THE NATIONAL HEALTH SYSTEM

A ROADMAP FOR REFORM

DRAFT SUMMARY REVIEW

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EXECUTIVE SUMMARY

Introduction

The health system has faced enormous challenges over the past 14 years. These have included institutional transformation, fiscal constraints, and substantial increases in population and the burden of disease. Although the system has faced many setbacks a base has been established for substantial improvements in service access and delivery.

This Roadmap provides a framework for implementing a series of necessary health systems improvements in South Africa, underpinned by a revised priority status within Government. Concerns exist that fiscal austerity and institutional challenges over the past 10 years have reduced the capacity of the health system to respond effectively to public health threats.

These concerns are borne out by key indicators of health performance and status which fall far short of a country of South Africa's level of development.

Health system components

The vision outlined for the transformation of the health system provided in this Roadmap is underpinned by a focus on the strategic levers that drive its performance. Broadly speaking the health system can be divided into three areas:

- 1. *Inputs*: which are required to control and determine the outputs of the health system. Inputs include: the institutional framework, human resources, finances, and information systems. These inputs are all inter-related. If any one of these inputs areas is poorly configured the functionality of the entire system will be compromised.
- 2. *Outputs*: which are the services as rendered. These can be broadly differentiated into personal and non-personal services. Personal services involve services provided to patients seeking advice, treatment and care. Non-personal services involve services provided at a community level, such as public/community health and environmental health services. If the service mix is poorly configured, with a disparity between front-end and referral services, the functionality of the health system will also be compromised.
- 3. *Outcomes*: which are impacts on health status of the population. This is the central rationale for the existence of the health system. Health outcomes will also be affected by programmes (e.g. sanitation) and socio-economic factors (e.g. income poverty) that fall outside the control of the health system.

The vision therefore encompasses specific achievements in relation to each of these strategic areas.

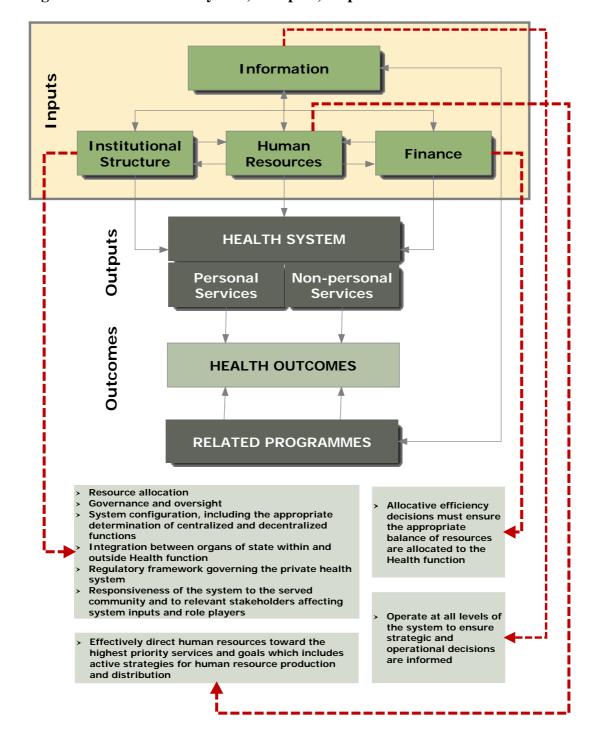


Figure 1: The health system, its inputs, outputs and outcomes

The Health System Now

Overview

South Africa has a relatively sophisticated health system with large public and private sectors. The size of the system, based on per capita expenditure, is not significantly out of line from an international perspective. However, of concern are the deteriorating health outcomes evident over the past 20 years.

Although health outcomes are not in themselves a consequence of the health system, it can be a significant contributor. The cause of poor health outcomes will result from a combination of *inadequate resources* allocated relative to priority needs, and the *efficiency* of that expenditure.

The efficiency of government health expenditure is related to its institutional design, and will be affected by the quality of its organisations and how they are overseen and managed. Given the complexity of a health system, close attention should be paid how decisions are made and how they are carried out at all levels of the system.

The evidence strongly suggests that the South African health system is inadequately funded and poorly configured. In combination these factors contribute in important ways to the poor health outcomes achieved.

Health system performance

All South Africa's key indicators of health status have reversed over the past 10 years.

This poor performance is consistent with regional trends.

As South Africa performs poorly relative to its peer countries, including many with far lower levels of per capita health expenditure and GNI per capita, a significant contributing factor may be a poorly configured public health system.

Institutional framework

There is a disconnection between the development of national policy and resulting spending decisions at a provincial and local government level.

The current district health system reduces the ability of many districts to establish the capacity to run more autonomously and achieve greater efficiencies. However, it is quite possible that many health districts will not have the capacity for full autonomy for many years.

No financial framework has been developed to fund districts. This coupled with the institutional model governing districts makes the role of local government in relation to district services unclear.

Financing the public system

The public health system has faced effective real declines in spending until 2002/03 after which systematically improved allocations were forthcoming. However, it appears that the improved funding from 2002/03 did not meaningfully improve public hospital services.

The overall health system, and in particular referral hospital services, appear worse off than they were in 1997/98 even after accounting for the expenditure improvements.

Local government spending from their own revenue has declined. This is a response to the implementation of the district system.

Financing the private system

Private sector per capita expenditure is significantly greater than that of the public sector.

Private sector expenditure trends rose significantly during the 1990s prior to the implementation of the Medical Schemes Act of 1998. Thereafter per capita expenditure has stabilised and begun to decline in real terms.

Medical scheme claims costs (i.e. the costs of medical services) have continued to rise mostly due to systemic specialist and hospital cost increases resulting from market imbalances.

Pharmaceutical costs have been contained to a degree through the introduction of pricing legislation and regulations affecting medical scheme chronic benefits and the treatment of AIDS.

Human resources

The public health system has the same level of human resources in 2007/08 as it had in 1997/98, despite the fact that both population and disease burden are significantly larger now than in 1997/98. This is after an initial decline of 36,000 personnel to a low point in 2002/03.

Had public sector staffing levels increased with population and the disease burden from 1997/98 an additional 79,791 staff would be employed at a residual recurrent annual cost of R12.0 billion (2008/09 prices). If only population growth were taken into account an additional 64,087 staff would be employed at a residual recurrent annual cost of R9.7 billion.

The improvements in staffing do not appear to be distributed proportionately across the system, with public hospitals unaffected. If this proves to be the case a severe reduction in the performance of public hospitals from 1997/98 was a probable outcome.

The responsiveness of staffing levels to budget improvements suggests that the public sector is able to attract and retain staff provided it has funds.

Diagnosis

The strategic gaps emerging within the South African health system are identified as:

- 1. Poor value for money for what is presently spent on the public health system;
- 2. The absence of a citizen-facing and performance-oriented institutional framework;
- 3. A needs-based resource gap related to:
 - a. Historical budget constraints, particularly for the period 1997/98 to 2002/3;
 - b. The misallocation of existing resources due to the absence of informed policy-making (i.e. an absence of costed norms and standards);

A primary determinant of the emerging gaps is an evident absence of leadership and accountability.

There is no evidence to support the view that South Africa's poor outcomes result from segmentation (or tiering) within the health system. International comparisons reveal that all peer group developing countries have multiple tier systems with vastly better (and improving) health outcomes than South Africa.

Institutional Framework

Overall approach

An important consideration going forward is that the existing health system does provide a sound basis for enhancement. Institutional reform will in many instances involve building on what exists rather than wholesale replacement. The following framework proposals are emerging from the roadmap process:

- Strengthen the organizational capacity and leadership at the national level to ensure that strategic policy can be developed and implemented.
- Strengthen the structurally link between financial transfers and approved policy. .
- Decentralise operational management to enable structures and organisations to more efficiently manage their resources. This would need to include specification of their minimum capacity requirements and accountability structures (governance).
- Clarify roles and responsibilities, linked to financing mechanisms, to reduce inter-administration and service relationship problems.
- Introduce arrangements that generate accountability that systemically impact on leadership and performance. This would include independent regulatory functions operating across the system (i.e. public and private sector).

Principles underpinning strategic institutional reform

The existing institutional framework has a logic and functionality which needs to be acknowledged as providing the base for transformation.

Institutional reform should not replace organisations or institutions unless very clear grounds exist.

Institutional restructuring should enhance the access to health care for everyone without at any time placing this access at risk.

Strengthening policy development – the National Department of Health

Due consideration needs to be given to the fact that capacity is presently quite weak within the National Department of Health and any necessary expansion in its authority and responsibility must be preceded by significant strengthening.

Agencies

A number of national agencies could be considered to provide the operational components of areas central to national strategic policy.

Resource allocation and strategic purchasing: This is an organization that would have three fairly complex and distinct operational requirements. The first would be perform the detailed technical work associated with allocating the ring-fenced transfers from national government to health administrations. The second would involve allocating risk-adjusted subsidies to medical schemes in accordance with the health funding proposals, which would replace the inequitable tax subsidies. The third would be to operate as a centralised purchaser/developer of strategic health services. These services would be developed as shared services across both the public and private sectors and focus on areas where the inefficiencies are greatest.

The financing of these services would occur either through mandatory or voluntary pre-payments required from public sector, private sector, and social insurance funds (e.g. COIDA and the RAF). This would eliminate the need for fee-for-service billing of any funder.

Statutory contributory fund: similar to arrangements in Ireland and Australia, and presently under consideration within South Africa in relation to death and disability insurance, consideration should be given to the establishment of a default statutory medical scheme. This scheme would focus on providing a value-for-money default arrangement for low-income groups.

Quality assurance: An independent authority should be established to perform a complete quality assurance regulatory function for both public and private health services, and in particular to make health services more citizen-facing. This body should have intrusive powers of inspection and, subject to due process, the ability to remove of accountable individuals who fail to comply with statutory requirements relating to quality assurance. It should also have the locus to initiate further legal proceedings against non-compliant administrations, organisations, health facilities, and accountable individuals. The legislation underpinning this function should furthermore criminalise non-compliance.

This independent authority will provide a critical avenue for public participation in the review of public and private health services. Users of health services could approach the authority to investigate and make finding on complaints of inadequate service.

Pricing Commission: A pricing authority should be established to deal with private sector pricing arrangements. This would seek to ensure that market power imbalances within the health system are checked. It would also provide for the enforcement of pricing legislation, e.g. the single exit price for pharmaceuticals and any area of abuse. This authority would absorb the existing Pricing Committee.

A further function of this authority would be to perform cost-effectiveness assessments of new pharmaceuticals and health products. These assessments would be used to advise whether Government or medical schemes should purchase a particular medicine.

Certificates of Need/Licensing Authority: An independent authority is required to assess the requirements for new expensive technology and hospital licensing. This authority would assess geographical requirements for both the public and private sector to ensure that over-supply is avoided. This authority would take over the hospital licensing functions of provincial administrations.

National Health Information System: the collection and distribution of information on the total health system should be incorporated into a specialised agency. The rational for this is discussed below.

National Health Insurance

The central rationale for the establishment of National Health Insurance ("NHI") is to implement an institutional framework that can establish a uniform entitlement to healthcare, subsidized by Government. This universal entitlement should be funded essentially by general tax revenue. However, consideration can be given to raising some portion via an earmarked payroll tax.

The complete NHI framework will operate within the context of a private health system that is regulated in accordance with social solidarity principles:

- Non-discrimination on the basis of health status;
- Coverage of essential healthcare; and
- Fair access for low-income groups.

Given the disruptive nature of payroll taxes, and consideration of a general social security payroll tax as part of a comprehensive system of social security, it is proposed that this should only make up a minor proportion of the overall framework. Further, it is proposed that any initial payroll tax should not exceed more than 1.5% of gross remuneration and coincide with a restructuring of tax subsidies. ¹

Given the institutional limitations, initially it may not be possible for the universal entitlement to take the form of a service. Any consideration of a universal benefit therefore needs to provide a service for those not on a medical scheme, and a subsidy to those on a medical scheme.

At a strategic level the central elements of the NHI arrangement should envisage the consolidation of the following proposed functions (proposed for agencification above):

- Resource allocation.
- Risk equalization², and
- Strategic purchasing.

These three functions would: determine the transfers to public health administrations, a statutory contributory fund, and medical schemes; and strategically purchase services that would be shared across the public and private sectors.

¹ The value of the existing tax subsidy is roughly equivalent to a 1.5% proportional tax on gross remuneration for everyone over the tax threshold.

² This option would not obviate the need for full implementation of the risk equalization fund currently envisaged in terms of the Medical Schemes Amendment Bill. Full implementation should occur, with a function shift occurring after the establishment of the NHI.

General Taxes Earmarked (majority of budget) **Taxes National Health Budget** Formula -based **Risk Equalization** Strategic Purchasing allocation for universal benefit/subsidy **National Health Insurance Authority** contract transfers Statutory **Public Sector** Contributory Fund Public Provider **Private Providers Shared Services**

Figure 2: Functional Breakdown of a National Health Insurance Framework

Shared Services grow over time as new services established with a focus on trauma, daycare, specialized radiology, oncology, pharmaceuticals

Over time the shared service component would expand, creating the basis for a universal benefit to replace the subsidy. Where it becomes rational for a particular service to be provided universally, a pre-payment from all funders, public sector and medical schemes, could be made mandatory.

While growing the shared service platform, both the public sector and medical schemes should access the services on a contractual basis, including, and preferably, using a *pre-payment*³ approach.

This framework permits the evolution of an efficiently provided set of priority services to grow progressively over time in a paced manner without disruption to institutional arrangements, or generating negative public perceptions concerning the shared services.

Importantly, the full NHI institutional framework could be implemented prior to the establishment of extensive shared services. This framework is therefore scalable, implies minimal destabilization of existing institutions, while nevertheless establishing all the structural components of an NHI. Once in place, the NHI framework compels the health system to evolve with the embedded social solidarity elements always in place.

³ This is also referred to as a prospective payment and will invariable involve some form of capitation arrangement. However, the specific reimbursement modality will depend on the type of health good or service involved.

The *strategic purchasing function*, together with the authority responsible for *certificates of need and licensing*, are required to ensure that the existence of a private funding arrangements, i.e. medical schemes, is not prejudicial to the availability of medical service providers (hospitals, doctors, specialists, nurses, etc.) provided through the public system.

Medical schemes would remain an important institutional component of the health system, and incorporate a regulatory framework which protects members from discrimination on the basis of their health status.

Public participation and national consultative fora

In additional to an organizational restructuring of the NDoH it is proposed that the national level of government be further supported through the establishment of standing national consultative structures in the following areas:

- HIV and AIDS and TB;
- Non-communicable diseases;
- Human resources (as recommended in section 7);
- Maternal and child health;
- Service delivery and organisation (both public and private sector) including quality assurance;
- Health information: and
- Private health.

These consultative for would be provided for in the National Health Act ("NHA") with specific advisory functions, including who participates, and outputs are required. Participation should be inclusionary rather than exclusionary.

These fora would permit an ongoing and structured dialogue between the key role players in the health system and the policy-making functions of Government. The relevant NDoH units related to any particular forum should provide secretarial support for their functions. Reports from these fora will be tabled in Parliament for consideration.

The public health service

Reform of the public health system needs to focus primarily on strengthening existing structures and avoid any disruption to the present levels of functionality.

Central to the establishment of a well functioning health system will be the full implementation of properly capacitated sub-provincial structures capable of effectively developing, overseeing, and co-ordinating the health services in their jurisdiction.

Sub-provincial structures have emerged by convention at two levels within provinces: the "regions" which have some responsibility for regional and central hospital services; and "districts" which have some responsibility for district hospitals, day centres, community health centres and clinics. Districts typically fall within regions.

Both regional and district structures can be hampered through inadequate access to basic support capacity in the areas of corporate services, service planning, information systems, and public health. As a consequence they have difficulty with administration and planning.

Sub-regional structures can also be hampered through limitations on their decision-space with many key operational and planning decisions made at a provincial level. Sometimes this is as much about capacity as it is decision-space.

Sub-regional structures also lack local accountability as their oversight structures are not sensitive to local feedback.

Priority therefore needs to be given to the following using the National Health Act:

- Establishing up to three configurations for regional and district structures ranging from light to full decentralisation;
- Determining a minimum executive structure required for regions and districts irrespective of the degree of decentralisation;
- Establishing governance and oversight requirements for each model;
- Fully clarifying the authority and accountability allocated in terms of each model so that sub-provincial structures can make effective decisions on a dayto-day basis;
- Establishing pre-requisites before any sub-provincial structure can move to the more advanced decentralisation models, which should include obligations placed on provinces to be able to oversee these authorities;
- Establishing a timeline for designated (mainly in the major metropolitan areas) regional and district structures to graduate toward full decentralisation on a mandatory basis;
- Retaining a general discretion for regional and district structures falling outside the mandated group, to move toward the full decentralisation model; and
- Fully clarifying the role of local government as an agent in carrying out functions for a district, including the funding obligations.

Although the criteria should be established in national legislation, provinces should be assigned the responsibility to oversee its implementation.

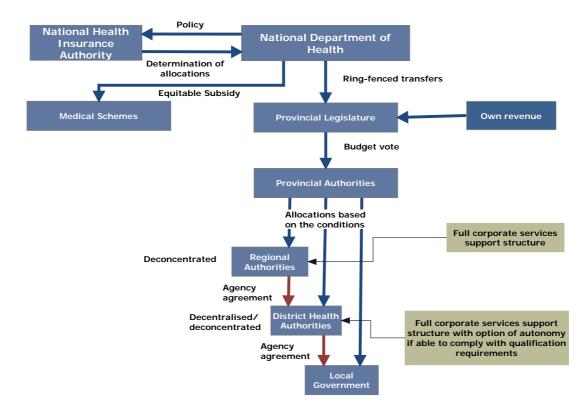


Figure 3: Structure of the public health system

Health information

Significant reliance is placed on information to decide on priorities and to allocate resources in health and related functions. However, the health information systems in place are weak, unreliable, and in some cases unusable.

Health-related surveys in many cases are not co-ordinated between departments, agencies and private initiatives. Different surveys use different approaches without any general consensus on best practice approaches. The resulting information often cannot be pooled, and sampling is too limited. As a consequence the results are not definitive and important policy questions cannot be answered.

The systems for collecting health information have been in development over a number of years and the consensus is that they are far from adequate. Nevertheless, a base exists which can be improved going forward. The experiences of the past ten years offer the potential for reliable insights on how to significantly improve health information collection and analysis.

Considerations going forward involve the following:

- The possible establishment of an agency to manage the national health information system.
- The introduction of standardised and appropriate training requirements for people required to manage health information systems;
- The incorporation of health information professionals into a general national subsidy framework for health professionals; and
- The establishment of chronic disease management systems at the health district level.

Funding Health Care

Determination of the funding envelope

No completely objective method exists to determine the level of public health expenditure that a country should target. Proportions of government expenditure and GDP do nevertheless provide indicators of the feasible and appropriate range of budget constraints. Based on this South Africa's existing allocation to the public health system is unusually low and could be improved without creating any macroeconomic or fiscal distortions.

The upper range for South Africa should potentially aim for between 4% and 5% of GDP over time, underpinned by significant improvements in the public health system. This would bring South Africa into the upper range of its peers, as well as cater for a changed disease burden. In present values this would imply a net annual increase in government expenditure of between R17.6 billion and R39.1 billion.

Although an increase in resourcing within the public health system is urgently needed, an important consideration is the capacity of the health system to absorb real improvements in resources. In some instances South Africa also faces hard supply constraints (nurses, doctors, etc.) and these will take time to alter.

Changes in the allocation should therefore be increased incrementally over time in a manner consistent with an improved relative prioritisation in Government taking cognizance of supply constraints.

Consideration should be given to a 3-year, 5-year, and 10-year view on improvements in relation to a targeted upper range. At a minimum this target should be set at 4% of GDP. Serious consideration should be given to going to at least 5% of GDP.

Earmarked taxes

Earmarked taxes are not a necessary requirement for improved public funding for health as expenditure levels are always determined subject to budget constraints irrespective of the revenue source.

Where an earmarked tax is used to fund a public system which explicitly (via a means test) or implicitly (due to unavoidable preferences) targets a lower income category or range the benefit principle no longer applies and general tax funding is preferred. However, if the benefit took the form of a compensatory subsidy provided to those who do not use the benefit, the benefit principle would apply.

In the absence of a credible universal benefit, reliance alone on the rationale to establish a general sense of solidarity could generate the opposite effect as those paying very large taxes (in value terms) would see little or no benefit. In such circumstances reliance on general taxes is preferred, as no specific entitlement expectation is established.

If consideration is given to an earmarked tax, the only feasible universal benefit would involve a free public service combined with a subsidy to those who are not exercising their right to use free public services.

Given the capacity of industrialised countries to properly resource their public health systems, their acceptability to the general population is vastly greater than in developing countries where a degree of segmentation is inevitable.

To mitigate any negative effects of segmentation the following is typically required:

• On the supply-side licensing of new private services should be required to take into account the impact a new service will have on public provision. Licenses

should be supplied to meet geographical need only. If this does not occur, as is the case in South Africa, supply-induced demand is likely to occur where third-party payers are effectively forced to accommodate over-supply. Furthermore, public facilities close to a new private facility will inevitably be cannibalized for staff.

• On the demand side, there is a risk that people could opt for the public system until they require expensive medical treatment and then take out voluntary health insurance. This conduct is referred to as anti-selection and is a source of instability to voluntary risk pooling. Furthermore, voluntary health insurers defend themselves from anti-selection through risk-selection (i.e. penalties of one form or another, including complete exclusion, applied to people or groups with predictable levels of health usage), which forces insurable individuals and groups out of cover. The most effective solution involves mandating health insurance cover for those above a reasonable income level and the introduction of measures that remove any form of risk-selection.

Resource Allocation

The effective allocation of finances within the health system is a central determinant of its success. Centralising the resource allocation mechanism is a necessary but not sufficient requirement for achieving significant health service delivery improvements.

During the period from 1995 to 1996 health budgets were ring-fenced at the national level and allocated as revenue to provincial governments. However, the system lacked a clear technical framework, resulting in some financial imbalances.

It is nevertheless appropriate that a national resource allocation mechanism be established which is supported by a strong institutional and technical framework. Consideration should be given to allocating technical and operational aspects of this function to an Agency, which could also be a national purchaser of health services to be shared by both the public and private health sectors as discussed above.

The central function of this national Agency would be to ensure that resources are determined and allocated to all levels of the health service in a manner that provides certainty over revenue streams matched by clear service delivery objectives.

The allocation mechanism in its totality should involve a combination of formulabased allocations with formalised discretionary allocations linked to explicit goals. The entire allocation should be underpinned by a province-by-province mutually approved agreement which outlines long-term requirements in exchange for the funding. Such an agreement could be reviewed and amended annually on a rolling basis.

Sub-provincial structures

Consideration needs to be given to ring-fencing allocations to regions (provided they become properly framed in legislation) and districts as part of the national determination process. This should be considered in conjunction with the establishment of fully decentralised arrangements, at least in respect of districts.

National requirements imposed on provinces would inter-alia need to emphasize the following:

- Spatial equity;
- Service norms and standards;
- Asset maintenance requirements;
- Access obligations;
- Quality of care norms and standards;
- Co-operation with compliance audits; and
- Reporting requirements in relation to all obligations.

Funding hospitals

The public hospital reimbursement systems in a number of countries (the United Kingdom, France, and Australia) make use of fairly sophisticated budgeting mechanisms. These include providing long-term security of funding for explicit services.

South Africa should move in the same direction in conjunction with the establishment of autonomous public hospitals. This budget mechanism would substantially remove the arbitrariness that predominates in the funding of public hospitals. The quasicontractual relationship established with provincial structures would require that agreements on service provision (including quality of care) become explicit and subject to an obligation to ensure adequate funding.

Private sector contracting

Making use of private sector services on contract is an option for accessing their surplus capacity. It can however also be seen a substitute for not properly improving public sector services. Where the rationale is the latter it is probable that the contracts will be poorly managed and result in a waste of resources. An authority unable to manage its internal "contracts" will clearly lack the capacity to manage external contracts.

At any level of the service private sector contracting for services should be discouraged and permitted only in those instances where the capacity and oversight exists to ensure adequate service delivery.

Human Resources

Short-term interventions

Short-term human resource interventions could be divided broadly into the implementation of human resource planning processes and the targeting of immediate staff level improvements.

Human resource planning processes:

• Implement a National Consultative Forum to annually review all health professional staff and training norms;

- Implement the new human resource information and reporting system with data and reports made available publicly; and
- Establish a fully resourced technical unit to analyze and evaluate human resource requirements on an ongoing basis.

Staff level improvements:

Return the public sector staffing ratios to the position they were in 1997:

- Funding for an additional 48,300 health professionals over the next three years;
- Prioritise hospital services for the improvements focusing key hospitals;
- Prioritise professional nurses and medical doctors for improvements;
- Identify specific health professionals to be funded for immediate improvement;
- Ring-fence the allocations, using conditional grants, to ensure targets are met;
- Establish a monitoring an evaluation process to ensure short-term targets are met, and to asses their impact on services.
- Prioritise the encouragement of foreign health professionals to support vulnerable institutions (e.g. management of underperforming hospitals).

Medium-term human resource priorities:

Human resource planning processes:

- Establish target ratios of health professionals to population in excess of the ratios in existence prior to 1997;
- Establish target health profession enrolment requirements:
- Long-term targets; and
- Three-year targets.

Staff level improvements:

- Expand enrolment numbers and capacity of institutions to educate and train new health professionals in line with targets;
- Expand staffing within the public services beyond the 1997 staff to population ratios in accordance with medium-term targets; and
- Prioritise institutions for specific support.

Conclusions

Reforming the health system is one of the most challenging endeavours for any government to undertake irrespective of the level of development. However, for developing countries the implications of not getting it right are substantial.

In developing countries the health system is often compensating for poor socioeconomic conditions, which makes the emphasis on public health goals enormously important.

Furthermore, skilled professionals, who are very mobile from a labour market perspective and in short supply in developing countries, are very sensitive to the availability of health care and education at levels consistent with their perceptions of risk and acceptability.

Developing countries therefore face harder choices than industrialised countries that are able afford predominantly single-tier health and education systems. They need to carefully balance equity goals within the context of tight resource constraints and the need to support the input requirements for an emerging modern economy.

For developing countries, therefore, an important strategic goal will be to implement an institutional framework that can frame the evolutionary path of the health system to improve its access and equity as the economy grows. Within the South African context this institutional framework is reflected in the structural reforms recommended in the Roadmap.

The implementation of a NHI structure will not instantly eliminate tiering as South Africa is inhibited by its socioeconomic context, its level of development, and the weak public sector health administrations. However, the existence of the NHI structure will automate the evolution of a predominantly single-tier system as the economy enlarges and formal employment increases.

It is furthermore important to understand that the existence of health insurance within a developing country context is inevitable and desirable. South Africa has the advantage of a well regulated medical scheme system that can form an important component of the overall system of social security. Consistent with health systems internationally, the considered incorporation of regulated private health insurance into the overall system of social security is well accepted and essential to the achievement of health policy goals.

A necessary consideration for health systems reform is to avoid unravelling existing institutional arrangements and attempting to replace them with new ones. Successful reform of any complex system always builds on existing institutions whether in the private or public sector.

The framework and vision provided in this Roadmap therefore focuses on the priority areas for intervention, including structural reform. The challenge is however considerable, and strong leadership, extensive mobilisation and public participation will be needed to see significant change within a five-year period. Without this leadership the reforms will fail to achieve their goals irrespective of the quality of the plan.

1. THE VISION

Introduction

- 1.1 The health system has faced enormous challenges over the past 14 years. These have included institutional transformation, fiscal constraints, and substantial increases in population and the burden of disease. Although the system has faced many setbacks a base has been established for substantial improvements in service access and delivery.
- 1.2 This vision of the key transformation requirements of the health system has been developed to take South Africa toward the goal of a modern state capable of realising the full potential of the population as a whole with no-one excluded.
- 1.3 The vision focuses on those strategic areas with the potential to substantially transform its capacity to deliver improvements in health status and social security for all. To achieve this requires pragmatic consideration of the historical development of the health system without becoming bound by its inertia.
- 1.4 Realising this vision requires that the realities of complex system reform be recognized and confronted, with careful attention paid to its inputs, outputs and consequent outcomes.

Health system components

- 1.5 The vision outlined for the transformation of the health system is underpinned by a focus on the strategic levers that drive its performance. Broadly speaking the health system can be divided into three areas:
 - 1.5.1 *Inputs*: which are required to control and determine the outputs of the health system. Inputs include: the institutional framework, human resources, finances, and information systems. Due to their inter-relatedness if any one of these inputs areas is poorly configured the functionality of the entire system will be compromised.
 - 1.5.2 Outputs: which are the services as rendered. These can be broadly differentiated into personal and non-personal services. The former involve services provided to patients seeking advice, treatment and care. The latter involves services provided at a community level, such as public/community health and environmental health services. If the service mix is poorly configured, with a disparity between front-end and referral services, the functionality of the health system will also be compromised.
 - 1.5.3 Outcomes: which are impacts on health status of the population the determinants of which are therefore the central rationale for the existence of the health system. Health outcomes will also be affected by programmes and socioeconomic factors that fall outside the domain or control of the health system.
- 1.6 The vision therefore encompasses specific achievements in relation to each of these strategic areas.

Information Institutional Human **Finance Structure** Resources Outputs **HEALTH SYSTEM** Personal Non-personal **Services** Services Outcomes **HEALTH OUTCOMES RELATED PROGRAMMES** Resource allocation Governance and oversight Allocative efficiency System configuration, including the appropriate decisions must ensure determination of centralized and decentralized the appropriate balance of resources Integration between organs of state within and are allocated to the outside Health function Health function Regulatory framework governing the private health system Responsiveness of the system to the served community and to relevant stakeholders affecting system inputs and role players Operate at all levels of the system to ensure strategic and Effectively direct human resources toward the operational decisions highest priority services and goals which includes are informed active strategies for human resource production and distribution

Figure 1.1: The health system, its inputs, outputs and outcomes

Modernization

- 1.7 The health system will be modernized to fully capture the opportunities for more efficient and effective service delivery offered by new technologies and better systems of oversight and management.
- 1.8 This modernization will seek to ensure that the health system as a whole provides all residents with access to high quality services consistent with a modern society that seeks to maximise the potential of all.

Performance-oriented institutional structure

- 1.9 A performance-oriented institutional framework will be implemented to become the central driver of ongoing change in the health system. This will involve careful restructuring of all the strategic levers affecting health system performance:
 - 1.9.1 The *centralisation* of resource allocation decisions linked to the development of strategic policy;
 - 1.9.2 The *decentralisation* of appropriate operational functions and decision-making;
 - 1.9.3 The careful design of governance arrangements for all components of the system with a view to ensuring:
 - Adherence to strategic policy requirements and goals;
 - Management responsibility;
 - Operational efficiency;
 - Financial accountability;
 - Responsiveness to the served population;
 - Responsiveness to stakeholders and role players, both internal and external, central to system inputs and performance;
 - 1.9.4 The establishment of a health information system with the capacity to inform strategic and operational decisions;
 - 1.9.5 The establishment of a powerful human resource framework capable of :
 - Correctly prioritizing the allocation of human resources to the areas of greatest need; and
 - Effectively managing the required levels of health professionals at all times which shall include an active focus on production and procurement.

Employer of choice for the public health system

1.10 Establish positive career opportunities for health professionals essential for the proper functioning of the health system. The end result will involve the establishment of a core staff establishment with a long-term commitment toward the public health system.

Substantially improve health status and outcomes

- 1.11 Health status will be substantially improved with substantial gains in the areas of:
 - 1.11.1 Maternal and child health;
 - 1.11.2 HIV and AIDS;
 - 1.11.3 Tuberculosis; and
 - 1.11.4 Chronic diseases.

Fully develop the constitutional right to health and social security

1.12 The health system will be transformed with a view to becoming fully compliant with the letter and the spirit of the Constitution in all respects.

Ensure the constitutional right to emergency care is fully realised

1.13 The right to emergency care provided for in the Constitution will be achieved through the implementation of supportive structural interventions ensuring universal treatment at the nearest facility able to provide appropriate care.

Harmonize health system regionally and internationally

- 1.14 All the health systems within region will be harmonized in relation to access and cross-border compensation to ensure that no-one is denied access to necessary healthcare.
- 1.15 Through international agreements and mechanisms all citizens and relevant residents will have their access to healthcare protected when travelling to foreign destinations. Through similar arrangements all foreign nationals will receive protection when travelling within South Africa and the region.

2. CORE PRINCIPLES

The right to health

- 2.1 The health system, which incorporates both the public and private sectors, must at all times strive to comply with the provisions and the spirit of the Constitution.
- 2.2 The health system must at all times strive to improve access to health care exercising all reasonable measures to do so.
- 2.3 Everyone must have access to emergency treatment at the nearest available facility capable of providing treatment free at point of service.
- 2.4 The health system will at all times prioritize the use of resources and set up systems to properly protect those most vulnerable or in need of health services.

Equity

- 2.5 The health system must be available on the basis of need to all without avoidable hindrance, with funding reasonably related to the ability to pay.
- 2.6 The health system must ensure that essential healthcare is funded on a pre-paid basis where alternative arrangements will result in a barrier to access.

Quality

2.7 The health system must at all times ensure that health services comply with minimum quality of care standards.

Responsiveness

- 2.8 The health system must at all time be responsive to the served community and incorporate mechanisms to ensure that this occurs at all levels of care.
- 2.9 Patients must have access to a properly legislated and implemented complaints procedure to deal with poor service provision or any denial of care within any part of the health system whether within the public or private sector.

Independence of regulatory and semi-judicial functions

2.10 All regulatory and semi-judicial functions must be able to operate in an impartial manner free of private or political influence.

3. THE SOUTH AFRICAN HEALTH SYSTEM NOW

Introduction

- 3.1 South Africa has a relatively sophisticated health system with large public and private sectors. The size of the system, based on per capita expenditure, is not significantly out of line from an international perspective. However, of concern are the deteriorating health outcomes evident over the past 20 years.
- 3.2 Although health outcomes are not in themselves a consequence of the health system, it can be a significant contributor. The cause of poor health outcomes will result from a combination of inadequate resources allocated relative to priority needs, and the efficiency of that expenditure.
- 3.3 The efficiency of government health expenditure is related to its institutional design, and will be affected by the quality of its organisations and how they are overseen and governed. Given the complexity of a health system careful consideration is required as to how decisions are made and how they are carried out at all levels of the system.
- 3.4 The evidence strongly suggests that the South African health system is inadequately funded and poorly configured. In combination these factors contribute significantly to the poor health outcomes achieved.

Health System Performance

- 3.5 In 2008/09 total health expenditure is estimated at 8.2% of Gross Domestic Product ("GDP"), with 3.5% of GDP spent directly through the public system and 4.7% of GDP spent through the private system. (National Treasury, 2008).
- 3.6 South Africa is below its peers of a similar level of income in the portion of General Government Expenditure allocated to health spending (10.6% compared to a peer group median of 11.9%) but above the median level of per capita expenditure. (**Table 3.1**).
- 3.7 The international average and median for General Government Expenditure allocated to health spending is 11.4% and 11.0% respectively. Within South Africa's peer group the average and median is higher at 11.6% and 11.9% respectively. However, countries quite similar to South Africa are higher than the average:
 - 3.7.1 Mexico: 12.5%
 - 3.7.2 Argentina: 14.2%
 - 3.7.3 Chile: 13.2%
 - 3.7.4 Peru: 13.1%
- 3.8 South Africa' health outcome indicators fall significantly below the average and median for all countries and for its peers. (**Table 3.1**). Out of 30 peer countries South Africa is the only one to experience a worsening of the Infant Mortality Rate ("IMR") per 1,000 live births

⁴ This is based on the 15 countries immediately below and above the GNI per capita of South Africa.

over the period 1990 to 2006.⁵ South Africa is also unique amongst its peers in facing worsening maternal and child mortality.

Table 3.1: Key indicators of South Africa's health outcome's performance

	Gen Gov Exp on health as % of total Gov Exp 2005	Per capita Gov Exp on health (PPP int. US\$), 2005	Per capita Gov Exp on health at ave ex rate (US\$), 2005	Maternal mortality ratio (per 100 000 live births), 2005	IMR per 1,000 live births 2006	Change in IMR per 1,000 from 1990 to 2006
South Africa	10.6	338.0	182.0	400.0	56	11
All WHO Countries						
Average	11.4	573.5	542.4	302.8	37	(14)
Median	11.0	211.0	109.0	130.0	21	(9)
South Africa Peers (15 above and below per capita GNI in PPP US\$)						
Average	11.6	306.5	155.7	109.9	21	(13)
Median	11.9	284.0	155.0	77.0	18	(10)

Source: All data based on the World Health Organization database.

3.9 The poor health outcomes performance of South Africa cannot properly be explained by the levels of Government expenditure on health as its performance is way below countries with similar levels of public health expenditure. This indicates that the health system is under-performing with its given level of expenditure.

Institutional Framework

- 3.10 The South African health system is broadly divided into a public system, which has functions split between the three tiers of government, and a private sector the regulation of which is predominantly a national function.⁶
- 3.11 The national DoH has the responsibility for advising and developing policy, operating certain vertical programmes, and allocating certain national conditional grants. The DoH reports to the Minister of Health who forms part of the national executive.
- 3.12 There are nine provincial health administrations which fall under the authority of the provincial executive and legislature. Provincial governments have the ability to make their own policy independently of the National Executive except where national legislation has provided otherwise.
- 3.13 There are 53 health districts which fall under the authority of the provincial executive and legislature. Their functions are determined through national and provincial legislation. The former provides an enabling framework for the district system, while the latter provides for specific functions which may vary from province to province.
- 3.14 Health districts are not decentralised and can be classified as "deconcentrated" authorities, with fairly limited decision-space in the key areas of finance, human resources, and service delivery. No

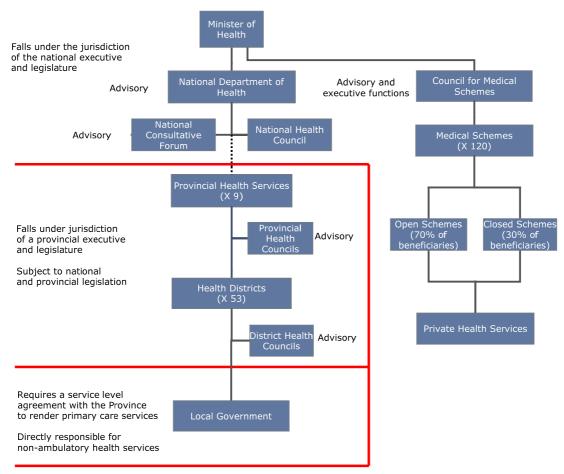
⁶ The licensing of private hospital services is presently carried out by provincial health departments.

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⁵ The WHO information is used here, which is different to domestic surveys which suggest higher

- definitive funding framework presently exists for them and they largely lack mechanisms for ensuring local accountability. Many districts suffer from capacity constraints. (van den Heever, 2004).
- 3.15 Local government can render services for health districts through service-level agreements, or provide services assigned to it in terms of the Constitution. The former are personal services (i.e. clinical services rendered to a patient), while the latter refer to non-personal services (e.g. environmental health services which are provided to a community as a whole).
- 3.16 The private sector funding framework (medical schemes) is not regulated on a provincial basis. The regulator of medical schemes is the Council for Medical Schemes ("CMS"), which reports to the Minister of Health. The CMS is in the process of implementing a risk equalisation mechanism which will effectively pool risks across multiple funders. (Medical Schemes Amendment Bill, 2008).

Figure 3.1: High-level overview of the structure of the South African Health System



Public and Private Systems

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⁷ District level capacity constraints may be systemic due to the deconcentrated model presently adopted. However, for many more rural provinces capacity constraints may be systemic regardless of the district model adopted. However, a conclusive finding will require a proper evaluation of the district system.

- 3.17 The population covered by a medical scheme was 7.5 million in 2007 (Council for Medical Schemes, quarterly scheme submissions for 2007), showing an increase of roughly 500,000 from 2006. The total population without medical scheme cover is roughly 40 million based on the 2008 mid-year population estimate (StatsSA, 2008).
- 3.18 Usage of private sector services is however not reliably estimated by subtracting the medical scheme population from the total population as many people pay out-of-pocket for private sector services, particularly for ambulatory services (general practitioner ("GP") and specialist services).
- An attempt to estimate the proportion of the total population falling into catchment populations served by the public and private sectors divided into hospital and ambulatory services, based on the General Household Survey ("GHS") of 2006, indicates as follows:

3.19.1	Public sector hospital services:	88.8%
3.19.2	Public sector ambulatory services:	54.1%
3.19.3	Private sector hospital services:	11.2%
3.19.4	Private sector ambulatory services:	45.9%

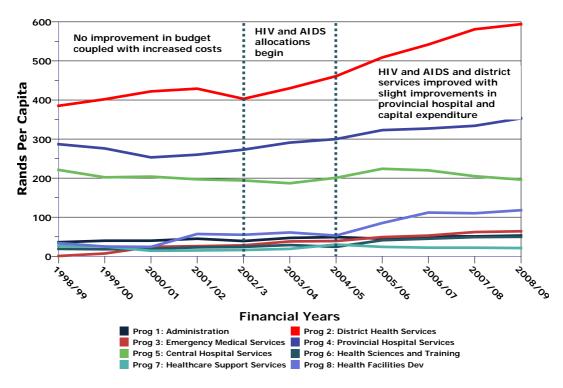
- 3.20 The GHS questionnaire however only indicates the most recently used service and does not account for utilization. It is therefore probable that non-medical scheme members will split their usage of ambulatory services between public and private services depending upon circumstances.
- 3.21 When estimated utilization of both public and private sectors is taken into account the catchment population for ambulatory services adjusts down to 32% of the population or 15 million people (roughly twice the number of medical scheme beneficiaries). However, it can be expected that around 27 million people make use of private ambulatory services at least once in a year.
- 3.22 The GHS therefore indicates that the voluntary use of fee-based services amongst quite low-income households is surprisingly high. Much of this is concentrated within households in formal dwellings (37.1% of the total population), which is indicative that this is a population with some degree of income stability. This also suggests a degree of dissatisfaction with the accessibility of free public sector services as this group is predominantly uninsured and choose to use private services on an out-of-pocket basis.
- 3.23 Hospital services evidently require insurance for them to be accessible in the private sector as the estimated catchment population correlates with medical scheme participation.

Public sector expenditure trends

3.24 Public health expenditure from 1998/99 to 2008/09 can be broken down into distinct periods where the patterns vary considerably. The four-year period from 1998/99 to 2001/02 shows a flat pattern of per real capita expenditure for all programmes. In the case of regional and central hospital services there is a real per capita decline. The only programme with some increase is programme 8 which deals with capital expenditure. (**Figure 3.2**).

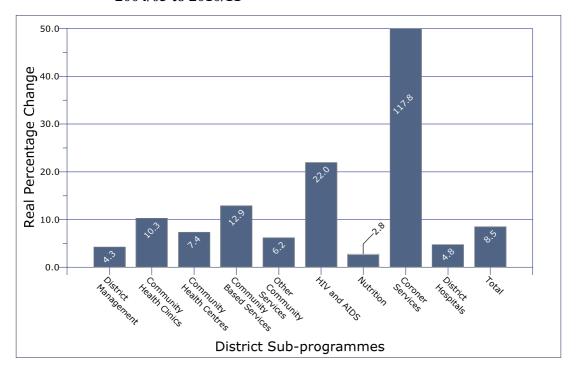
- 3.25 The two year period from 2002/03 to 2003/04 shows a significant improvement in district (programme 2) expenditure as the HIV and AIDS programmes are substantially expanded. Regional and central hospital services (programmes 4 and 5) expenditure however remains largely flat in real per capita terms, with all other programmes also flat. (**Figure 3.2**).
- 3.26 The four-year period from 2004/05 to 2008/09 shows continued dramatic improvements in district (programme 2) expenditure, with significant increases in all sub-programmes (see **figure 3.3**). Regional and central hospital services receive a one-off improvement to 2005/06 and thereafter remain flat on a real per capita basis. Capital expenditure (programme 8) improves on a per capita basis to 2006/07 and thereafter flattens out.
- 3.27 For district services the lowest increases are for nutrition, district management and hospitals. The highest increases are for coroner services (newly transferred to health from the South African Police Services), HIV and AIDS and community level services. The overall annual average real increase for the period 2004/05 anticipated to 2010/11 is 8.5%. (**Figure 3.3**).
- 3.28 Local government own revenue for funding healthcare has shown a decline in real terms (-1.4% per annum for the period 2004/05 to 2010/11) as services are shifted to provinces. (National Treasury, 2008). Therefore, some of the increased spending at a provincial level involves an implicit shift of resources from local government.
- 3.29 Over the entire period from 1998/99 to 2008/09, a period of 11 years, per capita expenditure on central hospital services remains largely unchanged, although by 2008/09 per capita expenditure is below where it was in 1998/99. Hospital services were clearly not prioritized over this entire period, with district services, outside of HIV and AIDS, prioritised from 2004/05.
- 3.30 A question arises as to whether public hospital services are underresourced relative South Africa's current needs. There is growing evidence of problems with the quality of care in public sector referral hospitals. However, no definitive assessment exists indicating in what way hospital services are deprived although some studies raise serious concerns about the resourcing levels.

Figure 3.2: Provincial health expenditure: per capita trends in constant 2006 prices (1998/99 to 2008/09)



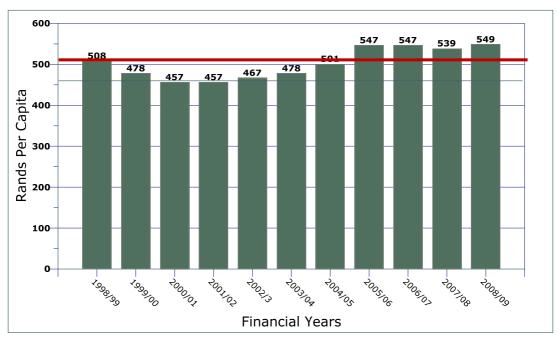
Source: Provincial Budget Reports

Figure 3.3: District services: annual real changes anticipated over the period 2004/05 to 2010/11



Source: National Treasury (2008).

Figure 3.4: Provincial expenditure on regional and central hospital services: per capita trends in constant 2006 prices (1998/99 to 2008/09)



Source: Provincial Budget Reports

3.31 Overall there are approximately 82,288 public sector acute hospital beds (Department of Health, 2005) and 28,000 acute private beds in South Africa. Expressed as beds per 1,000 population this equates to 2.0 and 3.3 for the public and private sector populations respectively. The national ratio is 2.3 beds per 1,000. These ratios do not compare unfavourably with international benchmarks when account is taken of South Africa's relatively young population. The following are the ratios for several countries (OECD data):

3.31.1	Australia:	3.6
3.31.2	Canada:	3.0
3.31.3	France:	3.8
3.31.4	Germany:	6.4
3.31.5	Ireland:	2.9
3.31.6	Sweden:	2.2
3.31.7	Turkey:	2.4
3.31.8	United Kingdom:	3.6
3.31.9	United States:	2.8

3.32 The resourcing of public sector beds, however, suggests a different picture. The difference between the actual services provided today and potential benchmarks of what should be provided appear wide. The under-provision of hospital services in the public sector is estimated as follows (van den Heever, 2005):

- 3.32.1 Under-provision of acute beds: 10.4%;
- 3.32.2 Under-resourcing of public hospitals: 52.1%.
- 3.33 The potential under-funding of public hospital services is supported by the analysis below of public sector human resource declines from 1997/98. Whereas staff levels improved from 2002/03 these potentially accrued almost entirely to district services. The hospital staff ratio reductions from 1997/98 are therefore likely to be considerably more severe than for the rest of the public health system.

Private sector expenditure trends

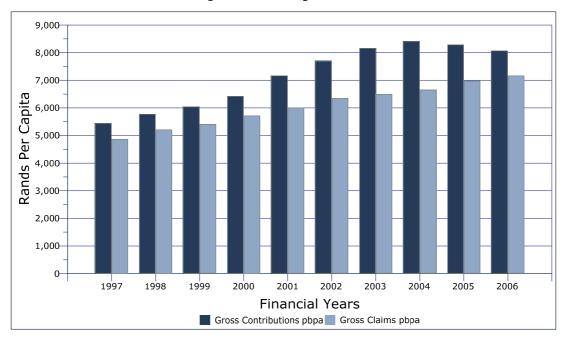
- 3.34 Real per capita expenditure on the private health system through medical schemes showed significant increases during the 1990s, when the market was not regulated. However, a deviation from the trends in the 1990s begins to occur from 2001, after the implementation of the Medical Schemes Amendment Act No.131 of 1998 which took effect from 2000.
- 3.35 Gross per capita medical scheme contribution increases started to decline from 2000 with real decreases from 2005. Per capita non-health cost changes, the bulk of which are made up by administration costs, come down substantially from 2002 and are negative by 2006.
- 3.36 Per capita claims costs have continued to rise in real terms relative to both gross contributions and non-health expenses. This trend is predominantly a consequence of hospital and specialist costs resulting from market imbalances in the setting of prices and related supply-induced demand. (Council for Medical Schemes, 2008).
- 3.37 Private hospital cost increases also result form the excessive licensing of acute beds and expensive technology by provincial health administrations, the recurrent can capital costs of which are subsequently imposed on medical schemes. There are presently 28,000 private beds in South Africa, with an additional 4,000 added between 2004 and 2008. The bed over-supply is roughly 10,000 assuming a bed occupancy rate of 80%. (Council for Medical Schemes, 2008).
- 3.38 The claims cost trend was brought down somewhat through the successful implementation of statutory measures regulating medicine prices and medical scheme benefits. The introduction of the Single Exit Pricing Mechanism via the Medicines and Related Substances Control Act No.90 of 1997 in 2004⁸ had a dampening effect on pharmaceutical prices in conjunction with the almost simultaneous implementation of prescribed minimum benefits ("PMBs") for chronic conditions and HIV and AIDS⁹. (Council for Medical Schemes,

⁸ The implementation of this legislation was held up by court action initiated by pharmaceutical manufacturers. The manufacturers agreed to a settlement in 2002. Certain of the provisions only took effect from 2004 after regulations were promulgated.

⁹ The extension of PMBs to chronic conditions and HIV and AIDS resulted in the implementation at the scheme level of disease management programmes which substantially improved patient management, and the costs of medicines subject to competitive bidding for inclusion on formularies. The implementation of the shadow Risk Equalization Fund process in anticipation of full

2004). However, aspects of the price regulation were undermined by private hospitals who were able to pass on profits from rebates (which were prohibited) by increasing facility fees. ¹⁰ Despite this, the data suggests a net reduction in costs resulting from changed incentive structures, more product competition, and price ceilings.

Figure 3.5: Private Sector Expenditure Trends: Per capita expenditure in constant 2006 prices for the period 1997 to 2006

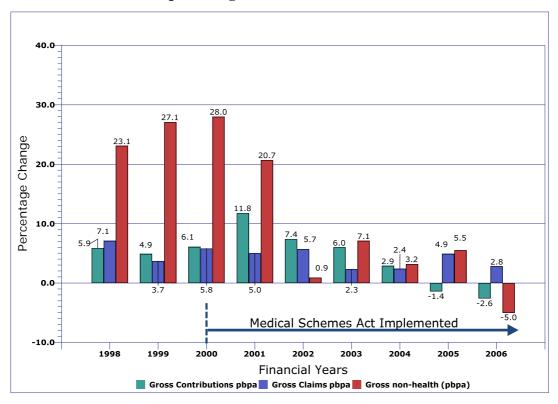


Source: Council for Medical Schemes (2007).

implementation further incentivised the implementation of the disease management programmes in all medical schemes. (Communication with Stephen Harrison at the Council for Medical Schemes). ¹⁰ The Council for Medical Schemes argues that their ability to transfer rebate profits onto facility fees

derived from their market power as schemes lacked any countervailing power to resist.

Figure 3.6: Private Sector Expenditure Trends: Year on year changes in per capita expenditure in constant 2006 prices for the period 1997 to 2006 (percentage)



Source: Council for Medical Schemes (2007).

Human resources

3.39 An evaluation of staff levels within the public health system suggests that funding levels have not maintained historical services levels.

There is furthermore strong evidence that service levels have in fact declined as staff numbers relative to population have declined.

3.40 In 1997 a staff headcount reveals 251,000 staff members. By 2002 this had declined by around 36,000, and thereafter increased again to 251,000 by 2007/08. Thus from 1997/98 to 2007/8, a period of 11 years, no increases in staff levels had occurred despite a significant increase in the population making use of the public sector and an increased burden of disease resulting from HIV and AIDS. 11

¹¹ This information arises from an assessment of Persal data in an analysis performed by the Department of Health. The details of the report have not been made public as yet as the work is not yet complete.

variation from 1997/98 ratios based on population growth = 64,087
variation from 1997/98 ratios based on population growth and burden of disease = 79,791

300,000

100,000

Financial Year

Actual Adjusted for population growth

Adjusted for population growth

Figure 3.7: Employment in the public health system from 1997/98 to 2007/08

Source:

The data for "actual" is based on information provided by National Treasury (2008) and communication with the National Department of Health.

- 3.41 When adjusting staff levels for *population growth* ¹² by 2007/08 a total complement of 315,087 would be required, a difference of 64,087 from the actual number of filled posts.
- 3.42 Adjusting staff levels for both *population growth* and *burden of disease*¹³, a total complement of 330,791 was required by 2007/07, resulting in a difference from the actual of 79,791.
- 3.43 The staff shortfalls suggest an under-spend on staff¹⁴ relative to 1997/98 norms of:
 - 3.43.1 R9.7 billion where population growth is accounted for; and
 - 3.43.2 R12.0 billion where population growth and the burden of disease is accounted for.
- 3.44 The reductions in staff correlate with periods of budget austerity in relation to the public health system, with growth correlating with real increases in budget. This shows that public health staffing levels

¹² A population growth rate of 2.3% is used. This is higher than the overall population growth rate as the population using the private sector, based on medical scheme membership, grows at roughly 1% per annum. Thus the bulk of the overall growth in population is assumed to be dependent on the public system.

¹³ A simple assumption of an additional 1% per annum staff required for the period from 1998/99 to 2002/03 is used. This correlates with the period in which a significant increase in the burden of disease was expected from HIV and AIDS.

¹⁴ The average salary cost for an employee in the public health system is taken at R151,089 using a 2006 breakdown of staff by salary level based on Persal data.

- reduced due to constrained budgets rather than from any other cause. It also shows that the public system can attract staff back if improved budgets are allocated.
- 3.45 This review suggests quite strongly that the public health system is in a weaker condition than in 1997/98 when significant staff reductions began. Although there have been improvements in staffing levels it is unclear what harm the severe reductions in staffing norms had on workload, staff morale, and service quality and whether these have been alleviated. It also appears that the staff improvements were not distributed evenly over the public health system, with the hospital services excluded.
- 3.46 Staffing levels are also affected by the possibility of a medium-term supply constraint as there is presently no system in place to ensure that the production of health professionals occurs in relation to their need over time. Presently decisions on health professional training and development are determined independently of national policy and indications are that levels have not changed over the past 10 years. (Department of Health, 2006). Given this, South Africa is likely to experience severe supply constraints over the next 10 to 15 years.

Conclusions and findings

- 3.47 *Health system performance*:
 - 3.47.1 All South Africa's key indicators of health status have reversed over the past 10 years.
 - 3.47.2 This poor performance is consistent with regional trends.
 - 3.47.3 As South Africa performs poorly relative to its peer countries, including many with far lower levels of per capita health expenditure and GNI per capita, a significant contributing factor may be a poorly configured public health system.

3.48 *Institutional framework*:

- 3.48.1 There is a disconnection between the establishment of national policy and spending decisions at a provincial and local government level.
- 3.48.2 The district health system involves a deconcentrated model which reduces the decision space of many districts that may be able to establish the capacity to run more autonomously and achieve greater efficiencies.
- 3.48.3 No financial framework has been developed to fund districts. This coupled with the institutional model governing districts makes the role of local government in relation to district services unclear.

3.49 *Financing the public system*:

3.49.1 The public health system has faced effective real declines in spending until 2002/03 after which systematically improved allocations were forthcoming.

- 3.49.2 The information at hand strongly suggests that the improved funding from 2002/03 did not meaningfully affect public hospital services.
- 3.49.3 The overall health system, and in particular referral hospital services, appear worse off than they were in 1997/98 even after accounting for the expenditure improvements.
- 3.49.4 Local government spending from their own revenue has declined. This is a response to the implementation of the district system.

3.50 *Financing the private system*:

- 3.50.1 Private sector per capita expenditure is significantly greater than that of the public sector.
- 3.50.2 Private sector expenditure trends rose significantly during the 1990s prior to the implementation of the Medical Schemes Act of 1998. Thereafter per capita expenditure has stabilised and begun to decline in real terms.
- 3.50.3 Medical scheme claims costs (i.e. the costs of medical services) have continued to rise mostly due to systemic specialist and hospital cost increases resulting from market imbalances.
- 3.50.4 A contributor to rising hospital costs has been the excessive licensing of new beds beyond the needs of the medical scheme population. There is an estimated excess of 10,000 beds.
- 3.50.5 Pharmaceutical costs have been contained to a degree through the introduction of pricing legislation and regulations affecting medical scheme chronic benefits and the treatment of AIDS.

3.51 *Human resources*:

- 3.51.1 The public health system has the same level of human resources in 2007/08 as it had in 1997/98. This is after an initial decline of 36,000 personnel to a low point in 2002/03.
- 3.51.2 Had public sector staffing levels increased with population and the disease burden from 1997/98 an additional 79,791 staff would be employed at a residual recurrent annual cost of R12.0 billion (2008/09 prices). If only population growth were taken into account an additional 64,087 staff would be employed at a residual recurrent annual cost of R9.7 billion.
- 3.51.3 The improvements in staffing do not appear to be distributed proportionately across the system, with public hospitals unaffected. If this proves to be the case a severe reduction in the performance of public hospitals from 1997/98 was a probable outcome.
- 3.51.4 The responsiveness of staffing levels to budget improvements suggests that the public sector is able to attract and retain staff provided it has funds.

4. INSTITUTIONAL ARRANGEMENTS

Introduction

- 4.1 The institutional framework of the health system incorporates all elements from legislation, regulatory structures, organisations and organisational arrangements, functional assignments, and resource allocation mechanisms.
- 4.2 Within the present context a fundamental reflection on the institutional arrangements is required given the evident failure of the system to achieve reasonable goals. Although the country was clearly presented with complex and difficult health challenges, a better functioning system should have achieved more.
- 4.3 Such reflection however requires: firstly, a full understanding of which structures are not working effectively; secondly, why they are not working; and thirdly the determination of appropriate measures to correct what is wrong.
- 4.4 Altering institutional arrangements is inherently risky as it is always possible for reconfigured arrangements to perform worse than they did in the past or have external effects that were not fully anticipated. Important to avoiding these consequences requires that the impact of "path dependence" (i.e. "history matters") on institutional reform be properly understood. It is rare that complex goals can be achieved through attempts to completely replace structures.

Problem Statement

- 4.5 A revised strategic framework for the health system is an appropriate consideration for South Africa at this juncture. The vast changes to national and provincial structures that characterised the late 1990s have now stabilized with the gaps more evident. These are:
 - 4.5.1 The link between national policy and service delivery is weak. The capacity to establish national policy frameworks is also deficient. The combined effect is to de-facto decentralise national policy to the discretion of provincial governments.
 - 4.5.2 The system is not performance oriented and many existing polices undermined by under-performing organisations and individuals. This is in part also related to an absence of strong leadership throughout many parts of the system due to weak accountability mechanisms.
 - 4.5.3 National and provincial structures are not held accountable for under-performance. The system also lacks mechanisms for generating accountability.
 - 4.5.4 Users of the public system are disempowered with the result that sensitivity to their needs is not internalized.
 - 4.5.5 Administrations and their services are so configured as to generate defensive rather than co-operative conduct in relation to each other. A similar dynamic operates in relation to the private sector for the same reasons.
 - 4.5.6 The linkage between allocations and expected service delivery is very weak.

- 4.5.7 Despite the existence of a medium-term budget framework, many services do not experience budget stability.
- 4.5.8 Services often mistrust the provincial structures as the relationship is seen as adversarial rather than supportive. This is reinforced by the absence of formalized relationships which services can rely on.
- 4.5.9 The administrations overseeing services at either the provincial or district level lack the capacity to provide a professional supportive role.
- 4.5.10 Centralized decision-making coupled with weak central capacity causes systemic and otherwise avoidable system bottlenecks.
- 4.5.11 Many functions of the health system are carried by ordinary civil service structures rather than purpose-specific organizations that can attract the capacity required to make them function competently.
- 4.5.12 Many oversight functions central to engendering accountability within the health system are not independent and retain conflicts of interest sufficient to entirely neutralise their purpose. These conflicts arise because very often the appointments of staff to these functions are by those who would be affected negatively by the findings. Furthermore, approval and release of reports can also be controlled by conflicted individuals or authorities.
- 4.5.13 No effective supply-side regulatory measures have been implemented to prevent service over-supply in the private sector. Existing hospital licensing arrangement lack direction and continue to expand the private hospital system without proper consideration of the implications for the health system.

Recommended approach

- 4.6 Responding to the above requires consideration of the following:
 - 4.6.1 Strengthen the organizational capacity and leadership at the national level to ensure that strategic policy can be developed and implemented.
 - 4.6.2 Structurally link approved policy to financial transfers to service rendering parts of the system.
 - 4.6.3 Decentralise key structures and organisations to allow them to specialise. This would need to include specification of their minimum capacity requirements and accountability structures (governance).
 - 4.6.4 Clarify roles and responsibilities, linked to financing mechanisms, to eliminate defensive inter-administration and service relationships.
 - 4.6.5 Introduce arrangements that generate accountability that systemically impact on leadership and performance. This

- would include independent regulatory functions operating across the system (i.e. public and private sector).
- 4.7 An important consideration going forward is that the existing health system does provide a sound basis for enhancement. Institutional reform will in many instances involve building on what exists rather than wholesale replacement.

Principles underpinning strategic institutional reform

- 4.8 The existing institutional framework has a logic and functionality which needs to be acknowledged as the providing the base for transformation.
- 4.9 Institutional reform should not replace organisations or institutions unless very clear grounds exist.
- 4.10 Institutional restructuring should enhance the access to health care for everyone without at any time placing this access at risk.

Strengthening policy development – the National Department of Health

- 4.11 Although there are proposals to establish a "National Health Authority" it is difficult to see how this differs from the existing National Department of Health ("NDoH") except in name. It is therefore not proposed that the designation be changed, but instead that significant enhancements be considered to the capacity, support arrangements, and its role.
- 4.12 Due consideration needs to be given to the fact that capacity is presently quite weak within the NdoH and any expansion in authority and responsibility must be preceded by significant strengthening.
- 4.13 As part of this strengthening a new organization configuration should be considered. The existing structure exhibits a number of peculiarities which need to be reconsidered. It also fails to make any provision for key arrangements, such as liaison with health agencies and regulatory structures. Its clustering of functions also makes no provision for consolidating strategic policy in relation to private sector regulation with pharmaceutical policy falling under Strategic Health Programmes and only a directorate of health insurance.
- 4.14 A revised indicative configuration is provided in **figure 4.1** which is structured to properly enhance the functionality and capability of national policy. The approach involves the following elements:
 - 4.14.1 Placing the Chief Financial Officer ("CFO") and Legal Services as direct supports to the Director General ("DG"). Both positions are at a Deputy Director General ("DDG") level. The CFO would be expected to focus on internal finances rather than strategic financial policy.
 - 4.14.2 Major divisions at a DDG level are established for:
 - *Corporate service*, where functions are consolidated, unlike now, where for instance national human resource policy and internal human resource issues are conflated under a single DDG.

- Strategic Policy, where all the Chief Directorates reflect major policy areas which should holistically consider both public and private sector issues within their area of responsibility.
- Resource allocation, where all the technical financial work relating to guiding national allocations would be performed. The resource allocation units would be expected to work with the strategic policy units to determine criteria for allocating funds to health priorities.
- Strategic vertical programmes, which would involve crosscutting or vertical health interventions. Here the key focus would be on clinical support services as well as key health priority areas. The proposed structures emphasize areas where policy is neglected at present.
- Health Information and research, where the focus would be on supporting policy development in relation to health information requirements and research. Areas of focus would also include the development and implementation of diagnostic coding nationally and the National health Information System.
- It is also proposed that consideration be given to a standing advisory board on national health policy to assist both the Minister and the DG on key policy questions. The Board would be made up of domestic and international experts.

National Consultative Fora

- 4.15 In additional to an organizational restructuring of the NDoH it is proposed that the national level of government be further supported through the establishment of standing national consultative structures in the following areas:
 - 4.15.1 HIV and AIDS and TB;
 - 4.15.2 Non-communicable diseases;
 - 4.15.3 Human resources (as recommended in **section 6**);
 - 4.15.4 Maternal and child health;
 - 4.15.5 Service delivery and organisation (both public and private sector) including quality assurance;
 - 4.15.6 Health information; and
 - 4.15.7 Private health.
- 4.16 These consultative fora would be provided for in the National Health Act ("NHA") with specific advisory functions, including who participates, and outputs are required. Participation should be inclusionary rather than exclusionary.
- 4.17 These for a would permit an ongoing and structured dialogue between the key role players in the health system and the policy-making functions of Government. The relevant NDoH units related to any particular forum should provide secretarial support for their functions.
- 4.18 The NHA should make provision for the nature of the advice that is to be provided, including that all reports produced, and advice given be made public.

Agencies

- 4.19 A number of national agencies could be considered to provide the operational components of areas central to national strategic policy.
- 4.20 Resource allocation and strategic purchasing: This is an organization that would have three fairly complex and distinct operational requirements. The first would be perform the detailed technical work associated with allocating the ring-fenced transfers from national government to health administrations.
- 4.21 The second would involve allocating *risk-adjusted subsidies* to medical schemes in accordance with the health funding proposals outlined in **section 5**, which would replace the inequitable tax subsidies. This arrangement would ultimately absorb the risk equalization fund currently being operationalized through the Council for Medical Schemes.
- 4.22 The third would be to operate as a *centralised purchaser/developer* of strategic health services. These services would be developed as shared services across both the public and private sectors and focus on areas where the inefficiencies are greatest. These services would include *inter-alia*:
 - 4.22.1 Pharmaceuticals, surgicals, medical devices;
 - 4.22.2 Emergency services, with a focus on trauma;

- 4.22.3 Pathology;
- 4.22.4 Radiology; and
- 4.22.5 Daycare.
- 4.23 The emergency and trauma services would provide a potential common service platform for the public sector, medical schemes, the Road Accident Fund ("RAF"), and the Commission for Occupational Injuries and Diseases ("COIDA"). This consolidation, would ensure that the Constitutional right of access to emergency care is achieved.
- 4.24 The financing of these services would occur either through mandatory or voluntary pre-payments required from public sector, private sector, and social insurance funds (e.g. COIDA and the RAF). This would eliminate the need for fee-for-service billing of any funder.
- 4.25 Statutory contributory fund: similar to arrangements in Ireland and Australia, and presently under consideration within South Africa in relation to death and disability insurance, consideration should be given to the establishment of a default statutory medical scheme. This scheme would focus on providing a value-for-money default arrangement for low-income groups.
- 4.26 Quality assurance: An independent authority should be established to perform a complete quality assurance regulatory function for both public and private health services. This body should have intrusive powers of inspection and, subject to due process, the ability to remove of accountable individuals who fail to comply with statutory requirements relating to quality assurance. It should also have the locus to initiate further legal proceedings against non-compliant administrations, organisations, health facilities, and accountable individuals. The legislation underpinning this function should furthermore criminalise non-compliance.
- 4.27 *Pricing Commission*: A pricing authority should be established to deal with private sector pricing arrangements. This would seek to ensure that market power imbalances within the health system are checked. It would also provide for the enforcement of pricing legislation, e.g. the single exit price for pharmaceuticals and any area of abuse. This authority would absorb the existing Pricing Committee.
- 4.28 A further function of this authority would be to perform costeffectiveness assessments of new pharmaceuticals and health products.
 These assessments would be used to advise whether Government or
 medical schemes should purchase a particular medicine.
- 4.29 Certificates of Need/Licensing Authority: An independent authority is required to assess the requirements for new expensive technology and hospital licensing. This authority would assess geographical requirements for both the public and private sector to ensure that oversupply is avoided. This authority would take over the hospital licensing functions of provincial administrations.
- 4.30 In the case of hospital services the authority would *inter alia* be required to take into account any impact on public services in making an assessment; as well as implement uniform, consistent, and fair criteria for reaching determinations.

4.31 *National Health Information System*: the collection and distribution of information on the total health system should be incorporated into a specialised agency. The rational for this is discussed below.

National Health Insurance

- 4.32 The central rationale for the establishment of a policy of National Health Insurance ("NHI") is to implement an institutional framework which establishes a uniform entitlement to healthcare, subsidized by Government. This universal entitlement should be funded essentially by general tax revenue. However, consideration can be given to raising some portion via an earmarked payroll tax.
- 4.33 Given the disruptive nature of payroll taxes this should never exceed more than 10% of the overall funding requirement. An initial payroll tax should not exceed more than 1.5% of gross remuneration and be timed to coincide with a restructuring of tax subsidies.¹⁵
- 4.34 Given the levels of formal employment and size of the economy it is not possible for the universal entitlement to take the form of a service. Any consideration of a universal benefit needs to provide a service for those not on a medical scheme, and provide a subsidy to those on a medical scheme.
- 4.35 At a strategic level the central elements of the NHI could envisage the consolidation of the following agencies:
 - 4.35.1 Resource allocation,
 - 4.35.2 Risk equalization ¹⁶, and
 - 4.35.3 Strategic purchasing.
- 4.36 These three functions would: determine the transfers to public health administrations, the statutory contributory fund, and medical schemes; and strategically purchase services that would be shared across the public and private sectors.
- 4.37 Over time the shared service component would expand, creating the basis for a universal benefit to replace the subsidy. Where it becomes rational for a particular service to be provided universally, a prepayment from all funders, public sector and medical schemes, could be made mandatory.
- 4.38 While growing the shared service platform, both the public sector and medical schemes would be able to access the services in a contractual basis, including, and preferably, using a *pre-payment*¹⁷ approach.
- 4.39 This framework permits the evolution of an efficiently provided set of priority services to grow progressively over time in a paced manner

¹⁶ This option would not obviate the need for full implementation of the risk equalization fund currently envisaged in terms of the Medical Schemes Amendment Bill. Full implementation should occur, with a function shift occurring after the establishment of the NHI.

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¹⁵ The value of the existing tax subsidy is roughly equivalent to a 1.5% proportional tax on gross remuneration for everyone over the tax threshold.

¹⁷ This is also referred to as a prospective payment and will invariable involve some form of capitation arrangement. However, the specific reimbursement modality will depend on the type of health good or service involved.

- without disruption to institutional arrangements, or generating negative public perceptions concerning the shared services.
- 4.40 Importantly, the full NHI institutional framework could be implemented prior to the establishment of extensive shared services. This framework is therefore scalable, implies minimal destabilization of existing institutions, while nevertheless establishing all the structural components of an NHI. Once in place, the NHI framework compels the health system to evolve with the embedded social solidarity elements always in place.
- 4.41 The *strategic purchasing function*, together with the authority responsible for *certificates of need and licensing*, are required to ensure that the existence of a private funding arrangements, i.e. medical schemes, is not prejudicial to the availability of medical service providers (hospitals, doctors, specialists, nurses, etc.) provided through the public system.
- 4.42 As also discussed in **section 5** medical schemes would remain an important institutional component of the health system, and incorporate a regulatory framework which protects members from discrimination on the basis of their health status.

General Taxes Earmarked Taxes (90%)(10%)National Health Budget Formula -based Strategic Purchasing Risk Equalization allocation for universal benefit/subsidy National Health Insurance Authority contract transfers Medical Schemes Statutory Contributory Fund **Public Sector** Public Provider Private Provider Shared Services

Figure 4.2: Functional Breakdown of a National Health Insurance Framework

Shared Services grow over time as new services established with a focus on trauma, daycare, specialized radiology, oncology, pharmaceuticals

The Public Health Service

- 4.43 Reform of the public health system needs to focus primarily on strengthening existing structures and avoid any disruption to the present levels of functionality.
- 4.44 Central to the establishment of a well functioning health system will be the full implementation of properly capacitated sub-provincial structures capable of effectively developing, overseeing, and coordinating the health services in their jurisdiction.
- 4.45 Sub-provincial structures have emerged by convention at two levels within provinces: the "regions" which have some responsibility for regional and central hospital services; and "districts" which have some responsibility for district hospitals, day centres, community health centres and clinics. Districts typically fall within regions.
- 4.46 Both regional and district structures can be hampered through inadequate access to basic support capacity in the areas of corporate services, service planning, information systems, and public health. As a consequence they have difficulty with administration and planning.
- 4.47 Sub-regional structures can also be hampered through limitations on their decision-space with many key operational and planning decisions made at a provincial level. Sometimes this is as much about capacity as it is decision-space.

- 4.48 Sub-regional structures also lack local accountability as their oversight structures are not sensitive to local feedback.
- 4.49 Priority therefore needs to be given to the following using the National Health Act:
- 4.50 Establishing up to three configurations for regional and district structures ranging from light to full decentralisation;
- 4.51 Determining a minimum executive structure required for regions and districts irrespective of the degree of decentralisation;
- 4.52 Establishing governance and oversight requirements for each model;
- 4.53 Fully clarifying the authority and accountability allocated in terms of each model so that sub-provincial structures can make effective decisions on a day-to-day basis;
- 4.54 Establishing pre-requisites before any sub-provincial structure can move to the more advanced decentralisation models, which should include obligations placed on provinces to be able to oversee these authorities;
- 4.55 Establishing a timeline for designated (mainly in the major metropolitan areas) regional and district structures to graduate toward full decentralisation on a mandatory basis;
- 4.56 Retaining a general discretion for regional and district structures falling outside the mandated group, to move toward the full decentralisation model; and
- 4.57 Fully clarifying the role of local government as an agent in carrying out functions for a district, including the funding obligations.
- 4.58 Although the criteria should be established in national legislation, provinces should be assigned the responsibility to oversee its implementation.

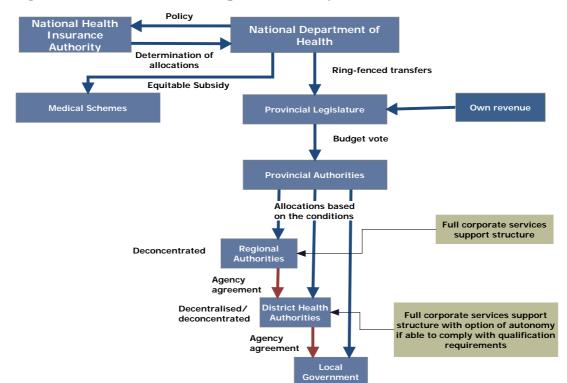


Figure 4.3: Structure of the public health system

Health Information Systems

- 4.59 Significant reliance is placed on information to decide on priorities and to allocate resources in health and related functions. However, the health information systems in place are weak, unreliable, and in some cases unusable.
- 4.60 Health-related surveys in many cases are not co-ordinated between departments, agencies and private initiatives. Different surveys use different approaches without any general consensus on best practice approaches. The resulting information often cannot be pooled, and sampling is too limited. As a consequence the results are not definitive and important policy questions cannot be answered.
- 4.61 The systems for collecting health information have been in development over a number of years and the consensus is that they are far from adequate. Nevertheless, a base exists which can be improved going forward. The experiences of the past ten years offer the potential for reliable insights on how to significantly improve health information collection and analysis.
- 4.62 There are conflicting estimates of South Africa's key outcome indicators. Although all suggest serious public health problems, the data varies widely with different groups championing different estimates.
- 4.63 Although reporting systems are in place, the absence of a reliable national system affects the ability of the country to effectively prioritise health and related interventions. Problems include:
 - 4.63.1 There is no reliable national system in place with the exiting arrangement subject to significant institutional weaknesses;

	4.63.2	There is no guiding forum for a national information system;
	4.63.3	Data is sometimes published that is clearly unreliable;
	4.63.4	Data that is important is sometimes not made public because it may reflect poorly on departments or Ministers;
	4.63.5	There are multiple reporting systems;
	4.63.6	The Anti Retroviral Programme is in need of a proper system;
	4.63.7	The implementation of information system at a facility level and within government is both patchy and weak;
	4.63.8	Existing reporting systems involve information going up but never down again;
	4.63.9	No adequate legislative framework exists governing the production, quality and distribution of health information;
	4.63.10	Capacity is weak at all levels of the system with no standardised training requirements for information officers (presently they come through librarian training system);
	4.63.11	Key outcomes surveys have such small sample sizes that they cannot be used to identify specific communities at risk and are only useful at a national and provincial level;
	4.63.12	The private sector is presently excluding from reporting requirements;
	4.63.13	Medical conditions that require ongoing treatment and management (e.g. chronic conditions, and AIDS) lack dedicated supporting information systems.
4.64	Considerations going forward involve the following:	
	4.64.1	The possible establishment of an agency to manage the national health information system.
	4.64.2	The introduction of standardised and appropriate training requirements for people required to manage health information systems;
	4.64.3	The incorporation of health information professionals into a

general national subsidy framework for health professionals

The establishment of chronic disease management systems at

(also see **section 6**); and

the health district level.

4.64.4

5. FUNDING HEALTH CARE

Introduction

- 5.1 South Africa' poor health outcomes point to problems with the allocation of public health resources and the quality of its programmes rather than to the level of spending.
- 5.2 Although HIV and AIDS is clearly responsible for the worsening health outcomes, the inability of the health system to respond timeously and effectively to the impending health crisis suggests the existence of deep-rooted problems with the public health system.
- 5.3 Nevertheless, consideration needs to be given to an increased allocation of resources to the publicly provided health functions.
- 5.4 Resource allocation within the public health system can be divided into two broad elements:
 - 5.4.1 Nationally allocated funds associated with certain national priorities; and
 - 5.4.2 Unallocated funds made available to provincial administrations and local authorities to allocate as they see fit.
- 5.5 Funds allocated by the national government involve conditional grants which are ring-fenced funds which must be spent on nationally determined priorities. These are either some general category of services, such as tertiary hospitals or the incremental cost to the health system providing teaching and education, or some very specific programme, such as HIV and AIDS.
- However, the major portion of the nationally determined allocation, the conditional grants for tertiary health services and teaching and education, bear no relation to specific services or functions, and no specific health policy objective can be achieved. For all intents and purposes these allocations are unconditional general allocations as they apply to the health function in each province.
- 5.7 It is argued strongly in various quarters that this resource allocation configuration fragments policy-making by emasculating the impact of nationally determined priorities. It is furthermore argued that, no mechanisms have been introduced to create a linkage between the determination of national priorities and ensuring their delivery within lower tiers of Government. Such mechanisms include the development of national norms and standards and associated national policy frameworks.
- 5.8 An additional concern arises with respect to the funding of district health services. The National Health Act makes provision for the development of District Health Authorities which have taken over the authority for ambulatory health services from local government. However, no clear financing framework has been established for the services.
- 5.9 Historically many primary care services were funded from local government taxation. However, due to the absence of any clear funding framework local authorities will withdraw any funding

- derived from their own revenue sources, shifting the burden to provinces.
- 5.10 The budget determination processes at all levels of the system are inflexible and involve limited input from service providers. In some instances this arises from inadequate capacity. However, it is quite plausible that the capacity problems have arisen as a result of poor resource allocation decisions coupled with the limited scope offered for high quality professionals to remain in the public system. The resulting centralised budget-determination process breaks the relationship between the budget allocation and health system priority needs.
- 5.11 Budgeting at all levels of the health system now frequently involves a dislocation between the financing of capital and recurrent expenditure. Ideally the capital expenditure programme should be closely linked to a long-term predictable stream of recurrent funding. Capital spending programmes are often determined by a different set of priorities than those affecting the recurrent spending programme. This schizophrenia can occur at all levels of the system, including within facilities.
- 5.12 Consideration therefore needs to be given to the following:
 - 5.12.1 A determination of the levels of funding required for the public health system;
 - 5.12.2 Restructuring the resource allocation mechanism for the public health system with specific consideration given to:
 - Centralising the budget determination and resource allocation mechanisms for the public health system;
 - Relating the allocations to national funding priorities;
 - 5.12.3 Establishing a constructive and supportive relationship with the private health system.

Determination of the funding envelope for health

- 5.13 The determination of the share of the national product allocated to public health priorities is typically a mixture of technical considerations set against competing government priorities. No completely objective method exists to determine the level of public health expenditure.
- 5.14 The review reported in **table 3.1** suggests South Africa is below the median and the mean for peer group countries (based on per capita GNI). If South Africa were placed at the median for its peers, an allocation equivalent to 11.9% of total Government expenditure would be expected. If done immediately an additional recurrent allocation of R9.7 billion would be expected.
- 5.15 However, South Africa's health outcome indicators are considerably below that of its peers (based on per capita GNI). It is also below that of countries with lower levels of per capita Government expenditure on health. There are several potential explanations for this:
 - 5.15.1 South Africa does not spend its available resources efficiently and leading from this the problem is structural and derives from the configuration of the public system.

- 5.15.2 South Africa is facing a specific change in its burden of disease which has been difficult to prevent without significantly improved resources. Aside from this predicament South Africa would be facing improved indicators.
- 5.15.3 The inability to respond to the changed burden of disease has been caused by an inadequate and poorly prioritised public health system.
- 5.16 After consideration of the evidence it appears most likely that South Africa's poor health outcomes are causally related to:
 - 5.16.1 A poorly configured public health system, which has also struggled to effectively prioritise the use of its existing resources;
 - 5.16.2 A level of resources insufficient to meet the existing problems;
 - 5.16.3 A problematic socioeconomic context which cannot reasonably be addressed through public health interventions alone.
- 5.17 An indication of the inadequate resourcing of the public system can be made with reference to:
 - 5.17.1 The declining proportion of GDP spent on health since 1995; and
 - 5.17.2 The reduction in health professionals working in the public health system since 1995 despite population increase and an increased burden of disease. (See **section 4**).
- 5.18 The public health system has faced several major challenges simultaneously with what amounts to a decline in resourcing.
- 5.19 Countries similar to South Africa spend in the range 12.5% (Mexico) to 14.0% (Argentina) of the Government budget (see **par 3.7**). These are higher than the median and the mean. Were South Africa to spend at Argentina's level it would require a 98.8% increase in budget taking health to a level equivalent to 21% of Government expenditure. Mexico, by contrast would require a 2.7% real reduction in expenditure.
- 5.20 Costa Rica, which is a peer country, however spends around 21.0% of its Government budget on healthcare (WHO). For South Africa to spend at Costa Rica's level a 53.6% increase in budget, or an additional R40.5 billion in recurrent expenditure. This would take public health expenditure to 5.1% of GDP.
- 5.21 Columbia, which is nominally a peer country given its per capita GNI (which is significantly lower than South Africa), spends 17.7% of the government budget on public healthcare. In real terms Columbia spends 45.6% more than South Africa on public health. For South Africa to spend at this level an additional recurrent budget of R34.4 billion would be required.
- 5.22 Cuba, which is not a peer group country for South Africa, given its lower per capita GNI, spends a greater percentage of GDP on public

- health, but a lower financial value. Were South Africa to spend at Cuba's levels it would reduce its budget in real terms by 10.7%, or equivalent to reduction of R8.1 billion per annum, taking expenditure to 9.4% of the national budget or 2.9% of GDP. ¹⁸ Interestingly, its health outcome indicators are vastly superior to South Africa.
- 5.23 Having reference to other countries provides some useful information, but not a definitive objective guide. Proportions of government expenditure and GDP do nevertheless provide indicators of the feasible and appropriate range of budget constraints. Based on this South Africa's existing allocation to the public health system is unusually low and could be improved without creating any macroeconomic or fiscal distortions.
- 5.24 The upper range for South Africa should potentially aim for between 4% and 5% of GDP over time, underpinned by significant improvements in the public health system. This would bring South Africa into the upper range of its peers, as well as cater for a changed disease burden. In present values this would imply a net annual increase in government expenditure of between R17.6 billion and R39.1 billion.
- 5.25 Although an increase in resourcing within the public health system is urgently needed, it is questionable as to whether this should occur via a significant up-front allocation of funds and this approach is not supported.
- 5.26 An important consideration is the capacity of the health system to absorb real improvements in resources. In some instances South Africa also faces hard supply constraints (nurses, doctors, etc.) and these will take time to alter.
- 5.27 Changes in the allocation should therefore be increased incrementally over time in a manner consistent with an improved relative prioritisation in Government taking cognizance of supply constraints.
- 5.28 Consideration should be given to a 3-year, 5-year, and 10-year view on improvements in relation to a targeted upper range. At a minimum this target should be set at 4% of GDP. Serious consideration should be given to going to at least 5% of GDP.

Earmarked Taxes, Funding Mechanisms and Regulated Medical Schemes

- 5.29 If consideration is given to significant improvements in government spending on health a question arises as to whether this should occur using an earmarked tax.
- 5.30 Earmarked taxes, particularly where they involve payroll taxes (which typically take the form of a proportional tax subject to some income ceiling), have the following objectives:
 - 5.30.1 To establish a relationship between a specified publicly provided benefit and a contribution. Where this occurs, tax-

¹⁸ It is not possible to provide a proper comparison between South Africa and Cuba given that its economic isolation.

payers are more willing to make a tax payment as they have some degree of certainty over where the funds are being used. This is referred to as the "benefit principle" in public finance.

- 5.30.2 To fund social insurance systems, where increased risk pooling for specific contingencies with important social implications would otherwise be under-insured in a private market. Examples include death, disability, unemployment, and healthcare.
- 5.30.3 To establish a general sense of social solidarity in relation to important contingencies within a nation. It can create an important sense of inter-relatedness and belonging to counter the socially alienating tendencies of modern society. This objective is quite abstract but can be important.
- 5.31 Earmarked taxes are not a necessary requirement for improved public funding for health as expenditure levels are always determined subject to budget constraints irrespective of the revenue source.
- 5.32 Where an earmarked tax is used to fund a public system which explicitly (via a means test) or implicitly (due to unavoidable preferences) targets a lower income category or range the *benefit principle* no longer applies and general tax funding is preferred. However, if the benefit took the form of a compensatory subsidy provided to those who do not use the benefit, the *benefit principle* would apply.
- 5.33 In the absence of a credible *universal benefit*, reliance alone on the rationale to establish a general sense of solidarity could generate the opposite effect as those paying very large taxes (in value terms) would see little or no benefit. In such circumstances reliance on general taxes is preferred, as no specific entitlement expectation is established.
- 5.34 If consideration is given to an earmarked tax, the only feasible universal benefit would involve a free public service combined with a subsidy to those who are not exercising their right to use free public services.
- 5.35 Consistent with recommendations made in the Taylor Committee of Inquiry, such a subsidy should take the form of a fixed rand amount allocated per person to a medical scheme chosen by the member. The member should be free to top-up their subsidy from their own resources to obtain comprehensive benefits from a medical scheme.
- 5.36 The Taylor Committee recommended converting the existing tax subsidy provided to medical scheme members, which is regressive, into a flat per-capita subsidy (similar to a universal social assistance grant). Offered on this basis, the subsidy to lower income groups is high relative to income, while it is low for high-income groups where an effective tax claw-back occurs.
- 5.37 An alternative is to provide a universal *benefit* through the public sector and only have medical scheme members purchase top-up cover

for benefits not provided directly by Government. ¹⁹ For this option to be feasible, the universal Government benefit would need to be:

- 5.37.1 Sufficient to obviate the demand for private out-of-pocket purchases and/or insurance; and
- 5.37.2 Specified in a manner that makes the Government-provided benefit differentiable from any discretionary cover offered by a medical scheme.
- 5.38 In the former instance, the quality of service and access must be such that those who can afford to pay for services have no need to so. This, for instance, will be the case for many government-provided services in countries such as Australia, Canada, the United Kingdom, and France.
- 5.39 Per capita General Government expenditure on health within industrialised countries substantially exceeds that of South Africa as can be seen from the following (also see **table 5.1**):

5.39.1	Australia:	6.0 times South Africa
5.39.2	Canada:	7.2 times South Africa
5.39.3	United Kingdom:	6.7 times South Africa
5.39.4	France:	8.0 times South Africa
5.39.5	Spain:	4.7 times South Africa

- Public health expenditure within industrialised countries can also be expressed as a percentage of South Africa's per capita GNI. Australia for instance spends at a level equivalent to 32.2% of South Africa's GNI. For Canada, the United Kingdom, France, and Spain this value is 27.3%, 30.0%, 35.2%, and 17.3% respectively.
- 5.41 Given the capacity of industrialised countries to properly resource their public health systems, their acceptability to the general population is vastly greater than in developing countries where a degree of segmentation is inevitable.²⁰

¹⁹ This proposal has been made by individuals from COSATU, NEHAWU and the South African Medical Associations ("SAMA").

²⁰ REFERENCE MATERIAL TO BE SUPPLIED

Table 5.1: South African per capita Government Health Expenditure Compared to Industrialised Countries

	Government Expenditure on Health (per capita) 2005				
***************************************	PPP int		Ave exchange rate		
Country	US\$	Factor variation from SA	US\$	% of SA per capita GNI	
Canada	2,424.0	7.2	2,432.0	27.3%	
Denmark	2,650.0	7.8	3,761.0	42.3%	
Austria	2,639.0	7.8	2,869.0	32.2%	
Ireland	2,483.0	7.3	3,176.0	35.7%	
Sweden	2,460.0	7.3	3,044.0	34.2%	
Australia	2,012.0	6.0	2,132.0	24.0%	
Belgium	2,194.0	6.5	2,465.0	27.7%	
Iceland	2,768.0	8.2	4,266.0	47.9%	
United Kingdom	2,262.0	6.7	2,669.0	30.0%	
Finland	1,787.0	5.3	2,196.0	24.7%	
Japan	2,047.0	6.1	2,406.0	27.0%	
Germany	2,499.0	7.4	2,790.0	31.3%	
France	2,720.0	8.0	3,135.0	35.2%	
Greece	1,264.0	3.7	1,103.0	12.4%	
Italy	1,909.0	5.6	2,078.0	23.3%	
Spain	1,602.0	4.7	1,538.0	17.3%	
New Zealand	1,720.0	5.1	1,860.0	20.9%	
South Africa	338.0	1.0	182.0	3.3%	

- A consequence of segmentation on the basis of income raises concerns about the fair distribution of health services between those available to low- versus high-income. If the relationship between the two settings is not managed effectively supply constraints could occur, with a disproportionate share available only on an exclusive ability-to-pay basis.
- 5.43 To mitigate any negative effects of segmentation the following is typically required:
 - 5.43.1 On the supply-side licensing of new private services should be required to take into account the impact a new service will have on public provision. Licenses should be supplied to meet geographical need only. If this does not occur, as is the case in South Africa, supply-induced demand is likely to occur where third-party payers are effectively forced to accommodate over-supply. Furthermore, public facilities close to a new private facility will inevitably be cannibalized for staff.
 - 5.43.2 On the demand side, there is a risk that people could opt for the public system until they require expensive medical treatment and then take out voluntary health insurance. This conduct is referred to as anti-selection and is a source of instability to voluntary risk pooling. Furthermore, voluntary health insurers defend themselves from anti-selection through risk-selection (i.e. penalties of one form or another, including complete exclusion, applied to people or groups with

predictable levels of health usage), which forces insurable individuals and groups out of cover. The most effective solution involves mandating health insurance cover for those above a reasonable income level and the introduction of measures that remove any form of risk-selection.

- 5.44 The following configuration of health reforms appear sensible to ensure that the public and private systems complement each other and evolve over time in a constructive manner:
 - 5.44.1 A universal health benefit should be provided with the following configuration of reforms:
 - A public service which is universally free at point of service (i.e. the complete removal of the means test for any public services);
 - A mandate on medical scheme membership for all those above a specified reasonable income level (and their families), and/or working within employers above a minimum size;
 - A contribution subsidy equivalent to, or less than, the per capita value of public sector services provided in respect of each medical scheme beneficiary, coupled with the substantive removal of the tax expenditure subsidy for medical scheme participation;
 - A requirement that medical schemes reimburse public services for any services used by their beneficiaries;
 - A prohibition on any parallel indemnity insurance market with medical schemes;
 - The proper licensing of private services²¹ to: prevent supplyinduced demand; and to prevent negative impacts on public sector services; and
 - A reasonable system of provider price determination which avoids excessive cost increases and unfair cost shifting onto medical scheme members.
 - 5.44.2 In addition to the above, consideration should be given to the establishment of a strategic purchasing arrangement which could establish shared services to be used by both public and private sector purchasers. Over time these services would become the mechanism by which a universal system of high quality services can be established. These services would involve a mix of contracted public and private providers.

Resource Allocation

5.45 The effective allocation of finances within the health system is a central determinant of its success. Centralising the resource allocation

²¹ Although the National Health Act provides for certificates of need and hospital licensing, the institutional requirements to ensure this legislation is properly implemented are not in place. Hospital licensing currently occurs at a provincial level with each province adopting different

- mechanism is a necessary but not sufficient requirement for achieving significant health service delivery improvements.
- 5.46 During the period from 1995 to 1996 health budgets were ring-fenced at the national level and allocated as revenue to provincial governments. However, the system lacked a clear technical framework, resulting in some financial imbalances. ²²
- 5.47 It is nevertheless appropriate that a national resource allocation mechanism be established which is supported by a strong institutional and technical framework. Consideration should be given to allocating technical and operational aspects of this function to an *Agency*, which could also be a national *purchaser* of health services to be shared by both the public and private health sectors as discussed above.
- 5.48 The central function of this national Agency (or equivalent structure) would be to ensure that resources are determined and allocated to all levels of the health service in a manner that provides certainty over revenue streams matched by clear service delivery objectives.
- 5.49 To remain consistent with the Constitution the implementation of a nationally determined resource allocation mechanism need not undermine the functions of provinces and local government. Centrally determined allocations need only take the form of transfers to other tiers of government where these allocations are earmarked for specific priorities.
- 5.50 The transfers become revenue for provinces, and local government where applicable, where the legislatures and related local government structures have limited discretion over their use. These conditions can be specified in broad or narrow terms.
- An example of a broad condition would limit an allocation to specified hospital or district services. A narrower specification could apply to a vertical programme or to a particular capital project which would be very specific on how the funds are to be used. The conditions linked to the funding becomes the means by which national policy is implemented. Provinces and sub-provincial structures (such as health districts) should have the discretion to establish the detailed budgets in accordance with the specific conditions applicable to their jurisdiction.
- 5.52 Achieving geographical access and equity objectives in the face of systemic factors working against this goal is an important resource allocation concern. This is particularly relevant to specialised and highly specialised services. In some instances a more equitable distribution will be affected by whether specialists can be attracted to less urban settings and smaller cities rather than to merely making resources available. However, it is possible to achieve a more equitable distribution despite these constraints provided careful consideration is given to all the factors affecting the distribution of health services.
- 5.53 A resource allocation mechanism therefore needs to cater for the existence of a geographical imbalance while implementing approaches

²² REFERENCE - FFC

- to remove the imbalance over time where possible. Importantly, it is recognised that removing geographical imbalances involves more than redistributing funds between provinces.
- 5.54 Removing geographical imbalances to the health system are also better achieved on an increasing rather than a constant or decreasing budget allocation. Even provinces that are well resourced relatively speaking appear under-resourced relative to current and future needs.²³

Funding Provinces

- 5.55 The national ring-fencing of the health allocation to the various tiers of government would require that allocations to provinces occur in a rational and sustainable manner. The most sensible approach would be to allocate funds using criteria which are sensitive to population size, and morbidity.
- 5.56 The allocation mechanism must also compensate appropriately for any instance where an inter-provincial imbalance exists in the provision of services which cannot reasonably be eliminated in the medium-term. Such arrangements should be explicit and formalised to remove any funding uncertainty and to ensure that concerns about equity and access are properly addressed at all times.
- 5.57 The mechanism for removing inter-provincial service imbalances needs to be addressed using a specific process which integrates service planning with resource allocation. Removing inequity should involve an active process which is not purely reliant on shifting budgets.
- 5.58 Consideration should be given to entering into long-term agreements between national government and provinces on service delivery, reporting requirements, and the achievement of national priorities. They can also set targets and objectives which vary by province.
- 5.59 These agreements should seek to formalise the relevant obligations of both provinces and national government in achieving set goals. Importantly, the achievement of particular goals may be contingent on national government complying with agreed obligations. An example would involve ensuring that budget allocations compensate for population increase and inflation costs.
- 5.60 The allocation mechanism in its totality should involve a combination of formula-based allocations with formalised discretionary allocations linked to explicit goals. The entire allocation should be underpinned by a province-by-province mutually approved agreement which outlines long-term requirements in exchange for the funding. Such an agreement could be reviewed and amended annually on a rolling basis.
- 5.61 Cross-boundary flows of patients²⁴ that have not been pre-empted through a direct budget allocation should be compensated for through

²³ REFERENCE

²⁴ This occurs where patients do not use the health services in their province of residence.

some form of inter-provincial transfer arrangement based on auditable criteria. The net financial payment process would best be managed via the national allocation mechanism.

Funding Sub-provincial structures

- Presently legislation, via the National Health Act ("NHA")²⁵ establishes health districts which have responsibility for district hospitals and ambulatory healthcare services (clinics and community health centres). Regional structures typically exist to co-ordinate and oversee regional and tertiary hospitals.
- 5.63 As regional structures oversee and support the planning of hospital-based services their jurisdictions differ from health districts which are often smaller.
- 5.64 Regions and districts are not budget-holding decentralised authority structures with the full authority to determine allocations and render services in accordance with their own decision-making structures.
- 5.65 Consideration needs to be given to ring-fencing allocations to regions (provided they become properly framed in legislation) and districts as part of the national determination process. This should be considered in conjunction with the establishment of fully decentralised arrangements, at least in respect of districts. Whereas an ultimate vision for health districts would see many of them as autonomous fully devolved arrangements, regional structures are reasonably retained as intermediaries for advising the provincial administration on hospital services falling outside districts.
- 5.66 National requirements imposed on provinces would *inter-alia* need to emphasize the following:
 - 5.66.1 Spatial equity;
 - 5.66.2 Service norms and standards;
 - 5.66.3 Asset maintenance requirements;
 - 5.66.4 Access obligations;
 - 5.66.5 Quality of care norms and standards;
 - 5.66.6 Co-operation with compliance audits; and
 - 5.66.7 Reporting requirements in relation to all obligations.
- 5.67 As it may prove difficult for conditional allocations to be withdrawn in cases of non-compliance, various national-level authorities could be given the authority to take action against responsible governance structures and/or accounting officers. In some instances the withholding of funds could also be considered where it would not prove detrimental to health services.

Funding Hospitals

5.68 The public hospital reimbursement systems in a number of countries (the United Kingdom, France, and Australia) make use of fairly

²⁵ REFERENCE

- sophisticated budgeting mechanisms. These include providing long-term security of funding for explicit services by way of contractual agreements coupled with allocations that take into account the patient case-mix experienced within a 12 month period.
- 5.69 South Africa should move in the same direction in conjunction with the establishment of autonomous public hospitals. This budget mechanism would substantially remove the arbitrariness that predominates in the funding of public hospitals. The quasi-contractual relationship established with provincial structures would require that agreements on service provision (including quality of care) become explicit and subject to an obligation to ensure adequate funding.
- 5.70 Case-mix based reimbursement involves the use of Diagnostic Related Groupers ("DRGs")²⁶ to weight activities for the purposes of differentiating budget allocations between hospitals. Typically a portion of the budget is allocated prospectively on an un-weighted basis, with the balance adjusted for case-mix. For this system to operate all hospitals are expected to report activities to the "funder" (i.e. the province in this instance) using diagnostic codes applied when the patient is discharged.
- 5.71 The development of DRGs and their maintenance can become a functional responsibility of the Agency established to manage the national system of resource allocation. However, a pre-requisite for this system to operate effectively is the implementation of significant improvements in hospital management and their information systems.²⁷
- 5.72 Interim approaches to funding hospitals should focus on the contractual relationship and long-term agreements on funding and service requirements.

Contracting with the private sector

- 5.73 Making use of private sector services on contract is an option for accessing their surplus capacity. 28 It can however also be seen a substitute for not properly improving public sector services. Where the rationale is the latter it is probable that the contracts will be poorly managed and result in a waste of resources. An authority unable to manage its internal "contracts" will clearly lack the capacity to manage external contracts.
- 5.74 At any level of the service private sector contracting for services should be considered with care and permitted only in those instances

²⁶ Diagnosis-related groupers is a system to classify hospital cases into one of around 500 groups and expected to have similar hospital resource use. DRGs are assigned by a "grouper" program based on ICD diagnoses, procedures, age, sex, and the presence of complications or comorbidities. The system is used for prospective payment by Medicare in the United States and public hospital reimbursement in the United Kingdom, France and Australia. South African medical schemes have begun using the system for analytical purposes but not as yet for reimbursement.

²⁷ Public hospitals will need to accurately report discharge diagnoses of patients using the ICD10 coding system.

²⁸ Various assessments of the private health system in South Africa have identified the existence of significant surplus capacity, particularly in relation to hospital-based services and expensive technology. (See Council for Medical Schemes, 2008).

- where the capacity and oversight exists to ensure adequate service delivery.
- 5.75 Public Private Partnerships ("PPPs") are a variant of contract used to fund new capital projects where agreements may include maintenance and management agreements. Such arrangements also need to be carefully assessed before being used in the health sector. In many instances it will be more efficient from a financing perspective to use general tax revenue to fund new capital projects.

6. HEALTH PROFESSIONALS

Introduction

- A straight headcount of the staff levels in the public health system reveal suggest that there was a decline from mid-1990s to 2002 followed by a rise to reach the same levels as before the decline by 2006. Over this period a population of roughly 6 million has been added to the public system coupled with a dramatic increase in the burden of disease generally due to HIV and AIDS.
- 6.2 The staff to population ratios have therefore been in decline from the mid-1990s which, coupled with the increased burden of disease must have resulted in deteriorating working conditions and the quality of care provided in public institutions.
- 6.3 Hospital-based services have been most affected, with nursing staff numbers now significantly below reasonable staff to bed ratios. Furthermore, key control functions of hospitals are no longer adequately managed. Hospital dispensaries are also struggling to cope as few qualified pharmacists choose to remain long on the public service.
- The education and training of health professionals has also remained stagnant for the past 14 years, with no national policy framework implemented to ensure that sufficient health professionals are trained within the country. Indications are strong that education and training levels are not sufficient to ensure replacement at existing staff to population ratios. Nationally a service supply constraint is therefore emerging that could take some time to reverse. Critical shortages are emerging in nurses, general practitioners, and specialists.
- 6.5 The declines in public sector health staffing norms and inadequate levels of education and training are systemic in nature and are closely related to the absence of clear national policy frameworks affecting funding levels for services and education and training. The former issue is dealt with in **section 3**. Policy decisions concerning the education and training of health professionals are made within higher education institutions or by provincial health authorities.
- As with the general funding of the health system, policy is effectively decentralised, even though these decisions have significant implications for the country as a whole.

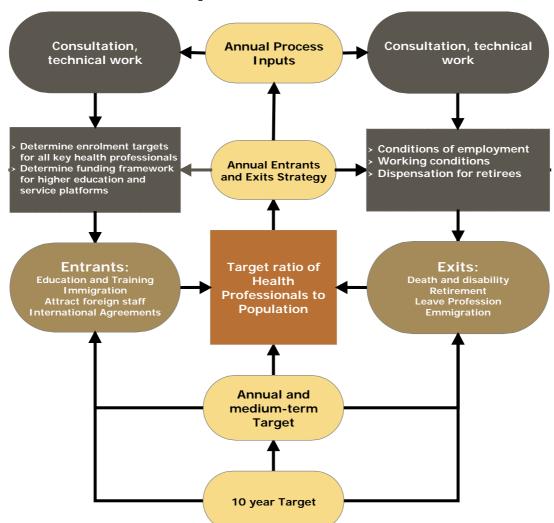


Figure 6.1: Strategic Framework for Planning Health Professional Human Resource Requirements

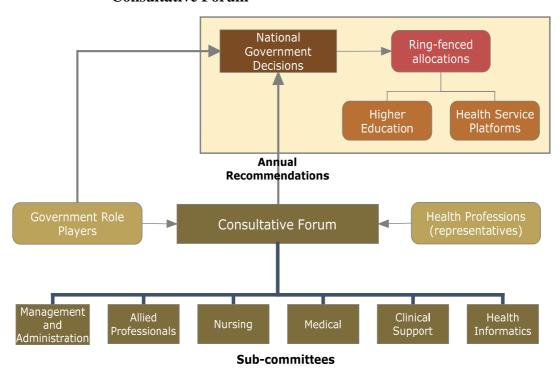
- 6.7 Strategic considerations of a future policy can be categorized in the following terms:
 - 6.7.1 Consideration has to be given to explicitly defining the target health professional staff to population ratios required over time. This should be done centrally.
 - 6.7.2 Based on the target staff ratios, policy needs to focus on strategies to deal with *entrants* and *exits* to the *active* number of health professionals working in the system at any point in time.
 - 6.7.3 Controlling in some measure the entrants to the system involves planning the -
 - Education and training enrolments levels;
 - Attracting foreign health professionals;
 - 6.7.4 Controlling in some measure exits from the system involves planning the -
 - Staff retention strategies, particularly within the public system.

- 6.7.5 Consideration could also be given to improving the efficiency of the current staff mix, through:
 - Changes to the scope of practice of key health professionals;
 and
 - Making greater strategic use of community health workers ("CHWs").

National Planning Framework

- 6.8 Options proposed in various reviews suggest that human resource requirements be established via a process with the following configuration:
 - 6.8.1 A standing *National Forum* be established which includes:
 - The Department of Health;
 - The Department of Education;
 - The Department of Public Service Administration;
 - The National Treasury;
 - Health professions representatives from teaching and training facilities; and
 - Health Professions Councils.
 - 6.8.2 The National Forum should develop proposals for submission to Government on:
 - Human resource norms and standards;
 - Education and training enrolment targets;
 - The allocation of education and training targets amongst HEIs; and
 - The indicative determination of subsidies and conditional grants for funding enrolment targets.
 - 6.8.3 The National Forum should also be required to oversee the reporting on health professionals working throughout the health system.
 - 6.8.4 Final decisions on recommendations emanating from the National Forum should be determined by Government.
 - 6.8.5 This National Forum should be required to make determinations by a specified time each year.
 - 6.8.6 The National Department of Health should provide full technical support to the Forum.

Figure 6.2: Process for the annual determination of health professional human resource requirements incorporating a National Consultative Forum



Target Staffing Norms

- 6.9 The health system relies on a large variety of health and related professionals to operate effectively. These go beyond the clinical professionals and include specialists in health management and administration, health informatics and information systems.
- 6.10 Critical staff shortages and/or the absence of properly qualified health professionals have been identified as follows:
 - 6.10.1 *Nursing*: the staffing numbers within the public sector have declined from 1997. This shortage is having a negative impact on hospital services.
 - 6.10.2 *Medical doctors*: as with nursing staff, the numbers within the public sector have declined from 1997.
 - 6.10.3 *Medical specialists*: shortages are occurring across the board, with notable concerns in the area of general surgery and anaesthetics.
 - 6.10.4 *Pharmacists*: significant shortages exist within the public sector due to poor conditions of employment. Consequently few choose to work in the public sector.
 - 6.10.5 *Management and administration*: South Africa has only recently begun providing tertiary training in hospital management and administration. Professionally qualified health managers are now required throughout the health system.
 - 6.10.6 *Health informatics*: the professional management and use of health information is critically lacking at all levels of the health system. This severely undermines the ability of health

- authorities and government to effectively prioritise interventions and funding.
- 6.11 A reasonable medium-term approach to resolving shortages in health professional both generally, and in particular within the public health system is to identify target ratios of health professionals to the population that are regarded as necessary and affordable.
- Targets should be specified as ratios of professionals to population. This will ensure that population growth is always factored into the actual numbers required at any point in time.
- 6.13 The targets should drive the policy decisions, *inter alia*, on:
 - 6.13.1 The levels of required education and training of health professionals; and
 - 6.13.2 Efforts to attract health professionals internationally.
- 6.14 To inform the establishment of these targets both technical work and consultation are required. The evaluation and revision of these targets needs to be an annual process with progress against the targets reported publicly.
- 6.15 There are concerns that targeting staff to population ratios may be prove insensitive to changes in technology and morbidity. However, it remains a very pragmatic basis upon which to set targets. It will always be possible to supplement the information used to set the targets used.

Education and Training

- 6.16 Education and training requirements need to be driven by official policy on target ratios of health professionals to population.
- 6.17 To ensure that policy objectives in relation to the production of health professionals are being achieved, nationally determined ring-fenced allocations (see **figure 6.2**) are required to underpin the policy. In this way policy on the production of health professionals will cease to be arbitrary.
- 6.18 The ring-fenced allocations are required for teaching and academic institutions as well as to compensate health services for the additional cost of in-service training. Two distinct allocations are therefore required:
 - 6.18.1 *Higher education*: a conditional allocation is required to subsidise the training of priority health professionals within higher education institutions. This allocation should be based on the numbers of enrolled students agreed to by institution.
 - 6.18.2 *Service platform*: a conditional allocation should be provided to specific health facilities and health districts where health professionals receive in-service training. This increment should be additional to the normal budget that the health facility or district would normally have received.
- 6.19 Consideration also needs to be given to fixing the minimum standards of teaching and education, with the required staff to pupil ratios underpinned by nationally determined allocations. The development and maintenance of these standards should be set in consultation with

- representatives of the health professions potentially through the *Consultative Forum*.
- 6.20 Given that there is a long lead time involved before increased student enrolments impact on the health system. Given this, education and training needs to be seen as a medium- to long-term strategy for improving the ratios of health professionals to the population.

Retention

- 6.21 Strategies to retain health professionals within the public health system or within the country may prove more cost-effective and quicker to implement than those involving training and education.
- 6.22 Retention strategies focus on improving conditions of employment and establishing appropriate career paths.
- 6.23 In addition, work conditions may also need to be improved. Staff retention may be improved as a consequence of improved initial staffing ratios, reducing work-related stress resulting from impossible workloads.
- Working conditions for health professionals should also improve due to the introduction of improved management resulting from the establishment of more decentralisation for hospital and district services and more skilled managers.
- 6.25 Health professionals also become demoralised when institutions are under continuous crisis. Where the broader environment underpinning the funding and oversight of healthcare services becomes more stable, the constant state of crisis under which much of the public health service functions could be alleviated.
- 6.26 Palliative strategies to retain health professionals, involving various forms of part-time work or "limited private practice" have been destructive to the public health system. Oversight of these arrangements varies considerably by institution with many health professionals abusing them. This applies to both medical and nursing staff.
- Full-time contracts should therefore be emphasized and phased back in, with alternative contracts (e.g. sessions) used for part-time employment where required. Sessional contracts involve providing payment only for time worked.

International Recruitment

- 6.28 International recruitment needs to be considered as a short-term strategy to improve the staff ratios in public health facilities. Such strategies should be sensitive to the needs of the countries targeted for such recruitment.
- 6.29 Consideration should *inter alia* be given to the following priority health professionals:
 - 6.29.1 Nurses:
 - 6.29.2 Hospital and health authority managers (consider special contracts from countries such as Australia, France and the United Kingdom);

- 6.29.3 Anaesthetists;
- 6.29.4 General surgeons; and
- 6.29.5 Medical practitioners.

Short-term priorities

- 6.30 Short-term human resource interventions could be divided broadly into the implementation of human resource planning processes and the targeting of immediate staff level improvements.
- 6.31 *Human resource planning processes*:
 - 6.31.1 Implement the proposed National Forum;
 - 6.31.2 Implement a new human resource information and reporting system with data and reports made available publicly; and
 - 6.31.3 Establish a fully resourced technical unit to analyze and evaluate human resource requirements on an ongoing basis.
- 6.32 *Staff level improvements*:
 - Return the public sector staffing ratios to the position they were in 1997:
 - Funding for an additional 48,300²⁹ health professionals over the next three years;
 - Prioritise hospital services for the improvements focusing key hospitals;
 - Prioritise professional nurses and medical doctors for improvements;
 - Identify specific health professionals to be funded for immediate improvement;
 - Ring-fence the allocations, using conditional grants, to ensure targets are met;
 - Establish a monitoring an evaluation process to ensure shortterm targets are met, and to asses their impact on services.
 - 6.32.2 Prioritise the encouragement of foreign health professionals to support vulnerable institutions:
 - Health facility managers;
 - Medical doctors:
 - Medical specialists; and
 - Professional nurses.

Medium-term priorities

6.33 *Human resource planning processes*:

²⁹ This is based on the number required to bring the public health system the same staff to population ratios that prevailed in 1997.

- Establish target ratios of health professionals to population in excess of the ratios in existence prior to 1997;
- 6.33.2 Establish target health profession enrolment requirements:
 - Long-term targets; and
 - Three-year targets.
- 6.34 *Staff level improvements*:
 - 6.34.1 Expand enrolment numbers and capacity of institutions to educate and train new health professionals in line with targets;
 - Expand staffing within the public services beyond the 1997 staff to population ratios in accordance with medium-term targets; and
 - 6.34.3 Prioritise institutions for specific support.

7. CONCLUSIONS

- 7.1 Reforming the health system is one of the most challenging endeavours for any government to undertake irrespective of the level of development. However, for developing countries the implications of not getting it right are substantial.
- 7.2 In developing countries the health system is often compensating for poor socioeconomic conditions, which makes the emphasis on public health goals enormously important.
- 7.3 Furthermore, skilled professionals, who are very mobile from a labour market perspective and in short supply in developing countries, are very sensitive to the availability of health care and education at levels consistent with their perceptions of risk and acceptability.
- 7.4 Developing countries therefore face harder choices than industrialised countries that are able afford predominantly single-tier health and education systems. They need to carefully balance equity goals within the context of tight resource constraints and the need to support the input requirements for an emerging modern economy.
- 7.5 For developing countries, therefore, an important strategic goal will be to implement an institutional framework that can frame the evolutionary path of the health system to improve its access and equity as the economy grows. Within the South African context this institutional framework is reflected in the NHI arrangements and related structural reforms recommended in the Roadmap.
- 7.6 The implementation of a NHI structure will not instantly eliminate tiering as South Africa is inhibited by its socioeconomic context, its level of development, and the weak public sector health administrations. However, the existence of the NHI structure will automate the evolution of a predominantly single-tier system as the economy enlarges and formal employment increases.
- 7.7 It is furthermore important to understand that the existence of health insurance within a developing country context is inevitable and desirable. South Africa has the advantage of a well regulated medical scheme system that can form an important component of the overall system of social security. Consistent with health systems internationally, the considered incorporation of regulated private health insurance into the overall system of social security is well accepted and essential to the achievement of health policy goals.
- 7.8 A necessary consideration for health systems reform is to avoid unravelling existing institutional arrangements and attempting to replace them with new ones. Successful reform of any complex system always builds on existing institutions whether in the private or public sector.
- 7.9 The framework and vision provided in this Roadmap therefore focuses on the priority areas for intervention, including structural reform. The challenge is however considerable, and strong leadership will be needed to see significant change within a five-year period. Without this leadership the reforms will fail to achieve their goals irrespective of the quality of the plan.

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