitably covered, costs are kept under control, and the resource requirements are available and can be maintained, there is little to choose between them.

6.5.1.2 National Health Systems (NHS): single payer

An NHS would be characterised by the following:

- It would be funded via a general tax. This would guarantee the income-related subsidy.
- In order to ensure that appropriate cover were provided regionally, risk-equalisation formula are used to distribute services equitably. This provides for the risk-related cross-subsidy typical in all health systems.
- The state would effectively be a single-payer operating a global budget.
- Both public and private providers can be funded from such a system. Hospital systems are predominantly public sector, while primary care services are private.
- A core package of services is not always defined, but should be. (Typically, the well resourced industrialised country systems define their core services by what they don't rather than do provide.)

Non-contributory tax-based systems typically face the greatest risk of arbitrary budget reductions. They are also the most inflexible in terms of management and administration. As such countries do not always fully regulate their private insurance environment (e.g. the United Kingdom [UK]) and

budget reductions can have severe impacts on equity and access if good risks shift to the private sector.

6.5.1.3 NHI: single payer

A single-payer NHI system could have evolved out of the amalgamation of private voluntary funds with a mandatory social health insurance fund. Such systems are characterised by the following:

- Funding is provided by way of earmarked income-based contributions. Social security taxes involving a broader tax base than income are also possible. This effectively entrenches an income cross-subsidy into the system.
- As with NHS various formula-related approaches are required to ensure regional resource allocation is weighted for need. This provides the risk-related cross-subsidy.
- Both public and private sector providers can be used. Here far greater reliance is placed on private hospital systems than with NHS. Primary care services are typically always private irrespective of whether the system is tax- or insurance-funded.

6.5.1.4 NHI: multiple-payer

A NHI system based on multiple-payer systems is quite common in Europe and requires some variations to the single-payer systems to achieve the same degree of risk-pooling and cross-subsidisation required by policy.

Two approaches are possible to achieve the income-subsidy normally addressed by income-based contributions or progressive taxes:

- *Mandatory income-based contributions* For these to work a large and established formal sector is required. The system of tracking individual income needs to be sufficiently developed to prevent under-contributions through non-disclosure of true income levels.
- *Subsidy from general taxes paid into voluntary contributory insurance funds* This approach eliminates the problem of income-based contributions and serves to reduce the cost of flat-rate contributory systems. As the subsidies are capped, subsidies support lower-income groups more than higher income groups.

Several measures are required to ensure an adequate sharing of risk between multiple funds. These are:

- *Mandatory community rating* This prevents the selective exclusion of higher risk groups from cover through over-charging them on the basis of their likelihood of requiring medical services.
- *Open enrolment* This prevents the exclusion of people upon joining a scheme, or when they move between schemes.
- *Mandatory minimum benefits* Fixing minimum benefit levels prevent the selective exclusion of higher risk groups based on their risk status.

- *Inter-fund risk-equalisation* Adjustments are made for any concentrations of higher risk groups within particular insurance funds using a risk-equalisation or related mechanism.

Private and public providers can be used. As with the single-payer systems, the chosen mix is largely a policy decision and depends on local circumstances and needs. As with the other systems, primary care providers are private. Hospital services are predominantly private, but this need not be the case in all instances. Strong tax funded systems can co-exist with regulated private environments (e.g. Australia, Ireland).

6.5.2 Findings

NHI is not an option that emerges overnight as an alternative to SHI or NHS. key functional policy objectives are usually achieved by whatever practical measures are available.

Regulated private insurance coupled with various social health insurance options and government subsidies represent the middle-income country route toward building a universal system.

NHS and NHI can, however, be based upon single or multiple payer systems. The choice of system largely depends on the historical developments and local conditions. Whichever system prevails should make little difference to the underlying equity principles and objectives.

The Committee recommends that the health system be put on the path toward an eventual NHI system. Due to the complexity of both the transition path and aspects of the final framework, this recommendation is clarified more fully in section 11.

6.6 Financial framework of the Public Health System

6.6.1 Introduction

Although a proportion of revenue raised for government as a whole is not based on general taxes, no consistent set of principles has been established as to how these funds should be raised, managed, and related to general tax revenue. The Committee furthermore finds no consistent set of principles exists underpinning choices made about policy areas subject to provincial discretion and those that are not.

The principles underlying the allocation of the budget arising from general tax revenue, as well as that arising from alternative sources, is consequently reviewed here by the Committee to determine how policy is to be guided with respect to existing and potential health system environments.

6.6.2 Allocation of funds arising from general taxes

Roughly 80 per cent of the health budget is allocated by provincial governments from an unconditional grant allocated from central government. The other 20 per cent is a conditional allocation from central government to cater for “spill-over” problems resulting from the concentration of secondary, tertiary and teaching services within only a few provinces.

The Committee finds that despite the allocation of an equitable share of the unconditional grant to all provinces equity has not been achieved in the provision of health services. Provincial allocations also fail to keep pace with population increases. The budget allocations to health departments show no consistent correlation with underlying population and equity considerations, both of which are central to health policy.

Consistent with theoretical arguments, in most countries the budget for redistributive public services are more centralised than for all public services. There has been a trend since the 1930s for central governments to take additional responsibility for redistributive programmes and to expand their scope and magnitude, with Australia, Canada, Denmark, the UK, and Sweden all joining the United States (US) as illustrations (Fisher, 1996, p.591).

Responsibility for social security, welfare, and housing is quite centralised, with federal expenditures accounting for at least two thirds of the total in the four major federal systems (Australia, Canada, Germany and the US). In all cases, federal expenditures are a greater share of the total for the broad category of social security, welfare and housing than they are for government purchases in general. Education expenditures are the least centralised of the group, although it is much more centralised in Australia than for the other three countries (Fisher, 1996, p.592).

The Committee finds that the ability provincial governments have to undermine allocations to health services arising either from conditional grants or user fees is a very real issue needing to be addressed if health policy objectives are to be fully achieved. Additional revenue from these sources, which should result in a net increase in revenue over budget, is offset through reductions in the general budget allocations at a provincial level. To the extent that these reductions are consistent with national health policy no problem arises. However, in reaching these allocational decisions provinces are not obliged to defer to national health policy. This results in a different allocation of resources from what would occur if national policy were to prevail.

Based on the information reviewed the Committee finds that consideration be given to a greater national determination of the resources going to toward health services. No evidence or rationale exists suggesting the budgets be programmed at a central level. Nevertheless, the ring-fencing of a significant portion of the provincial allocations after determination at a national level appears consistent with both international practice and the current and future needs of the health system.

6.6.3 Allocation of funds arising from user fees

User fees raised by public hospitals are currently not differentiated from general tax revenue. This is inconsistent with the normal treatment of user charges. Typically where user fees have a strong cost-recovery purpose, they are recovered and utilised at source and are not regarded as part of the redistributable income of government. The non-redistributable nature of user charges relates to the fact that general taxes have not made financial provision for the additional costs of services. As such, fee recovery must cover the full costs of any service not explicitly budgeted for.

The Committee makes the following recommendations regarding financing principles that should be applied to user charges:

- In all instances where user charges, consumer tariffs, or levies are charged, separate operational accounts should be maintained by the relevant institution or authority.
- Financial accountability should be delegated to the lowest appropriate level where separate operational budgets exist.
- Surpluses on all charges should not occur or be accumulated for redistributional purposes. Appropriate mechanisms should be put in place to ensure that surpluses and deficits even out over time.
- As far as possible, specific redistributional goals should be achieved through *general tax and budget allocations* and not via the revenue obtained from dedicated taxes. It would not be inconsistent, however, for certain redistributional goals to be achieved amongst contributors (as opposed to that between contributors and non-contributors). Keeping to these guidelines should ensure that redistributional goals and objectives are transparent and based on clear and rational policy objectives.

6.6.4 Allocation of funds arising from earmarked taxes

Earmarked taxes are important with respect to proposals for a mandatory contributory environment based on a specific contribution to be made to a public fund for the reimbursement of benefits obtained from public hospitals. Although such a proposal clearly does not take the form of general tax it nevertheless has many of the characteristics of a tax. This is related to two key features:

1. It is mandatory
2. There is a redistribution of income involved.

The justification for an earmarked tax often lies in the application of the exclusion and benefit principles. In exchange for payment, contributors gain access to the services so funded. Non-contributors would be excluded. The application of the exclusion and benefit principles in conjunction with an earmarked tax enhances the willingness-to-pay and improves tax compliance. However, where a new tax is introduced, which replaces the funding from a general tax, an offset from general revenues could be considered. Any net improvement in financing would in all circumstances be an explicit policy decision of national government.

Principles that should be applied with respect to earmarked taxes are:

- Earmarked taxes should not be considered as an alternative to the general budget but rather be used only in specific instances where the quasi-public nature of the goods or service requires a direct relationship to be established between the contributor and the goods or service to be provided. Insurance of one form or another and retirement contributions, where compelled by the state, would fall into this category.

- Where earmarked taxes are considered, separate operational budgets are required to ensure consistency between the funds raised and the entitlements to be funded.

6.6.5 Concluding remarks

Overall the Committee finds strong grounds for a review of the financing principles guiding the funding of public sector health services. This would include the use of user fees, earmarked taxes, and their relationship to general tax funding. The Committee also notes the general lack of valid guiding principles surrounding the use of such mechanisms in government generally.

6.7 Reform of the tax regime and subsidies for medical scheme cover

6.7.1 Overview

Early in the 1990s debate about the tax deduction for medical scheme contributions arose primarily as a consequence of the funding crisis in the public health sector, and perceived inequality between the public and private sectors (Price *et al*, 1995).

Employees currently contribute a certain portion of their salary to a medical scheme, with employers also making a contribution on their behalf. The Income Tax Act allows the employer's contribution to be deducted as an expense before tax. On the employee's side, a deduction is available only where an individuals medical expenses exceed 5 per cent of income or R5 000. For pensioners, all medical expenses are tax deductible.

The Melamet Commission wrote that the tax deduction

> encourages consumption of healthcare beyond the point where the costs of obtaining extra cover equate to the value of the marginal benefits received. Price signals are badly muffled. Medical cost inflation is thus encouraged..(Melamet Commission, 1994, p.44).

An evaluation in 1995 concluded that given

> … the scarcity of healthcare resources in any country, the prime responsibility of government with respect to funding should be to improve the healthcare of the poorest in society. The very structure of the private health sector in South Africa goes against this principle, since it distributes healthcare resources predominantly according to ability to pay. The subsidisation of this sector by the government is not consistent with the principles of healthcare funding by the state. The current specific concessions allowed in South Africa are furthermore inequitable across income groups with high earners receiving a greater subsidy than low earners on medical aid, while self-employed individuals (including the whole informal sector) receive almost no subsidy at all. (Price et al, 1995).

6.7.2 Value of the tax deduction

A micro simulation run by the National Institute of Economic Planning (NIEP) was performed for the Committee to estimate the total medical deduction allowable under income tax. The value was estimated at R7,9 billion and included both the individual and employer contributions. The amount was broken down according to the following family types:

- Single individuals: R5,056 billion
- Couples with no children (1 or 2 taxpayers): R2,072 billion
- Couples with children (2 taxpayers): R15,576 billion
- Single parents: R12 662 billion.

The per capita value of coverage in the public sector ranges from just over R300 (2000 prices) in provinces, such as Mpumalanga and Northern Province, to around R500 in Gauteng and Western Cape excluding conditional grant allocations. When conditional grants are taken into account, in 2000 public sector per capita expenditure averages just over R700.

According to the evidence, the value of tax subsidies in respect of private healthcare expenses exceed per capita expenditure in the public sector. In certain provinces this amount is significantly less than the estimated R1,127 available as a subsidy in the private sector. In fact the total value of the subsidy is higher than the total budget spent by the Gauteng Health Department, which effectively covers in excess of 7 million people.

6.7.3 NHI Committee proposals

The NHI Committee (1995) identified serious problems with the existing tax regime.

> The Committee recognises serious inequity and distortions resulting from present tax policies regarding medical scheme contributions. These disproportionately reduce the price of high-cost packages, encouraging inefficient use and allocation of medical resources. In addition, if mandatory cover is extended to all employees, the current tax treatment of contributions would result in decreases in employees' after tax income, and would affect disproportionately on the self-employed.

Price *et al* (1995) recommended that tax concession be restructured as follows:

- All contributions, whether by employer or employee should be considered part of an employee's taxable income.
- A fixed absolute amount (not percentage) of all medical scheme expenditure, including contributions to approved medical schemes, should be allowed as a deduction from table income before tax.
- This fixed amount should ideally be set at a level so that the per capita subsidy (including dependants) is not greater than what the state spends on each individual in the public sector

for personal care (i.e. individual medical care, excluding community level interventions). The amount should also not be set so that the net income of people earning less than a specified figure does not increase.

- Consideration should be given to allowing that portion of total medical expenses that exceeds 15 per cent of income to be deductible before tax. This would provide disaster relief for households hit by an unexpected catastrophe.
- There should be further discussion and research regarding expenditure by employers on in-house medical services that benefit individuals but are not a necessary part of the occupational health service. Our provisional view is that, where possible, these should be considered benefits taxable in the hands of employees.
- The policy could be implemented over a few years by increasing the proportion of the employer's contribution which becomes taxable each year.
- The Department of Health should attempt to negotiate a once-off increase in public health spending to absorb the tax windfall from removing the concession, in order to keep total health expenditure (public and private) constant. The new level of expenditure should be pegged as a percentage of total government spending.

Taking note of its findings and the above recommendations the NHI Committee proposed the following measures:

- All contributions, whether by employer or employee should be considered part of an employee's taxable income.
- A fixed amount of all medical expenditure, including contributions to approved medical schemes, should be allowed as a deduction from taxable income before tax.
- Consideration should be given to increasing the current threshold above which medical expenses are tax deductible.

6.7.4 Assessment of the tax subsidy framework

The subsidy framework has to date been debated within a fairly narrow policy framework. Furthermore, the outcomes of the policy have drifted away from the achievement of any rational public policy objectives. It is fairly clear to the Committee that the subsidy policy has had an impact on the way in which the private health system has evolved. It is just as clear, however, that the concession in its existing form has had little impact on the fundamental problems of the private health system and the health system as a whole. Although it may have initially played an important role in supporting social solidarity goals within the system of private medical scheme cover (by encouraging employers to risk pool), these have been substantially eroded. The subsidy in its current form promotes inefficiency and inequity rather than countering these trends.

The Committee finds the following fundamental problems with the tax subsidy which need to be resolved:

- Very little of the tax concession genuinely benefits the final consumers of healthcare services. Much of the intended cost reduction impact is lost to inefficiency in healthcare service provision and excessive administration costs.
- The tax concession results in a misallocation of publicly directed health resources in favour of higher income earners and private sector service providers.
- The subsidy system is an off-balance-sheet transfer to income earners and is therefore not transparent. Approximately R7-R8 billion lies outside of a clear health policy framework.
- The per capita value of the tax concession exceeds the value of per capita expenditure in the public sector.
- There are no clear policy principles and objectives underlying the current subsidy framework.

6.7.5 Reform recommendations

The Committee recommends that consideration be given to bringing the tax concession policy into a consistent overall strategic health policy framework. This would imply that it ceases to be an implicit policy area within the domain of tax policy. Healthcare is functionally related to both population and income in a stable way. Revenue insecurity only creates instability in this framework and promotes inefficiency. A restructuring of the tax concession should therefore promote transparency and certainty in revenue flows. It should also comply with public health policy in relation to equity.

The Committee recommends that a revised strategic framework take consideration of the following:

- The tax subsidy be restructured within the context of strategic health policy and not tax policy.
- The tax subsidy be reconsidered in favour of an explicit on balance-sheet subsidy provided to medical scheme members. The level of the subsidy should be related in some functional and rational way to the value of cover available through the public sector.
- Within a broader reform process consideration should be given to raising the subsidy through an earmarked tax in line with proposals to introduce a universal contribution of one form or another. Initially the subsidy could be funded from the increased general government revenue resulting from the withdrawal of the tax subsidy.
- The allocation mechanism, whether the funds are raised from general or earmarked taxes, would need to comply with standard equity principles, and consideration should be given to allocating the funds via any proposed system of risk-equalisation for medical schemes. (See section 9.)

Given that certain reforms would need to be phased in and integrated with other reforms, sequencing and prioritisation is important. The following lists options that could be considered initially and those that would emerge in conjunction with a broader more integrated reform process:

- The tax subsidy should be withdrawn for all contributions to medical schemes.
- Simultaneously, the estimated increased revenues should be budgeted from general taxes, through the Department of Health budget, as a per capita subsidy to medical schemes based on the number of beneficiaries covered. The subsidy should be set per beneficiary covered and not per member.
- A temporary mechanism would need to be considered for making the subsidy allocation. Ultimately the allocation would be made to a risk-equalisation fund and allocated to schemes on the basis of an equitable formula.
- The subsidy should ultimately be raised as part of the revenue obtained from a universal mandatory contribution toward a NHI fund. Both the collection and distribution of funds would become incorporated within an integrated framework.

6.8 State-sponsored medical scheme

6.8.1 Overview

The 1995 NHI Committee recommended that mandatory contributions "*would not necessarily have to go to an existing medical scheme, but may be channelled via a new state-sponsored hospital plan…*". The manner in which this proposal is stated suggests an option more along the lines of the Public Hospital Fund proposed in 1997. However, the idea of a state-sponsored Medical Scheme has been proposed in various submissions and by the Central Bargaining Chamber of Government. Such schemes have been implemented in various regulated private insurance environments such as Australia and Ireland to bolster the not-for-profit community-rated open-enrolment environments. In both these countries, once the health insurance environment had fully matured, these state-sponsored schemes were privatised. The Committee feels that South Africa also needs to consider the opportunities that one or more state-sponsored scheme could offer to the consolidation of health current health policy.

6.8.2 Purpose of a state-sponsored low-cost scheme

A state-sponsored medical scheme would be in a position to achieve a number of basic health policy objectives. These are:

- A scheme would be available which is not burdened by excessive and unnecessary administration and marketing fees.
- A scheme of last resort would always be available for anyone of low-income able and willing to join a medical scheme.
- A benchmark scheme will be available in the market.
- The scheme would be established as the lowest cost scheme in the market, setting a minimum benchmark price against a set of minimum essential benefits.
- The cost level of the scheme would provide an indication of the income group for whom mandatory membership of a medical scheme could be set at some future period.

- The scheme would provide a basis for the determination of any potential subsidy for medical scheme members.
- An opportunity will be created for establishing and taking advantage of contracts with the public hospital provider system.
- A state-sponsored scheme could be one of the key schemes used for public sector employees when membership of a medical scheme becomes mandated in that environment.

6.8.3 Target group for cover

The group targeted for cover would be low-income groups employed in the formal sector. With the conversion of the tax subsidy into an explicit per capita subsidy, low-income groups would benefit most. As such the size of the target group will be strongly influenced by any subsidy policy introduced.

6.8.4 Benefits

The benefits offered would be as follows:

- Hospitalisation offered in differential amenity in a public hospital
- Specialist services in a public hospital
- Primary care offered primarily in private sector capitated networks.

6.8.5 Contributions

The estimated contributions for a family of four will be around R500 per month. Current low-cost medical scheme options affordable to families of four with a monthly income of less than R4 000 per month range from just over R400 to around R800 per month. However, if public hospitals are used, these would be significantly lower and inflation-linked.

6.8.6 Relationship to public hospitals

The Committee finds that a problem clearly exits with the efficient development of contracts between medical schemes and public hospitals. As discussed elsewhere in this report, much of this difficulty arises from inflexibility in the public sector system, and the lack of a specific regulatory dispensation for public hospitals. Correcting for this inflexibility should create the opportunity for the public sector to enter into mutually beneficial contractual arrangements with both a state-sponsored scheme(s) as well as other medical schemes.

The development of these options in conjunction with a state-sponsored scheme should have spin-off benefits for other medical schemes in two areas:

- Private hospitals will be compelled to look for competitive contracts along similar lines to public hospitals.
- The state-sponsored scheme will offer opportunities for the development of options whereby specialised services are shared between the public and private sectors.

6.8.7 Recommendations

The Committee recommends that consideration be given to the development and implementation of a state-sponsored medical scheme within the next two years. Such a scheme (or schemes) could be both open for general enrolment and/or focus on public sector employees (at least initially).

6.9 Risk-equalisation

6.9.1 Overview

6.9.1.1 Policy relevance

During the 1990s the policy relevance of an adequate risk-adjustment mechanism has increased as many countries seek to make their individual health insurance market more competitive or to increase access to coverage for high risk individuals in private insurance environments. Countries that have introduced risk equalisation include Belgium, Columbia, the Czech Republic, Germany, Ireland, Israel, the Netherlands, Poland, Russia, Switzerland and the US (van der Venn *et al*, March 1999).

South Africa is currently one of the only countries in the world with a community-rated open enrolment environment without a system of risk-equalisation. This lack, however, appears to be related far more to the recent introduction of community rating rather than a policy oversight. The Committee therefore finds that this is clearly a reform that must be placed high on the health policy agenda.

6.9.1.2 NHI Committee recommendation

NHI Committee (1995) recommended that a risk-equalisation mechanism be introduced as part of a system requiring the mandatory membership of medical schemes. It was also recommended that medical scheme contributions be income-based, thus resulting in an automatic income-based cross-subsidy, provided a risk-equalisation mechanism was in place. The risk-equalisation mechanism effectively creates a much larger risk pool out of a number of smaller independent risk pools. However, the NHI Committee proposals did not make technical recommendations on how to provide for an income-based cross-subsidy mechanism in the absence of mandating income-based contributions, if this proved not to be feasible in the short-term.

6.9.1.3 Need for review

As the medical schemes environment will need to remain a central feature of the health system, the Committee strongly supports the view that key objectives of a national health system are realised through the private system. These include:

- Ensuring that the funding of essential health services are done on a pre-paid basis.
- Preventing any groups or individuals from being excluded from access to essential health services.

- Ensuring that risk pools are as large as possible.
- Ensuring risk-related cross subsidies for essential health services are environment-wide (from healthy to sick).
- Ensuring that income-based cross-subsidies for essential health services are environment-wide.
- As far as possible removing perverse incentives to drive up costs.

Whereas tax-based health systems provide very broad risk-sharing and income-based cross-subsidisation, individual medical schemes reduce the risk-pooling effects quite dramatically. The Committee finds that the only approach capable of achieving any reasonable protection of key cross-subsidies between schemes has to involve the use of a risk-equalisation fund into which contributions are paid by below average risk schemes and from which funds are paid to above average risk schemes.

In the absence of risk-equalisation, certain schemes will obtain windfall gains from a below average risk pool, creating incentives to risk-select. As risk-selection ultimately results in the systematic exclusion from cover of vulnerable risk groups, this cannot serve the final objectives of the health system.

6.9.2 Purpose of risk equalisation

Risk equalisation is a mechanism for achieving equity and efficiency in regulated private insurance markets. Its purpose is to prevent competition from occurring on the basis of risk- selection. In doing so it serves to foster competition on the basis of healthier criteria such as cost and quality of healthcare services.

There are a number of risk-equalisation models proposed and operating internationally. Despite a degree of uniformity in approach and principle, each country has a unique system of delivery and consequently different forms of risk equalisation are used that suit the country in question. These range from public sector formula-based resource allocation systems to risk-equalisation between competing health funds or insurers.

Within private markets mandatory community rating and open enrolment is usually required to protect cover within voluntary and mandatory contributory environments with multiple funds or insurers. However, these measures are unstable on their own and risk-equalisation is regarded as essential to protect the environment.

Risk-equalisation also become central to any government instituted income-based cross-subsidies. This is either offered as a direct subsidy or through the impact of mandating income-based contributions to health insurers. Which option is preferable would depend on the circumstances prevailing in any particular country.

Risk-equalisation should improve efficiency and reward those managing to reduce medical costs. To achieve this risk-equalisation models must be based on objective risk factors or diagnostic information, and not actual treatment, utilisation or expenses incurred.

According to van den Ven *et al* (March 1999) risk-adjusted premiums are the norm, not the exception, in competitive markets, and in the absence of regulation, health plans will tend to charge premiums that differ across both observable risk factors and benefit packages designed to attract specific risk types.

The larger the predictable profits arising from cream skimming, the greater the chance that cream skimming will be more profitable than improving efficiency. At least in the short-run, when a health plan has limited resources available to invest in cost-reducing activities, it may prefer to invest in cream skimming rather than in improving efficiency. Efficient health plans, who do not cream skim applicants, may lose market share to inefficient health plans who do, resulting in a welfare loss to society.

While an individual health plan can gain by cream skimming, for society as a whole, cream skimming gains nothing. Thus any resources used for cream skimming represent a welfare loss to society.

Therefore, according to van de Ven *et al* (March 1999, p.14) regulations that are intended to increase access to coverage for high-risk individuals may instead induce selection efforts with the following unintended effects:

- Problems with financial access to coverage for high-risk individuals
- Reductions in the quality of certain kinds of care
- Reductions of allocative efficiency and efficiency in the production of care.

6.9.3 Definition of risk adjustment

"Risk adjustment" can be used to mean different things in different contexts. There is therefore a need for a definition. Van de Ven *et al* (1999) define risk-adjustment to mean "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."

Risk-equalisation is a zero sum game: there will be some winners and some losers. As such the initial implementation of a risk-adjustment model needs a carefully planned transition. It is essential that stakeholders have a clear understanding of the objectives and structure of the model.

6.9.4 International review of risk-equalisation mechanisms

6.9.4.1 Criteria for the selection of an appropriate risk-equalisation mechanism

The criteria for the selection of an appropriate risk-equalisation mechanism from the Briefing Paper on Health Insurance Regulatory Framework in Ireland published by the Department of Health in July 1994 are as follows:

- *Equalisation of risk profiles* The system should provide a stable environment for community rating and open enrolment, and should eliminate the incentives for health insurers to select preferred risks, by ensuring that each health insurer must bear the cost of a risk profile equal to the risk profile of all insured lives.
- *Equity* The system should be perceived to be equitable between health insurers and should not result in any health insurer having to share profits which it has made as a result of its own efficiencies and cost controls.
- *Cost containment* The system should not contain any inherent disincentives for health insurers to seek to maximise efficiency and control costs.
- *Non-equalisation of benefit levels* The system should not equalise different levels of benefit paid by different health insurance schemes.
- *Practicality* The system should be understandable and practical to operate.
- *Predictability* The system should produce results which are as predictable as possible, in order to allow health insurers to cost their policies appropriately.

The adjustment procedure should also be reliable (minimum error) and not vulnerable to manipulation. It should further not compromise the right for privacy of insurers and the insured.

6.9.4.2 Criteria used to establish risk-equalisation

In developing or implementing risk adjustment it must be decided how the information will be collected and used. Payments that are calculated at the beginning of the prediction period will use only prior information. Prospective systems estimate risk premiums for each insurer's portfolio, based on risk factors or on prior utilisation for that insurer's portfolio (Ellis *et al*, March 1999).

*Advantages for prospective system (*Society of Actuaries, June 1995*)*:

- Greater degree of certainty for health insurers
- Cash flow problems removed for those insurers with poor risk profiles.

*Disadvantages (*van Vliet *et al*, 1992*)*:

- Significant problems with devising a satisfactory set of risk adjusters. Global risk adjusters such as age and sex are, on their own, poor predictors of future healthcare costs for any one individual. Data may be difficult to obtain to use other predictors.

It is not necessary to predict all the variation in costs for a medical scheme. A majority of the cost-variation is random and unpredictable (hence not a basis for risk selection). Thus, the adjustment procedure must be such that the marginal benefit to the insurer of identifying individuals to risk select is less than the marginal cost of obtaining the necessary information (Wilson *et al,* Summer 1998).

Payments can be calculated retrospectively, at the end of the period using information that becomes known during that period. Such a retrospective system involves the redistribution of the observed risk in terms of the actual claims costs experienced by insurers over the relevant period. Prior utilisation patterns will be a key factor in the process. Retrospective and prospective systems can however also be used in combination.

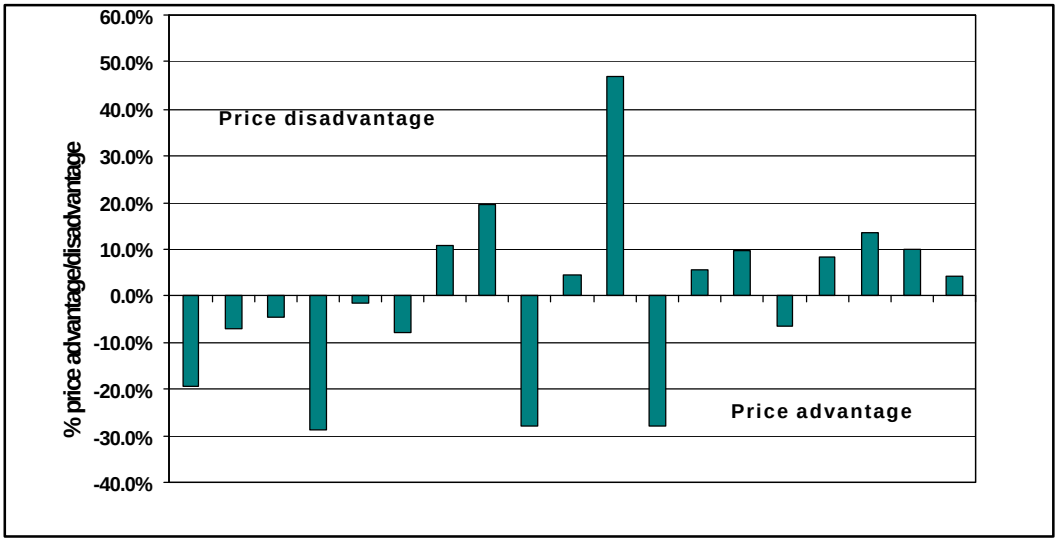
6.9.5 Evaluation of residual risk selection in the South African medical schemes environment

Figure 6.5 provides results of analysis carried out for the Committee which show substantial variation in risk pools within the open scheme environment in 1999. The sample of schemes chosen represents 90 per cent of the total number of beneficiaries. The cost-weighted demographic profile of the individual medical schemes is compared with the cost-weighted profile of all open schemes, closed schemes, and all schemes (market). (Weightings were based on those used by various European risk-equalisation funds.) Initial indications are that the various risk profiles have not changed significantly in 2000.

The variation in risk profile implies substantial cost differences for schemes unrelated to their efficiency in managing costs. As this analysis only measures the age and sex cost variation more subtle measures such as chronic members by age could exacerbate the variations shown. Whether by chance or design, the South African medical scheme market indicates an unfair distribution of risk between schemes, which has implications for both equity and efficiency.

There is a clear advantage for open, relative to the closed, medical scheme environment where a higher percentage of pensioners exist. Thus risk-selection targeted at the closed scheme (mostly employer-based schemes) market will provide a profitable short-term strategy for commercially oriented open schemes. The advantage ends, however, once closed schemes have been eliminated.

Figure 6.5: Price advantage/disadvantage due to risk profile for schemes representing 90 per cent of the open scheme membership (each bar represents a different scheme)



(Source: Analysis performed for the Committee of Inquiry based on the statutory returns of registered medical schemes for the 1999 financial year)

6.9.6 Risk-equalisation for South Africa

The Committee finds that in accordance with both international practice, and the evidence available on the South African health market, serious consideration has to be given to the implementation of a system of risk-equalisation amongst medical schemes. Without such a system inefficient schemes will be in a position to undermine efficient schemes.

The South African medical schemes environment is predominantly made up of open schemes. Open schemes typically charge flat-rate contributions, i.e. they are not income-based. There is therefore no income redistribution possible via the contribution. Although it can be mandated that schemes charge income-based contributions in South Africa, such an option will probably not prove feasible for some time.

Income-based cross-subsidies can however be achieved through allocations from an earmarked or general tax into a risk-equalisation fund. (See section 7). The risk-equalisation fund therefore allocates both the income- and the risk-based cross-subsidies. An earmarked tax for this fund is more appropriate than a general tax contribution, as it establishes a clear link between a shared risk-pool and the contributory environment.

6.10 Overall findings

6.10.1 Problems Identified with the existing strategic framework

The Committee finds that the existing structure of the health system has certain endemic perverse cycles which need to be reversed through interventions at an institutional level. The central contributors to this negative cycle are identifiable in four areas:

- *Cover* The public sector is faced with an increasing population, both low-income and indigent, while the private sector population is not increasing. The public sector is also having to provide cover for sicker and less healthy groups traditionally covered by the private sector. This latter shift is induced through risk-selection within and uncontrolled cost increases. The Medical Schemes Act of 1998 has addressed some of these problems, but many gaps nevertheless remain.
- *Burden of disease* The public sector is facing a worsening burden of disease as a result of HIV/AIDS as well as increasing levels of diseases of poverty. The private sector is attempting to shift HIV/AIDS patients and chronic patients onto the state system, as part of the risk-selection process.
- *Finance* Despite an increasing population and disease burden, the public sector health system faces constant or declining real budget allocation. The private sector, by contrast, increases its expenditure at roughly double the annual inflation rate on a per capita basis. As costs increase in the private sector, so does the effective tax subsidy.
- *Providers* In the face of an increased population to cover, an increased disease burden, and a declining budget, the public sector is losing clinical personnel to the private sector. As such, the private sector effectively drains resources from the state to provide cover to a relative healthy and younger population.

Taking account of the above, the Committee finds that government needs to adopt a strategic approach to reforming the health system which engages fully with both the public and private sectors. The objective would be to achieve jointly what each sector cannot realise alone.

6.10.2 Role and scope of government Involvement

The Committee strongly endorses the views of the World Health Organisation whereby the ultimate responsibility for the performance of a country's health system lies with government, which in turn should involve all sectors of society. Government has the responsibility for establishing the best and most equitable health system possible with available resources. The oversight and effective regulation of the private sector has to form part of the overall government response and must be high on the policy agenda.

Central objectives

- *Increased risk pooling* Risk pooling needs to be encouraged through the use of a combination of instruments. These would include the tax system, the creation of risk equalisation mechanisms within both public and private sectors, government mandates, and the reinforcement of community rating.
- *Benefits* Government policy needs to provide a framework that results in cover for a minimum level of essential benefits irrespective of whether it is provided in the public or the private sectors.

- *Efficiency* Given the existence of perverse incentives in unregulated markets for healthcare, any regulation must pay careful attention to the incentives generated. The use of mixed systems for covering and providing healthcare combined with the correct elements of choice represent the most reasonable approach to balancing healthcare objectives with the need for operational efficiency.

Role of the public sector:

The Committee finds that the public sector system must remain the backbone of the overall health system and should be protected from chronic under-funding.

Role of the private sector

The private sector can provide an effective environment for achieving increased levels of funding over-and-above tax-based allocations. However, as the private market for healthcare suffers from chronic market imperfections, government involvement is required to ensure that funding levels are socially optimal and not merely set at what the market can tolerate.

6.11 Recommendations

6.11.1 Overview

Due to the complexity and inter-related nature of the health system and the issues under review, the Committee finds it necessary to present its findings in the form of a broad strategy rather than a list of individual measures. This section therefore draws on earlier finding and recommendations and presents them as part of a phased reform process.

6.11.2 Reform strategy

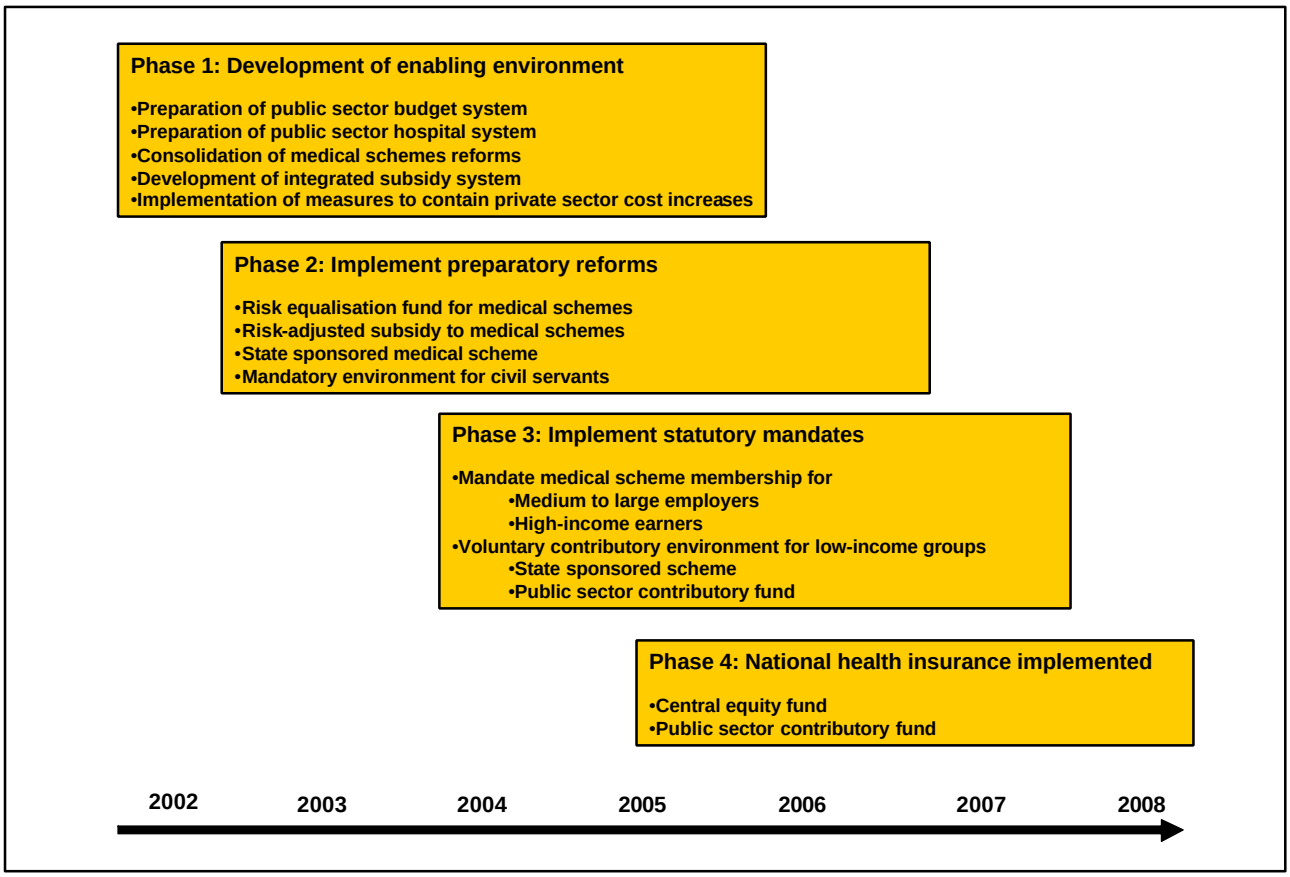
The Committee recommends that South Africa move toward a NHI system based on multiple funds and a public sector contributory environment as defined in the 1995 NHI Committee Paper.

Initially the environment would remain differentiated between a private contributory environment and a general tax funded public sector environment. Over time this strict differentiation should diminish with a broader contributory environment emerging, replacing general taxes as a revenue source. The ultimate elimination of general taxes as a key revenue source is expected to take some time.

The reform process has to take into account the need to develop a phased approach whereby key enabling measures are implemented and the base established for the longer-term reforms.

Four phases are envisaged defining important linked reform measures. The phases guide the evolution of health system toward the achievement of a universal contributory system. (See figure 6.6).

Figure 6.6 Reform strategy and approximate timeline



6.11.2.1 Phase 1: Development of the enabling environment

The current health system is incompatible with the introduction of, or integration with, contributory environments. The overall system of cross-subsidies is fragmented and not structured in accordance with strategic policy goals. Furthermore, the strict partitioning between the public and private sector spheres is resulting in substantial and unsustainable private sector cost escalations. This also occurs because private medical schemes are technically barred from explicitly contracting for and using public sector services.

The priorities within phase 1 therefore need to focus on an improvement of public health facilities and their management. They also need to consolidate medical scheme reforms to ensure greater integration with public sector provision and funding, as well as the incorporation of equity and access provisions.

(a) Preparation of the public hospital system:

i. Decentralise public hospital management

ii. Implement a coherent uniform policy with respect to enhanced amenities

iii. Investigate the possibility of a financial injection to enhance public sector amenities

iv. Establish a process to develop and implement minimum service requirements for the public system

iv. Revise the human resource environment as they relate to health personnel to improve management and incentives to perform.

(b) Consolidation of medical scheme reforms to remove any residual risk-selection and to increase coverage:

i. Expand prescribed minimum benefits to include chronic conditions and other essential services

ii. Phase out benefit options or, alternatively limit the degree to which they can be differentiated on the basis of the cover they provide

iii. Phase medical savings accounts out of schemes to prevent them being used in a discriminatory fashion

iv. Refine the late-joiner penalties

v. Require all civil servants to become members of a medical scheme

vi. Significantly improve the regulatory framework dealing with medical scheme intermediaries.

(c) Development of an effective policy process on defining and implementing basic essential services. Ultimately both the public and private sectors will need to ensure coverage for an equivalent minimum core set of services. Within medical schemes these would be regulated as prescribed minimum benefits. Within the public sector a similar process would occur and be framed as minimum norms and standards.

(d) Development of an integrated subsidy system:

i. A process needs to focus on rectifying structural deficiencies within and between the existing risk-pooling mechanisms. These include:

1. Inequity in the allocation of public health services

2. The tax subsidy to medical schemes

3. Risk-equalisation between medical schemes

4. Unfair penalties applied within the medical schemes environment.

(e) The public sector budget system needs to be revised to ensure that the regional allocation of health services is equitable. Furthermore, the subsidy provided to the private sector must at no time exceed that provided to people covered through the public sector.

(f) The tax subsidy currently runs counter to the achievement of health policy objectives and must be reformed. It is recommended that it be converted into an explicit income- and risk-adjusted subsidy. This subsidy could ultimately be funded from an earmarked tax, although initially it should be funded from general tax revenue.

(g) It is essential that a system of risk-equalisation between medical schemes be introduced. This fund would also serve the function of allocating any appropriately structured risk-adjusted subsidy to medical schemes provided by government.

(h) Measures to contain private sector cost increases need to be more explicitly targeted by government policy. These should include the use of:

i. Direct controls on the supply of services

ii. Various market-related measures

iii. Improved regulation of competition.

6.11.2.2 Phase 2: Implement preparatory reforms

These need to focus on the creation of regulated risk pools, and changes to the regulation and subsidisation of the medical schemes environment. The objective is to improve the quality and cost-effectiveness of cover within the voluntary contributory environment (medical schemes).

The phase 2 reforms serve to enhance the voluntary contributory environment in order to facilitate the establishment of the mandatory environments emphasised in phases 3 and 4. The greater the degree of cover, and the acceptability of the contributory environment, the less the disruption involved in establishing any future mandatory environment.

Key reform elements would include the final implementation of:

(a) The risk-equalisation fund (begun in phase 1)

(b) The risk-adjusted subsidy to medical schemes (begun in phase 1)

(c) The state-sponsored medical scheme

(d) A mandatory environment for civil servants.

6.11.2.3 Phase 3: Implementation of the initial mandates

Once the preparatory reforms of phase 2 are substantially in place, the groundwork would have been established for the implementation of the first statutory mandates requiring contributions to medical schemes. Given the income distribution in South Africa, the mandates should begin with higher income groups. Where lower income groups are concerned, this phase should focus on further active encouragement and development of the voluntary contributory environment.

Phase 2 would have seen the initiation of a state-sponsored medical scheme. Phase 3 should focus on the development of a contributory scheme for *non-medical scheme members* in addition to the state-sponsored medical scheme. This will help to establish the institutions in government that would ultimately manage a public sector contributory scheme within a NHI framework. Thus two contributory mechanisms will exist: the first based on medical schemes (including the state-

sponsored medical scheme); and the second a dedicated public sector contributory fund. The non-contributory portion of the health system would continue to be funded from general taxes.

6.11.2.4 Phase 4: Implementation of National Health Insurance (NHI)

The last phase envisages the implementation of a universal contributory system which would, to a substantial degree, replace general tax funding as a source of revenue. General tax as a supplementary source of revenue may nevertheless prove desirable for quite a while yet.

The final phase essentially envisages the establishment of a contributory environment for all groups and individuals assessed to be in a position to contribute toward the health system. These contributions would not replace medical scheme contributions, but rather fund the subsidy provided to medical schemes. In other words, medical scheme contributions would be regarded as a top-up contribution to the subsidy. This top-up is not necessarily for more benefits, but will purchase the same benefits in higher cost settings.

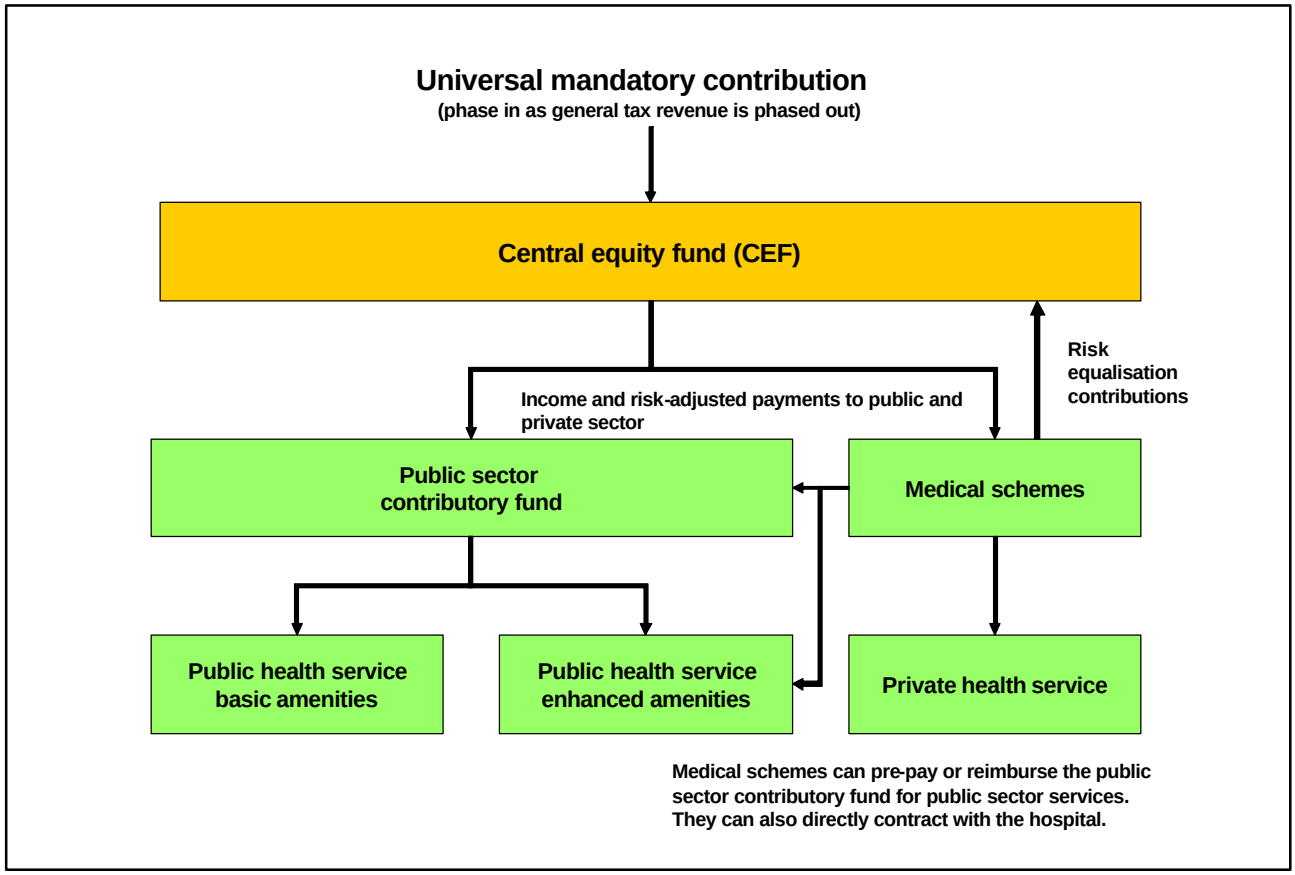
All contributions and general tax allocations would be made directly to a central equity fund (CEF) which would in turn allocate them to the public sector and medical schemes based on a risk-adjusted equity formula.

A public sector contributory fund (PSCF) would become the national funding authority for the public health system. This would either operate as a dedicated unit within the national Department of health, or exist as a separate parastatal reporting to the Minister of Health. Phases 1 through 3 would have seen the centralisation of the health budget, and the establishment of capacity to fund provinces via substantial improvements in the capacity to manage and apply the conditional grant system.

The end phase of these enhancements would see the creation of the PSCF which would take responsibility for, and manage, the allocation of funds from general tax revenues and contributions allocated through the CEF.

All residents of South Africa should become entitled to a subsidy equivalent to the risk-adjusted per capita average of all contributions and revenue received into the CEF. This subsidy system should evolve from the reforms in phases 1 through 3.

Figure 6.7: Institutional framework for a universal contributory system (Phase 4)



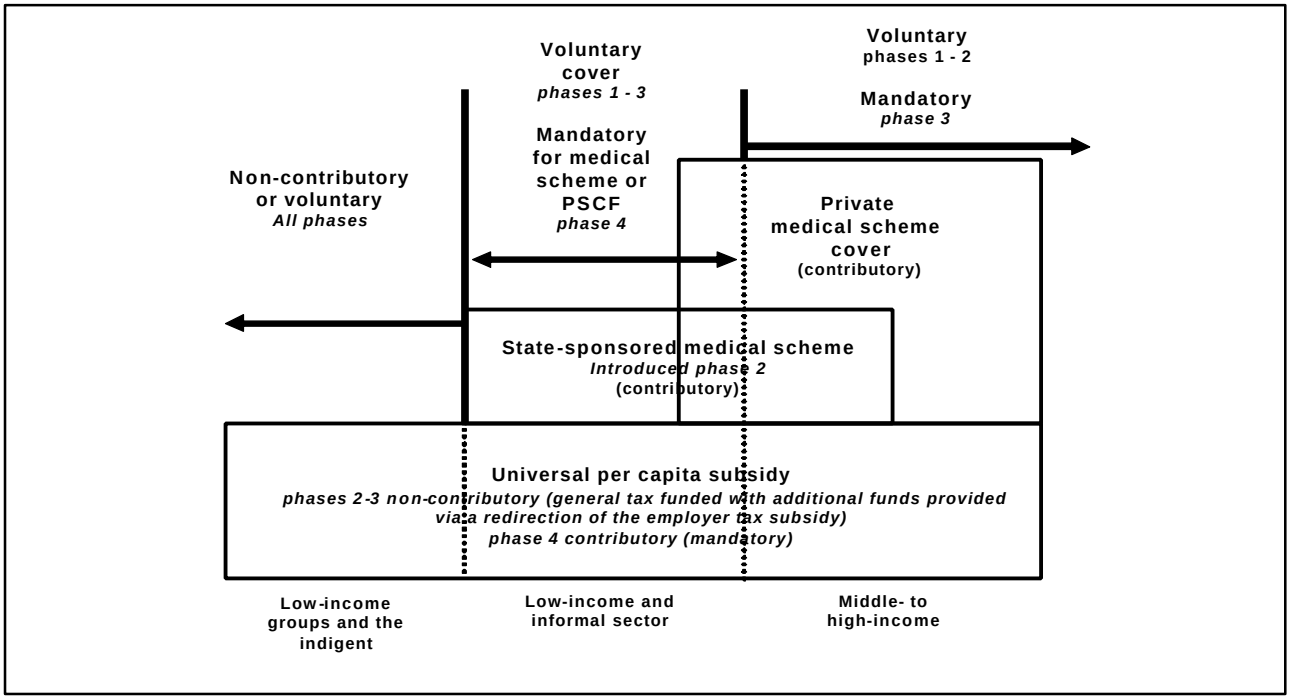
6.11.3 Strategic financial framework

Unlike retirement provision and other forms of insurance and social assistance, the health system comprises both a *financial framework* as well as *provider system*. The proposed strategic framework involves the development of three risk-pooling systems.

The first is the universal per capita subsidy, funded from general taxes and enhanced through a redirection of the existing employer tax-subsidy. This system begins as entirely non-contributory (funded from general taxes—phases 1 to 3) and converts to a contributory fund in phase 4. Contributors toward the universal per capita subsidy can choose to utilise this subsidy through the PSCF and obtain an enhanced public sector amenity, or to subsidise their contributions to a medical scheme. This system becomes the basis for entrenching income cross-subsidies within both the non-contributory and contributory financial systems.

The second major system is the medical schemes environment. This remains voluntary for high income groups for phases 1 and 2, after which it becomes mandatory. The third major risk pooling system involves the establishment of a state-sponsored medical scheme targeted at low-income groups, the informal sector, and middle-income groups who wish to obtain more cost-effective cover.

Figure 6.8: Strategic financial framework for the South African health system



6.11.4 Coverage

Coverage changes over the four general phases with the gradual expansion of the contributory system. The public sector basic amenity is the non-contributory environment offered free to all below a certain income level. Higher income groups move from a voluntary contributory environment into mandatory options for both medical scheme membership and a final NHI contribution.

By phase 3 the user fee system for public hospitals is eliminated and replaced by a combination of mandatory medical scheme membership and a voluntary contributory system for an enhanced differential amenity. Middle- and upper-income groups will be compelled to join a medical scheme during this phase. Public sector schemes will be able to contract for the differential (enhanced) amenity. Phase 4 creates a mandatory contributory environment which includes low-income groups. From that stage on, low-income contributors will access enhanced amenity services (table 6.10).

Table 6.10 Summary of coverage by broad income category

	Phase 1	Phase 2	Phase 3	Phase 4
Poor	o Public sector: basic amenity **(free)**	o Public sector: basic amenity **(free)**	o Public sector: basic amenity **(free)**	o Public sector: basic amenity **(free)**
Low-income	o Public sector: basic amenity **(user fee)**	o Public sector: basic amenity **(user fee)** o Medical scheme **(voluntary)**	o Public sector: basic amenity **(free)** o Public sector contributory fund **(voluntary)** o Medical scheme **(voluntary)**	o Public sector: basic amenity **(free)** o Public sector contributory fund via NHI contribution **(mandatory)** o Medical scheme **(voluntary)**
Middle-income	o Public sector: basic amenity **(user fee)** o Medical scheme **(voluntary)**	o Public sector: basic amenity **(user fee)** o Medical Scheme **(voluntary)**	o Medical scheme **(mandatory)**	o NHI contribution **(mandatory)** o Medical Scheme **(mandatory)**
High-income	o Public sector: basic amenity **(user fee)** o Medical scheme **(voluntary)**	o Public sector: basic amenity **(user fee)** o Medical scheme **(voluntary)**	o Medical scheme **(mandatory)**	o NHI contribution **(mandatory)** o Medical scheme **(mandatory)**

6.11.5 Concluding remarks

The Committee recognises that the various phases outlined in this framework reflect the need for careful planning and prioritisation of interventions. The reform process is both complex and multi-dimensional. Significant technical work and consultation will be required in virtually every phase and step of the process. This complexity should be recognised as inherent to health systems reform and a degree of openness and flexibility permitted to fully develop the reforms for implementation.

6.12 Concluding remarks

It is the view of the Committee that the direction adopted by government with respect to healthcare reflects the correct path to a more institutionally integrated and equitable health system. The findings and recommendations of this report do not represent a deviation but rather a refinement of existing policy.

The strategic framework outlined in this report places strong weight on the need to place health systems reform within a holistic framework which recognises the inter-relation between healthcare funding and service provision within both the private and public sectors. Although organisationally diverse, there is essentially one health system.

In order to ensure that certain goals and objectives are achieved universally, the Committee recognises that a range of instruments are required, tailored to the requirements of distinct parts of the system. The Committee in particular focused attention on finding institutionally feasible routes that in the medium- to long-term could integrate non-contributory and contributory healthcare systems in a sustainable and affordable manner.

Given the complexity of the required reform path, and the substantial nature of certain of the recommendations, it is recommended by the Committee that these proposals form the point of departure for a consultation process on the way forward.

REFERENCES

Advisory Group on the Risk Equalisation Scheme, Report of the Advisory Group on the Risk Equalisation Scheme, The Minister for Health and Children's independent review of the Risk Equalisation Scheme, 8 April 1998.

Adams, SI. A Study of the Changes in the Affordability of Medical Scheme Contributions, following changes to the Medical Schemes Act (Act 131 of 1998), Mini Thesis, Actuarial Science Department, University of Cape Town, 11 April 2001.

AFReC. Public Hearings on the MTEF Figures for 2001/2002, Submission to the Select Committee on Finance, 23 August 2001.

American Academy of Actuaries. Health Risk Assessment and Health Risk Adjustment, Crucial Elements in Effective Healthcare Reform, May 1993.

Arrow, KJ. December 1963 Uncertainty and the welfare economics of medical care".American Economic Review,: 941 to 973.

Berman, P. 1997. Supply-side approaches to optimizing private health sector growth,.Private health sector growth in Asia: Issues and implications. Newbrander, W (ed). John Wiley & Sons, Ltd,.111-133, p.124.

Bradshaw, D, Masiteng, K, Nannan, N. December 2000. Health Status and Determinants. Chapter 4, South African Health Review 2000: 89-124. The Press Gang. Durban, ,.

Carstens, I, Grobbelaar, N, Smit, A, van der Merwe, A, van der Walt, van der Walt, G,. Healthcare", 1999 In: Social Security Law, general principles. MP Olivier, MC Okpaluba, N Smit, M Thompson (eds). Butterworths. Durban, pp.213-247.

Cichon M, Newbrander W, Yamabana H, Weber A, Normand C, Dror D, Preker A. July 1999. Modelling in healthcare finance, A compendium of quantitative techniques for healthcare financing. ILO. Geneva,.

Department of Health, Draft Policy Document, Policy proposals concerning the financing of the private health industry in South Africa, 28 April 1997.

Department of Health. September 1999 A Social Health Insurance Scheme for South Africa: Policy Document. 7.

Department of Health. December 1994 Finance Committee Task Team Report,

Department of Health, Health Sector Strategic Framework, 1999-2004.

Department of Health, Smith, MJ, Cornell, J, Solanki, G. August 2001. A Study of Public Priorities, Willingness and Ability to Pay for Social Health Insurance in South Africa, Progress Report, Strategy and Tactics.,

Department of Finance. 1998, Principled Approach to User Charges and Levies, Unpublished.

Donaldson, C, Gerard, K. 1993. Economics of Healthcare Financing, The Visible Hand. pp.35-36 Macmillan. .

Enthoven, AC. Fall 1993 . Why managed care has failed to contain health costs. Health Affairs: , 21 to 43.

Families USA,. 1996. Bipartisan Consumer Health Bill Turned into Partisan Bill Harmful to Consumers. Washington,.

Families USA. August 1996. Health Insurance Bill Clears Congress: Medical Savings Accounts Limited to Demonstration Programme, , http://epn.org/families.

Final Report of the Commission of Inquiry into Health Services, 1986, RP 67/1986. (Brown Commission).

Financial and Fiscal Commission. Recommendations 2001-2004 MTEF Cycle, May 2000.

Van der Merwe, D. Social Transformation in South Africa by Means of Social Assistance: A Legal Perspective (1998). 4; Devenish Commentary 73; Davis, Cheadle and Haysom Fundamental Rights 355. Also see Olivier M. Some Trends and Critical Issues in South African Social Security (30-31 March 1998).

Fischer, Ronald C, 1996. State and Local Public Finance, Second Edition, Irwin Chicago.

Gildenhuys, JSH. 1993, Public Financial Management, J.L. van Schaik, First Edition.

Gilson, L, March 2001. Social Health Insurance Stakeholder Analysis: Report of Preliminary Investigation. Prepared for the Directorate of Health Financing and Economics, Department of Health, Centre for Health Policy (University of the Witwatersrand) and Health Economics Unit (University of Cape Town).

Ginwala, K.N. 1981. Health Legislation in South Africa. Masters Thesis, University of Natal.

Healthcare Working Party of the Society of Actuaries. June 1995. Private Health Insurance in Ireland: Challenging Times.

Herber, Bernard P, 1975. Modern Public Finance, the Study of Public Sector Economics. Third Edition, Irwin Illinio.

Industry Commission. Private Health Insurance. Australia, 1996.

Jewkes, R, Penn-Kekana, L, Bradshaw, D, Nannan, N, Harrison, A, Myer, L, *The Health of the Nation's Youth, 2000*. Contribution to the National Youth Commission Report on the State of the Nation's Youth in the Year 2000.

Katz, M. 1995. Third Interim Report of the Commission of Inquiry into certain aspects of the Tax Structure of South Africa. Pretoria. Government Printers.

Kironde, S. December 2000. Tuberculosis, Chapter 17, South African Health Review 2000: 335-349. The Press Gang. Durban.

Marone, JA. The ironic Flaw in Healthcare Competition, the Politics of Markets. Competitive Approaches to Healthcare Reform. R.A. Arnould, R.F. Rich, W.D. White (eds). The urban Institute press, Washington D.C.

Melamet Commission. The History and Development of Medical Schemes in South Africa. Unpublished paper prepared for the Committee, 1994.

Melamet Commission. 1994. Commission of Inquiry into the Manner of providing for Medical Expenses.,

National Economic Research Associates. May 1993. The Economics of Healthcare Reform: A Prototype.

National Economic Research Associates. 1995. Risk Adjustment and its Implications for Efficiency and Equity in Healthcare Systems.

Price M, Khunoane, B, van den Heever, AM. 1995. Should Tax Concessions on Medical Aid Contributions Be Removed? Centre for Health Policy.

Reinach Departmental Committee Regarding Medical Benefit, Friendly and Assurance Schemes, 1962.

Restructuring the National Health System for Universal Primary Healthcare. Report of the Committee of Inquiry into a National Health Insurance System, Executive Summary, June 1995.

Shung-King, M, Giese, S, Hendricks, M, Iriam, J, Abrahams, E, Guthrie, T, Hussey, G, Jacobs, M, Proudlock, P. December 2000. Child Health, Chapter 19. South African Health Review *2000*: 365-391. The Press Gang. Durban.

Teisberg, EO, Porter, ME, Brown, GE. Making Competition in Healthcare Work. Harvard Business Review: July-August 1994.

Thomas, S, Muirhead, D, Doherty, J, Muheki, C. December 2000. Public Sector Financing. Chapter 5, South African Health Review 2000: 127-147. The Press Gang. Durban. .

Trotman-Dickenson, DI. 1996, Economics of the Public Sector. First Edition, Macmillan. London.

Trowbridge Consulting (internationally Woodrow Milliman). Unfunded Lifetime Community Rating, "preferred model for Australia", November 1997.

United Nations Economic and Social Council, Committee on Economic, Social and Cultural Rights. Consideration of Reports Submitted by States Parties Under Articles 16 and 17 of the Covenant: Concluding Observations of the Committee on Economic, Social and Cultural Rights (Canada). 10 December 1998, E/C.12.1.Add.31.

Van der Merwe, D. 1998 . Social Transformation in South Africa by Means of Social Assistance: A legal Perspective. 4; Devenish Commentary 73; Davis, Cheadle and Haysom Fundamental Rights 355.

Van de Venn, WPMM and Ellis, RP. 31 March 1999 Risk adjustment in competitive health plan markets", Chapter 17, Handbook of Health Economics (eds. Culyer AJ and Newhouse JP,

van Vliet, van de Ven. 1992. Towards a Capitation Formula for Competing Health Insurers. An Empirical Analysis.

Van Rensburg, HC, Harrison, D. 1995. History of Health Policy, Chapter 4, South African Health Review. Health Systems Trust and Hemry J. Kaiser Family Foundation, m pp.53-71.

White Paper for the Transformation of the Health System in South Africa. Published as Notice 667 of 1997 in the Government Gazette, no. 17910.

Wilson, VM *et al*. Summer 1998. Case Study: The Washington State Healthcare Authority, Inquiry 35, ,pp.178-189.

World Health Organisation. The World Health Report 2000. Health Systems: Improving Performance, Geneva.