NATIONAL HEALTH INSURANCE

THE FIRST EIGHTEEN MONTHS

HEALTHCARE FOR ALL SOUTH AFRICANS

health
Department:
Health
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South Africa is poised at the brink of effecting significant and much needed change to its health system; a change based on the principles of social solidarity, equity and fairness. A National Health Insurance (NHI) is the vehicle which is intended to bring about this change and is expected to have a lasting and recurring impact on the health of all South Africans. The policy objective of NHI is to ensure that everyone has access to appropriate, efficient and quality health services. Intended to be phased in over a period of 14 years, such a system will require significant overhaul of existing service delivery structures, administrative and management systems.

This chapter summarises the progress and future plans for introducing the NHI in South Africa. Since the NHI Green Paper was launched in August 2011 there has been considerable progress in preparing the final NHI policy and in preparing South Africa's health system for the introduction of NHI. This chapter summarises progress against the key features of the NHI's development as outlined in the Green Paper and includes input on key areas and initiatives that have been identified for the successful implementation of NHI. This includes, amongst others, management reforms, hospital reimbursement reforms, establishment of the Office for Health Standards Compliance, undertaking of the national health facility audit, quality improvement and certification, and strengthening of district health authorities.

Many challenges and risks exist but plans to mitigate these are being put in place; in particular, to continue the process of consultation, improving on communications (including the timetable for changes to happen), strengthening oversight of the reform process in existing and future pilot districts and keeping a focus on equity to ensure that introducing the NHI will lead to a fairer healthcare system.

The policy objective of NHI is to ensure that everyone has access to appropriate, efficient and quality health services.

Introduction

This chapter provides a brief summary of the progress made in preparing for the NHI since the launch of the Green Paper in August 2011.[1] It also comments on some of the key challenges to be overcome in implementing the NHI and discusses the way forward.

The 2010 edition of the South African Health Review (SAHR) provided extensive information on a proposed NHI for South Africa (SA) from a variety of perspectives,[2] while the 2011 edition[3] provided an overview of the key issues contained in the Green Paper.

The principles that provide the basis for developing the NHI were made clear in the Green Paper. The NHI will improve access to quality healthcare services and provide financial risk protection against health-related catastrophic expenditure for the whole population. Such a system will provide a mechanism for improving cross-subsidisation, according to which funding contributions would be linked to an individual's ability to pay and benefits from health services would be in line with an individual's needs. Everyone will have access to a comprehensive package of healthcare services, provided through accredited and contracted public and private providers, with a strong focus on health promotion and prevention services at the community and household level. There will be clear lines of accountability at all levels of the health service and transparency of decision making. The NHI's objectives are:

- to improve access to quality health services for all South Africans, irrespective of whether they are employed or not;
- to pool risks and funds so that equity and social solidarity will be achieved through the creation of a single NHI fund;
- to procure services on behalf of the entire population and efficiently mobilise and control key financial resources; and
- to strengthen the under-resourced and strained public sector in order to improve the health system's performance.

Progress

The first five years of NHI development will aim at strengthening the public sector in preparation for new NHI systems, with the launch of the new central NHI fund envisaged in 2014/15. In the Green Paper a timetable was set for the development of the NHI. We review progress here against that plan of action.

NHI White Paper and legislative process

Following the launch of the Green Paper, the National Department of Health (NDoH) had several consultations with medical scheme administrators, labour, the pharmaceutical industry, professional associations for different occupations, statutory bodies, government departments, academia, civil society and parliament. Over 100 submissions were made to the NDoH. In December 2011 an international conference was held, with experts from a number of countries and institutions around the world sharing their experience of introducing NHI-like arrangements and moving to universal health coverage.[4] The Minister of Health's 'road-show' to each of the NHI districts involved meeting a wide range of stakeholders, including: independent doctors, mayors and councillors responsible for health, religious leaders, traditional leaders, managers of health facilities, health workers and their unions, and principals and school governing bodies. All 11 pilot districts were included, which involved a total of over 15 300 stakeholders. The knowledge gained from the consultations will contribute towards the development of Government's White Paper on National Health Insurance in consultation with the Treasury.

Experience from other countries has shown the importance of positioning health reform within a legal framework.[5] Other legislative changes will be required for health service tariffs. Countries that have successfully introduced universal coverage have well established mechanisms for pooling funding that address equity, efficiency, and sustainability of health expenditure.[6] The White Paper is expected to be launched in 2013, after which there will be further consultations and completion of a final NHI Policy Document. At this point the NHI legislative processes will commence.

Management reforms and designation of hospitals

Publication of regulations on designation of hospitals: Regulations on designations of hospitals and policy on management were released for public comment on 2 March 2012.[7] They provided clarity on the categorisation of hospitals into districts (small, medium and large), regional, tertiary, central and special (e.g. psychiatric) and the services that should be provided within each. This has allowed for chief executive officer (CEO) job descriptions to be more clearly defined – a key step in ensuring the appointment of competent and skilled managers, the decentralisation of management and the development of accountability frameworks.

Policy on the management of hospitals: The separation of purchaser and provider functions is of particular importance for the management of hospitals. These complex institutions need highly skilled, empowered senior managers to ensure efficiency and the provision of quality services. The NDoH has prepared draft guidance for strengthening all hospital boards in the public sector. In addition, the NDoH is aiming at stronger oversight and greater accountability of central hospitals. Work has started with three central hospitals in Gauteng (Charlotte Maxeke, George Mukhari, and Steve Biko). These hospitals render highly specialised tertiary and quaternary service on a national basis and are a platform for the training of health workers and research. They also function as referral units for the other hospitals and employ highly trained staff. Initial work has focused on revenue generation, collection and retention as a first step in strengthening their information and administration systems.

Advertisement and appointment of health facility managers: Following the assessment of competencies of all public sector CEOs, the filling of 86% (102) of the 118 new CEO positions has been completed. In future, all senior managers will need to undergo specialist training and be accredited by a newly established South African Leadership and Management Academy.

Hospital reimbursement reform

Regulations are in place to allow hospitals to raise revenue from the clinical and other services they provide to those who have access to other sources of financial protection. The 2009 Uniform Patient Fee Schedule (UPFS) was developed to provide a simpler charging mechanism for public sector hospitals.[8] Various initiatives are progressing and are described below.

Central hospitals: To prepare hospitals for the future NHI the World Bank is assisting the NDoH with a project to improve administration and management capacity in three of the central hospitals in Gauteng. The project focuses on: upgrading information technology infrastructure; improving financial management; and identification and implementation of efficiency savings in work-flow processes using short-term placement of interns to prepare for new financing mechanisms. Information Technology (IT) 'rescue-plans' have been de-veloped for the three hospitals. A case study on the financial management processes in Charlotte Maxeke has been written, which covers new models of financial management under the NHI. The work has also identified an additional R37 million over five months from users covered by medical schemes.

Other sources of income: The revenue derived from patient fees is a consistent funding stream to augment current operational budgets. Revenue enhancement strategies aim at improving revenue collection, resource management and administration, with a financial incentive to retain surplus revenue generated. Revenue collected by provinces is directed into the provincial revenue fund, which is incorporated into the annual budget allocation. The revenue performance for the two past fiscal years was R842 million in 2010/11 and R671 million in 2012/13 (up to third quarter) totalling approximately R1.5 billion. Details are as follows:

Road Accident Fund (RAF): The potential to improve revenue collection from the RAF is considerable. The NDoH was previously hampered by limited liability for certain road accident victims, but since the change in legislation in 2003 the NDoH has displayed a positive revenue growth. Challenges still persist in respect to the onerous processes of lodging claims against the Fund. The NDoH collected a total of R630 million in 2010/11 and 2011/12 (up to the third quarter);

Medical schemes: Raising funds from medical schemes has proven to be difficult, as medical scheme rules create barriers to effectively collect revenue due to the application of prescribed minimum benefits. The NDoH has collected a total of over R408 million for this period. More work is now required on reimbursement reforms to raise revenue from medical schemes.

Intergovernmental organs: The public sector also raises funds from providing services to other state organs. The total income generated was R299 million.

Subsidised patients: * The NDoH statutory obligation is to decrease or eradicate any user fees raised against the patients who should be subsidised patients. Currently, this obligation cannot be fulfilled because of a lack of patient identification systems. The income generated from those without medical scheme cover (including those who should be subsidised) equates to R175 million over this period.

Coding systems: The implementation of the NHI will also require a comprehensive health service coding for hospitals and other health establishments and work required in this area is being mapped out.

Diagnostic coding: An ICD-10 coding system exists in South Africa[9] (SA) but is not yet operating satisfactorily in all public health institutions whereas the private sector uses it for billing purposes. The Minister of Health has appointed a task team to advise on necessary changes that must be considered in SA and to keep pace with changes that are implemented internationally. The task team has sub-groups working on morbidity, mortality, privacy and confidentiality, and communications and monitoring. A key priority for 2013 is training and improving the skills of those involved in coding.

Procedural and other coding: There is no standardised National Procedural Coding System available in SA, which leads to fragmented procedural coding systems. To compound this problem, the Intellectual Property (IP) of these different procedural coding schemas is in the hands of private organisations. It is important, therefore, that a process of developing all these different coding schemas into a preferred standardised national coding system commence as soon as possible. Such a schema will ensure that government is able to do version controls and updates without seeking permission from IP holders. When a preferred schema is identified, it will be customised to suit the South African health sector environment. A case-based hospital payment system (based on Diagnostic Related Groups **) is being piloted in several hospitals including: Umtata (Eastern Cape), Universitas (Free State), Inkosi Albert Luthuli (KwaZulu-Natal), and Steve Biko (Gauteng). Other coding systems that will be required include unique provider numbers, facility numbers, specialty codes, and a laboratory-results coding system. These codes will need to be contained collectively in some form of 'National Health Data Dictionary', as in other countries.[10]

* "Subsidised patients" are those who do not fall in the category of full paying patients (as per the national UPFS guidance). Subsidised patients are also categorised on their ability to pay for health services: H0 (fully subsidised); H1 and H2 (partially subsidised).

** Diagnostic Related Groups: A patient classification scheme that provides a means of relating the number and types of patients treated in a hospital to the resources required by the hospital, as represented by a code.

Establishment of the Office for Health Standards Compliance

The National Assembly will shortly vote on the final version of the National Health Amendment Bill required for the Office for Health Standards Compliance (OHSC) to be established in 2013 following promulgation by the President.[11] The objectives of the Office are to protect and promote the health and safety of users of health services by (a) monitoring compliance by health establishments with norms and standards prescribed by the Minister in relation to the national health system; and (b) ensuring consideration, investigation and disposal of complaints relating to non-compliance with prescribed norms and standards in a procedurally fair, economical and expeditious manner. It will have three sections. The first will be an inspection unit that will arrive unannounced to check and report on compliance, with problematic hospitals having frequent visits, and others less frequent. The second will be an ombudsperson to whom dissatisfied members of the public can complain. Finally a certification unit will certify every health establishment that meets the required standard or withdraw certification as part of a set of progressive sanctions. Improvement in the quality of services through ensuring compliance with standards will remain the responsibility of health service providers.

Audit of health facilities: An audit of all 3 880 public sector facilities has now been completed. This covered all public health facilities (including clinics, community health centres and district, regional, specialised and tertiary hospitals) in all nine provinces and used standardised measurement tools.[12] The assessment included the range of health services provided, the profile of each facility, the state of the physical infrastructure, the availability and basic functionality of medical equipment, the degree of compliance with national quality standards, the allocation and availability of human resources, the status and utilisation of Health Information Systems, the utilisation rates of healthcare services and facilities and the budget and expenditure reports for the health facilities.

Facility improvement teams (FITs): These teams have been established, trained in quality improvement[13] and started in the NHI pilot districts, to strengthen the supervision of services and help ensure that the many problems identified in the audit are systematically addressed. Approximately 1 000 facilities have been covered. There is a need now to systematically scale up the initiative, whilst evaluating and learning from the current experiences and successes, as shown in Boxes 1 and 2. Some problems are more systemic and require longer-term strategies to improve leadership and culture.

Inspection of facilities: The work of the OHSC has already started, with inspectors recruited and trained to carry out inspections of public facilities on a voluntary basis. By end January 2013, 171 establishments had been inspected against the national standards and the results discussed with facility managers, with a further 80 inspections planned by end March 2013. These are "mock" or training inspections at present, with both the tools and the procedures being progressively refined, and the norms to be prescribed still being developed. They have thus far covered every province and all types of hospitals and primary care establishments, although the numbers are still small and should be interpreted with caution. Initial results show that central hospitals (as would be expected) are closest to the probable future compliance threshold of 80%, although with a range between 59% and 92% in the overall scores, and even the top-performing hospitals presenting with areas requiring improvement. District hospitals, community health centres and clinics have been further from the desired threshold, with a significant proportion scoring below 50% overall (with some as low as 24%) though with some excellent establishments in this same group scoring over 90%. Re-inspection visits to review whether corrective action has resulted in an improvement will be initiated from April 2013, focusing on the highest-risk and lowest-scoring establishments. Direct feedback and validation has been built into the routine of each inspection, for each individual unit and for the establishment as a whole. This is used to convey the intent of the standard being assessed and the gaps found in a process that is acknowledged by establishments as contributing to their knowledge and understanding. Once the OHSC becomes properly established, inspections will be mandatory, in both the public and private sectors. Great effort has therefore been put into an extensive communication process. Since late 2011, national meetings on this matter in every province have been followed by extensive dissemination throughout the health services. This effort is currently being reinforced, with a focus on effective ways of reaching frontline staff and using recognised quality improvement methods to close identified gaps.

Inspection of NHI districts: The Inspectorate has started inspections in 8 of the NHI pilot districts and will be increasing the coverage in the coming months to reach 15% coverage of establishments. The overall audit scores vary per district and also per type of establishment, with hospitals generally scoring higher than clinics in the same district. The inspections have included an assessment of four NHI pilot district offices as they are involved in critical components of the delivery of quality care, although they are not strictly "health establishments". These offices (or even provincial offices in some cases) implement a number of support services such as human resources (HR), finance, procurement or infrastructure. District offices should play a key role in providing leadership, oversight and support in relation to compliance with the core standards in all establishments for which they are responsible. The district offices that were inspected, however, found this to be a new concept and something they are not well-prepared to do, scoring low in assessments.

Primary health care re-engineering

If SA is to provide access to quality health services for all its population, experience from other parts of the world shows that effective primary health care (PHC), with a focus on prevention and health promotion, must be at the centre of service delivery.[14-15] Services

BOX 1: FACILITY IMPROVEMENT TEAM (FIT): SEDIBENG – REDUCING WAITING TIMES

The overall methodology of FITs is to focus on the worst performing facilities according to data obtained in the national audit and use the best performing facilities as local benchmarks for comparison. Discussions with staff covered the six priority areas – availability of medicines, cleanliness, patient safety, infection prevention and control, positive and caring attitudes and waiting times. The last area was a particular concern in the district. Sub-district 'FITs' were formed, led by sub-district managers, and the problem of waiting times assessed using root cause analysis, and process maps to identify bottlenecks. (see Figure 1)

Problems were categorised into those that could be sorted out immediately and those that had to be taken up with provincial authorities, such as that many of the facility managers were acting and critical staff vacancies existed. 'Quick win' improvements were then designed to improve waiting times. (See Figure 2) These included re-organising the waiting area, arranging triage by a professional nurse and having fast queues for emergencies, children, family planning and pregnant women. Other 'best practices' identified included a booking system for chronic diseases, and vital signs, laboratory tests and dispensing done by the primary health nurse in each consulting room. Regular reviews were done by 'quality circles' where teams discuss performance on a daily basis.

BOX 2:
FACILITY IMPROVEMENT TEAM (FIT): PIXLEY KA SEME – COMMUNITY PARTICIPATION AND PARTNERSHIP

The FIT took the following innovative approach to their work. They constituted teams consisting of a national, provincial and district member for each sub-district. By the end of July 2012, a facility improvement plan was developed for each facility in the district. This gives every facility certain targets at certain times to achieve. Meetings were held with Mayors and role players in all the sub-districts. As a result a stakeholder forum for each sub-district was established. Community dialogues on health issues were started in one sub-district. The stakeholder forums, led by the Mayors, meet monthly to assess progress attained in addressing challenges and assess individual facility performance in respect to performance in the six quality priority areas and other health service delivery matters. Facilities then had to report monthly on progress made. For each of the sub-districts there has been substantive progress. Despite the major problem of insufficient staff, many quick wins were identified and resolved with the help of the community.

FIGURE 1:
PROCESS MAP TO IDENTIFY BOTTLENECKS. DEVELOPED BY SEDIBENG FACILITY IMPROVEMENT TEAM.

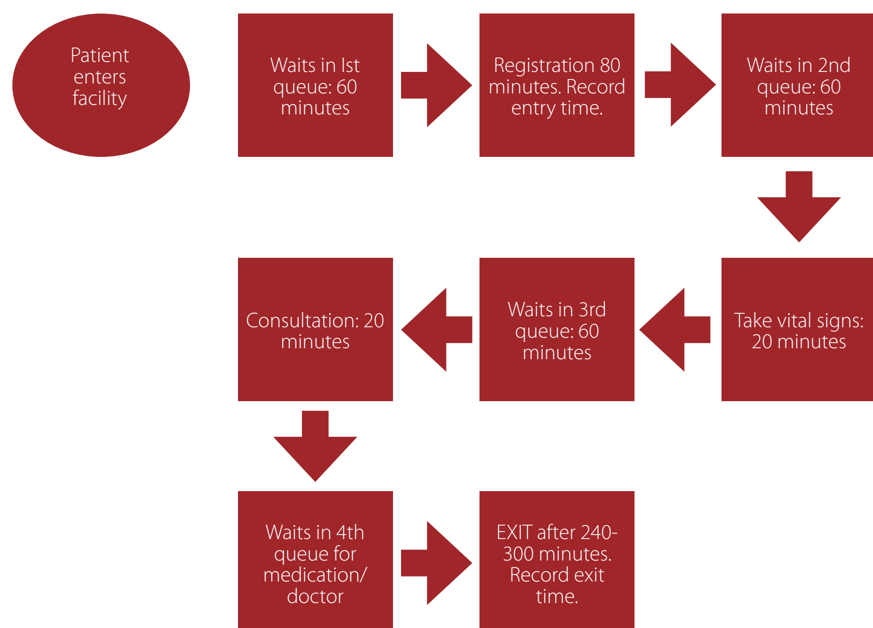
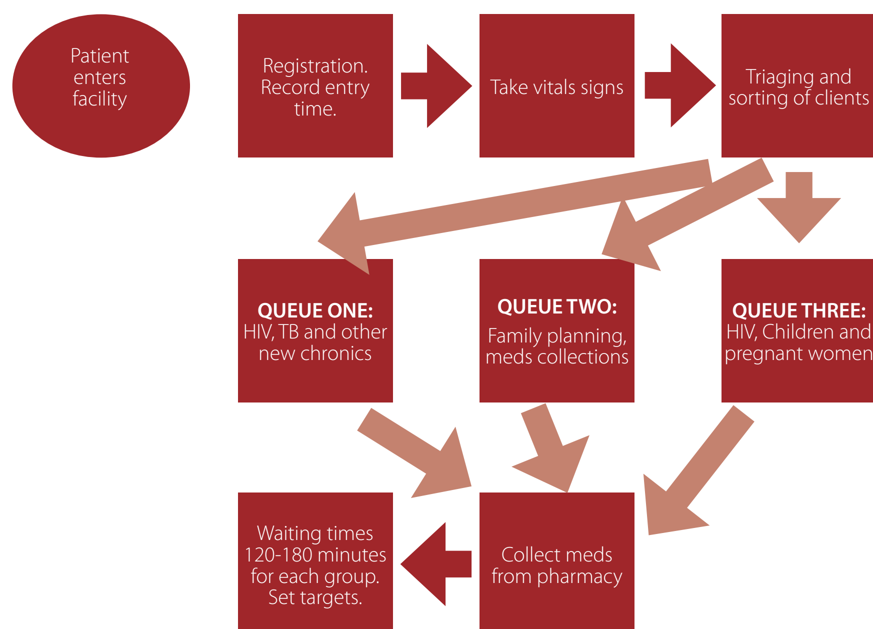


FIGURE 2:
PLAN TO REDUCE WAITING TIMES. SEDIBENG FACILITY IMPROVEMENT TEAM.



Community health workers checking blood pressure in an informal settlement in Gauteng, October 2012.

need to be based within all communities to promote good health and prevent ill health and act as the first point of contact for most health care.[16] This will provide some balance to the current dominance of hospital-centred curative care.[17] The PHC platform in SA is being established across the country based as three complementary components, referred to as streams.[18]

District Clinic Specialist Teams (DCSTs): These newly established teams will focus on improving both the quality of health care and health outcomes for mothers, newborns and children.[19] As of December 2012, over 43% of positions have been filled, with a target for every district to have a dedicated senior obstetrician and gynaecologist, paediatrician, family physician, midwife, paediatric and PHC nurse. Their induction and orientation programme is now underway with five modules to be completed over one year:

- status of maternal child health in SA and the national vision for the DCST and PHC;
- team building, role clarification and tools for conducting baselines;
- clinical orientation; leadership, mentoring and coaching; and
- outreach support.

The induction programme is well underway in KwaZulu-Natal, Gauteng, Limpopo, North West and the Free State, with a schedule having been agreed upon for all the remaining provinces.

Municipal ward-based primary health care: Evidence from many countries suggests that provision of home- and community-based health services and their links with fixed PHC facilities in particular are critical to attaining good health outcomes, especially child health outcomes. Literature has shown that the role of community health workers (CHWs) in many countries has contributed to better health outcomes.[20] Each municipal ward in SA will have one or more PHC outreach teams. These teams are composed of a professional nurse, environmental health and health promotion practitioners, as well as CHWs. The main functions of these teams is to promote good health and prevent ill health through a variety of interventions based on the concept of a healthy community, a healthy family, a healthy individual and a healthy environment. Approximately 25% of the 40 000 CHWs have been re-trained in the new, national approach to community-orientated PHC. While this brings many challenges, and may take some time to implement fully, the CHW will be at the centre of the future PHC system and the contact point for all households.

School-based PHC services: The new national Integrated School Health Policy was launched with the Departments of Basic Education and Social Development in October 2012.[21] A database of school nurses has been established by the NDoH. The policy focuses on the most disadvantaged schools in the

country. School nurses will be supported by mobile clinics to provide preventative and promotive services, reduce health barriers to learning, and facilitate access to health and other services where required. In 2012 an additional 30 mobile clinics were deployed and a further 60 are currently being purchased by the NDoH. The package of services includes:

- Health education and promotion – including: nutrition and exercise; personal and environmental hygiene; chronic illnesses (including HIV and TB); abuse (sexual, physical and emotional abuse, including bullying and violence); sexual and reproductive health; menstruation; contraception; sexually transmitted infections (STIs) including HIV and AIDS; male circumcision including male medical circumcision (MMC); teenage pregnancy; choice of termination of pregnancy (CTOP); prevention of mother-to-child transmission (PMTCT) of HIV; HIV counselling and testing (HCT) and stigma mitigation; and mental health issues including drug and substance abuse, depression, anxiety and suicide.

- Learner assessment and screening – including: conducting vision, speech and basic hearing screening; measurement of height, weight and calculation of body mass index (BMI) linked to appropriate nutritional interventions; checking for fine and gross locomotor problems; conducting oral health screening; screening for chronic illness or long-term health conditions, including both communicable diseases, (such as TB and HIV and AIDS) as well as non-communicable diseases; and performing a basic mental health and/or psychosocial risk assessment.

Public hospital infrastructure and equipment

Work is underway to enable provinces to plan, manage, modernise, rationalise and transform infrastructure.

Refurbishment and equipping nursing colleges: To date over 70 nursing colleges and schools are being refurbished as shown in Table 1.

TABLE 1:
REFURBISHMENT OF NURSING COLLEGES, 2012

Province	Number of nursing colleges refurbished
Eastern Cape	11
Free State	4
Gauteng	15
KwaZulu-Natal	12
Limpopo	6
Mpumalanga	4
Northern Cape	1
North West	8
Western Cape	11

Refurbishment of public sector facilities: The NDoH is now following up with provinces for them to respond to the issues identified in the facilities audit. This includes:

- expanding on existing facilities where there are problems with space, but where there is room for expansion;

- fixing and repairing problems that were identified in the audit, such as dilapidated facilities;

- building new infrastructure where long-term solutions are required; and

- where there are acute problems of access, supplying services through mobile or prefabricated facilities.

Building of flagship hospitals and medical facilities through public-private partnerships (PPPs): Major infrastructure projects are also underway in the tertiary centres. Feasibility studies are at an advanced stage in five centres: Polokwane Academic Hospital (Limpopo), Chris Hani Baragwanath Academic Hospital (Gauteng), Dr George Mukhari Hospital (Gauteng), Nelson Mandela Academic Hospital (Eastern Cape), and King Edward VIII Hospital (KwaZulu-Natal). The pre-qualification of six international and national competitors has been completed for the bidding for the design work.

Human Resources for Health

National Human Resources for Health Strategy: The strategy was launched in October 2011.[22] Work has started on the determination of norms and staffing needs for the country for primary and secondary care. This is being done with support from the World Health Organization (WHO) using the Workload Indicators of Staffing Needs (WISN)[23] method with the aim of improving the HR data extraction, capture and analysis. This will ensure the appropriate level and mix of staff at facilities. Six provinces have been trained in WISN and it will be used within all 11 NHI pilot districts to estimate and cost future staff requirements. The challenge posed by the various professional categorisations is being resolved following the completion of the review of the Occupational Specific Dispensation. The report has been completed and its recommendations are now being implemented.

Leadership and Management Academy: As envisaged in the human resources for health (HRH) strategy, the Leadership and Management Academy was launched in October 2012.[24] Its vision is to be a centre of excellence and a beacon of good practice in health leadership and management. Its aims are to develop outstanding leadership and management in health in order to improve people's health and their experience of the NHI. It will create an industry-wide benchmark of accredited programmes for all levels of leaders and managers, com-missioning programmes necessary to meet identified needs and identifying, developing and promoting best practice. The academy recognises that good leadership and management are about improving health equity and outcomes, committing to professionalism, championing equality and diversity, and encouraging innovation and continuous improvement. The committee's first task was to prepare an induction and orientation programme for the newly recruited CEOs, which took place over five days in early February 2013 for 88 of the 102 newly appointed CEOs. Various national and international experts are now working together to inspire and encourage this new group of leaders to respond to their needs and concerns and to facilitate sharing of experiences and best practices through teamwork and support. A longer-term programme of support and development will be based on the individual needs of CEOs.

Increase in production of doctors: Training of new doctors has been increased through increasing the intake in training institutions and sending 1 000 medical students to Cuba to be trained. Since the launch of the strategy, an extra 40 doctors started training in SA in 2011/12 and 125 in 2012/13. Also, 95 medical specialists are being recruited from Cuba and will start work in SA in 2013. In addition, the number of professionals undertaking community service is steadily increasing, with 7 162 placements across all provinces in 2012, covering doctors, dentists, pharmacists, and other specialties.

Increase in production of nurses: In October 2011, the Minister of Health appointed a task team on Nurse Education and Training to take forward the recommendations from the April 2011 Nursing Summit. This has resulted in a National Strategic Plan[25] being completed in February 2013. Nursing colleges will be declared higher education institutions in compliance with the provisions of the Higher Education Act (as amended in 2008). Nurse Education and Training is be regarded as a national competence accounting to the Director-General of Health to help address current provincial inequalities, decrease fragmentation and improve national clinical training and accountability. The South African Nursing Council (SANC) will be requested to develop and finalise an accreditation framework for Nursing Education Institutions. The task team also recommended that nursing students be awarded the status of full student (rather than employee) while undergoing their training and that clinical education and training be strengthened. A Continuing Professional Development (CPD) system for all nurses and midwives, linked to licensing and professional progression, will be introduced and include professionalism and ethics as a compulsory component. Provision of a uniform allowance will be phased out and will be replaced with the direct provision of contemporary white uniforms provided by employers. An office of the Chief Nursing Officer (CNO) is to be established and will facilitate the development and implementation of the national core curriculum for nursing and also a national framework for financing nurse education and clinical training to overcome current inefficiencies and inequities. These actions will help bring clear leadership and management nursing structures at all levels of government health services.

Minister of Health with medical students at the launch of the Human Resources for Health Strategy in October 2011.

PUBLIC HEALTH FACILITY AUDIT, QUALITY IMPROVEMENT AND CERTIFICATION

The standards for the Positive Practice Environment (PPE) are in the national core standards, and will be extended to cover other recommendations in the MTT report. National nursing norms will be finalised to strike a balance between ideal staffing, what is a safe and what is affordable using a combination of the WHO's population-based norms and an activity based workload approach in SA.

Information management and systems support

An effective NHI is reliant on an effective set of information systems that helps health workers and facility managers keep track of the services and the quality of care provided, and for the contracts between purchasers and providers to be properly monitored. Considerable efforts are required to improve the quality, coverage and standardisation of information across the public and private healthcare systems. While much still needs to be done, progress has been made in some critically important areas such as the e-Health strategy (see below) which was officially launched in 2012 and an agreement on national indicators and targets for the priority areas in the NSDA for health,[26] through the work of the Health Data Advisory and Coordination Committee.[27] Norms and standards for national health and information systems have been developed in partnership with the CSIR. In addition a variety of initiatives designed to improve the health information system in the country have been undertaken. These include the following:

National Health Information Repository and Database (NHIRD): The vision of NHIRD is to provide up-to-date information on routine National Indicator/ Data Sets (NIDS) data and indicators and to provide a unified and integrated repository for data such as the annual HIV and syphilis survey, demographic and health surveys, child health and HIV counselling and testing campaigns, aggregated financial data from the basic accounting system (BAS) and municipal financial systems including District Health Expenditure Review (DHER) data, HR data from government (PERSAL) and municipal HR systems, and a range of data sets from other government departments (e.g. Statistics South Africa, Human Sciences Research Council, Medical Research Council) and national and international development partners. This national database is now established and also contains data from the audit of all public sector facilities. It also has information on service access and determinants of health (e.g. deprivation and household income) and is being made available to provinces. In the future it will be routinely available to districts and service providers.

Data capturers: The District Health Management Information System (DHMIS) Policy approved in October 2011[28] stipulates different categories of Health Information Systems (HIS) personnel required at different levels of the health system, including data capturers responsible for capturing the data at all fixed facilities, sub-district or higher levels, and then forwarding the data to the next level. By the end of 2011/12, a total of 1 721 cadres had already been appointed, with an additional 550 employed by December 2012. These are young unemployed South Africans with at least a matriculation certificate, who are recruited by the NDoH, and sent for training. During 2013/14, a total of 503 of these data capturers will continue to work in the public health sector on contracts and the NDoH aims to add 900 additional data capturers in 2013 to meet its target of 3 535.

Information Communication and Technology (ICT) graduates: As part of the internship programme for young, unemployed South African graduates, 137 graduates with IT were employed. They have been provided with opportunities to gain work experience in the public health sector and will prove to be an invaluable asset for health information systems strengthening in SA in the near future.

Patient records: Many innovations using both simple and complex electronic systems are being used across the country. This is an area that requires further work for both primary- and hospital-based care.

Strengthening of District Health Authorities

NHI district management and government structures: One of the gaps in the health sector is building a strong cadre of executive leaders capable of managing the complex healthcare environment and leading the re-engineering of PHC and hospitals in the build-up to the NHI rollout. The South African Executive Leadership Programme in Health (SAELPH) is one initiative that will help to fill this transformation gap. It is a partnership involving the University of Pretoria (UP), the University of Fort Hare (UFH), the Harvard School of Public Health and others in collaboration with the NDoH. Since its start in 2012 it has engaged 60 district managers in its programme on "Transformation of Health Districts" and a further 30 on "Leadership in Health Districts". It also holds policy seminars and round table meetings, including ones on NHI and pilot districts that enable district managers to engage with national and international experts and policy makers.[29] Preparatory work to develop District Health Authorities is a priority for 2013 and this is now underway.

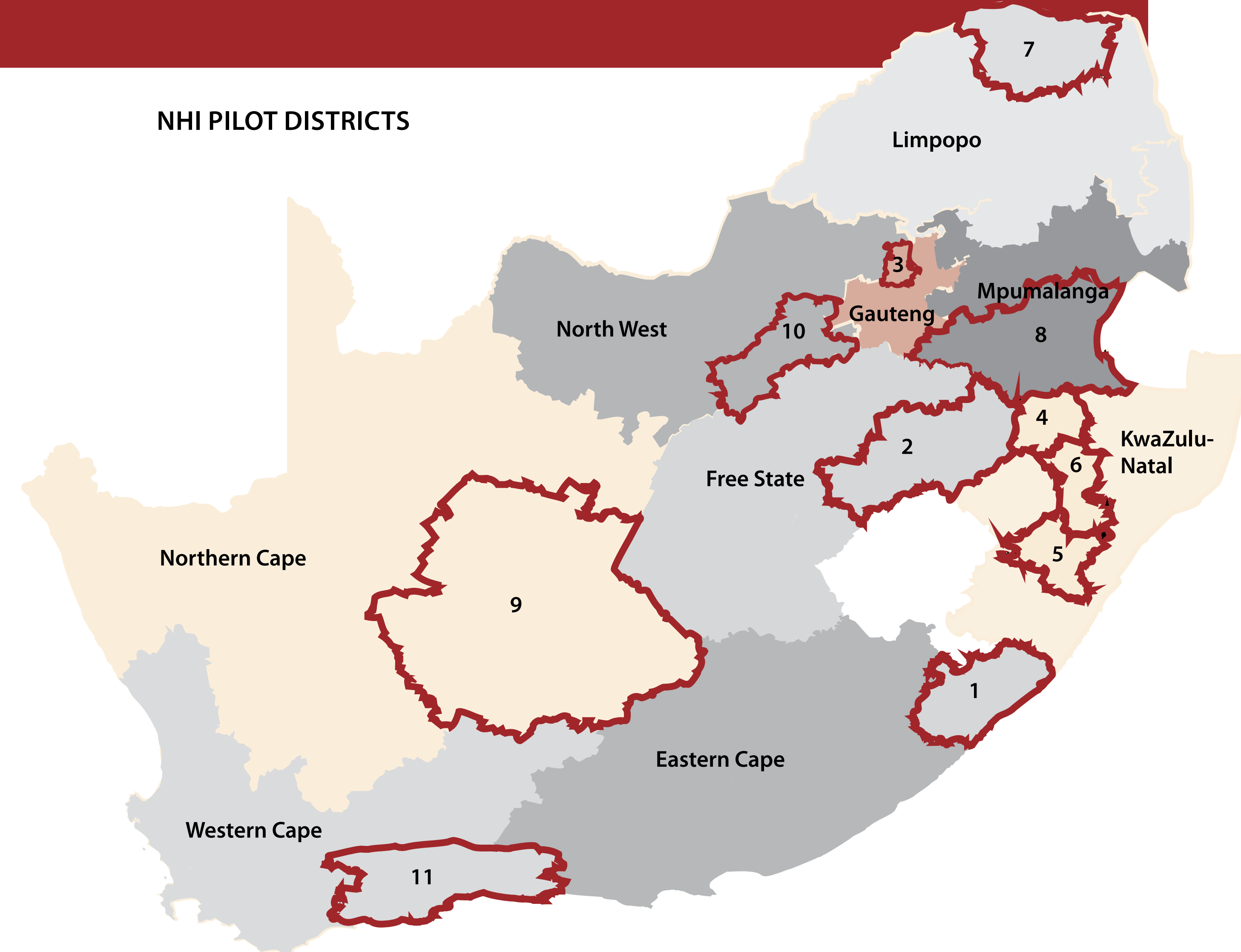


TABLE 2: NHI PILOT DISTRICTS

District	Population (2012)	Province
1. OR Tambo	1,754,499	Eastern Cape
2. Thabo Mofutsanyane	771,610	Free State
3. City of Tshwane	2,520,435	Gauteng
4. Amajuba	517,279	KwaZulu-Natal
5. uMgungundlovu	1,071,606	KwaZulu-Natal
6. Umzinyathi	517,806	KwaZulu-Natal
7. Vhembe	1,312,197	Limpopo
8. Gert Sibande	946,719	Mpumalanga
9. Pixley ka Seme	192,572	Northern Cape
10. Dr Kenneth Kaunda	905,675	North West
11. Eden	567,993	Western Cape

NHI pilot districts: In April 2012 the first wave of 11 pilot districts were announced. The districts are situated in every province and specifically in areas with high levels of under-served communities. (See Table 2) The specific aims of the district pilots are to:

- assess the ability of districts to assume greater responsibility with a 'purchaser-provider split';
- assess the feasibility, acceptability, effectiveness and affordability of engaging the private sector; and
- assess the costs of introducing a fully fledged District Health Authority and implications for scaling-up.

District NHI Business Plans provide an opportunity for 'bottom-up' learning and experience to inform central NHI-related policy and the rollout of reforms to other districts.[30]

Some additional funds have been made available through a conditional grant to catalyse initiatives to strengthen the district health system, to improve access to quality health services, to look for efficiencies, to improve health system performance, and to improve management of services. Links between the pilot districts and academic groups specialising in health systems and public health research are being encouraged to provide some rigour to the learning process. This work will inform national debate on the options and costs for establishing stronger management and accountability mechanisms at the district level through establishing District Health Authorities. Implementation will require considerable efforts to strengthen the capacity of existing district management teams and their oversight mechanisms in areas such as financial management, planning, monitoring, evaluation and contracting.

The service package to be offered under the NHI pilot sites: International experience on defining a package of services to be made available under the NHI has been carefully reviewed, and a starting point for SA is the Minister's agreement of a 'non-negotiable' set of services to be universally available.[31] The NDoH is now overseeing work to ensure that all these are adequately budgeted and provided for as part of the national and provincial support to districts.

NHI Conditional Grant

The NDoH has made available R150 million to develop new systems and capacities in pilot districts and central hospitals, provided through a new conditional grant as mentioned above. These grants will fund the implementation of 'NHI business plans' in all of the 11 pilot districts and average R11.5 million in each district.[30] The main purpose is to pilot and test new interventions required for the successful implementation of NHI so that those that are shown to work can be rolled out more widely. They will see a scale up of activities in 2013/14 including R300 million from the grant, and R450 million in 2014/15.[32] These grants include R5 million to strengthen revenue collection and related systems and test innovations around revenue retention and management in central hospitals.

Costing

Background work on two costing models was done prior to the release of the Green Paper. One was a costing model based on work by McLeod et. al.[33] who explored a range of alternative assumptions about the scope and efficiency of health service delivery. Using data from existing medical schemes with different kinds of benefit combinations, they estimated fully comprehensive benefits to cost R234 billion. However, costs varied hugely depending on the comprehensiveness of benefits included and the service delivery efficiency assumed, ranging from R78 billion to R334 billion. The Actuarial Society of South Africa (ASSA)[34] also developed a comprehensive costing model drawing on medical scheme data. They estimated that a comprehensive package, with efficiency savings, would cost R235 billion, similar to the previous model, but that it could be as high as R336 billion for NHI at full implementation in 2025/26, if modelled on the current private sector. The Treasury and the NDoH have now taken forward more detailed costing work.

Costing based on NHI Pilot Districts: The NDoH has commissioned a detailed costing exercise in the 11 NHI pilot districts to inform future planning. This will focus on the specific intervention requirements for each pilot district: including strengthening District (and sub-district) Management Teams and creation of District Health Authorities, comprehensive service benefits, strengthening health facilities, the three PHC streams, contracting private providers, emergency medical services, strengthened referral systems, and other preparatory activities related to specific district needs. The work is now underway and will be completed in the first half of 2013.

Green Paper model: The resource requirements for NHI set out in the Green Paper were derived from a model built on projected utilisation trends by five year age-group and average-unit costs. A revised version of these projections has been prepared by the National Treasury, based on more recent estimates of the costs of the NHI pilots and other reforms currently being implemented. Implicit in this projection is a partial shift over time from medical scheme coverage to NHI, as NHI becomes fully functional and citizens gain trust in the system, and the broadening of NHI coverage to include purchasing of some private services. This transition cannot be adequately modelled yet, as it depends on the NHI benefit design and medical scheme regulatory reforms that are both complex and inter-related.

Determinants of healthcare costs: There are broad similarities in the results of the costing models. However, a great deal of variation can be obtained by adopting alternative inputs and assumptions, providing insights into the future costs of NHI:

- Demographic projections: Changes in the population structure and its epidemiological profile significantly affect changing health needs, including a likely shift in the burden of disease from communicable to non-communicable diseases.
- Health inflation: Various factors tend to drive health sector costs above consumer price inflation – these include rising professional qualifications and remuneration levels, new technologies, new equipment and improved drugs.

NHI roads shows during 2012 (left to right) Qwa Qwa, Eastern Cape, Bethlehem, KwaZulu-Natal

Clinic nurses being trained to use the mobile monitoring system. Cofimvaba, Eastern Cape, August 2012.

- Utilisation changes: Hospitalisation and primary care visit rates tend to rise as incomes and education levels rise, but there is considerable variation internationally. There is scope for shortening lengths of stay in hospitals through improved case management, appropriate self-care and alternative options for complementary or alternative private provision.

- Benefit packages: A critical set of policy choices concerns what should be included in the universal service package and what should be excluded and might be covered through top-up benefits or insurance options.

- Unit costs of improved resourcing: It is recognised that public services need to be better resourced to improve quality, but there is also scope for better use of existing resources through use of appropriate referral rules, diagnostic and therapeutic protocols and rationing some procedures.

- Provider payment methods: International experience shows us that the way in which hospitals and medical service providers are paid influences both volume and price of services delivered. Costs can be contained through volume-based global budgets and case-load payments for hospitals, and through bundled capitation payments rather than fee-for-service charges for general practitioners and other primary care providers. However, this brings considerable complexity into the negotiation and management of alternative reimbursement arrangements and it will take time to implement payment reforms.

- Supply side constraints: Service delivery expansion will be limited over the medium term by capacity limits, including the availability of doctors and professional nurses, and the time needed for improvements in health infrastructure.

Conclusions from costing work: The design of an NHI system and the effective management of health financing reforms offer wide-ranging opportunities for containing costs and improving efficiency. A gradual and phased set of reforms is more favourable than a big-bang approach, with progressive re-evaluation as the country proceeds along the path to NHI.

Population registration

A partnership has been established with the Department of Science and Technology and consultations with the Council for Scientific and Industrial Research (CSIR) are underway on population enrolment for NHI and linkage to facilities. Considerable data is already available in the Department of Home Affairs (through identity documents) and public health facilities. A strategy for filling in gaps is being defined, which will then be piloted to learn lessons before agreeing a full acquisition strategy for a population register.[35]

Minister of Health meeting private sector GPs and members of District Clinical Specialist Teams at Dr Kenneth Kaunda District road show, North West province, March 2013.

Information Communication Technology

The NDoH recently launched its e-Health strategy to harness information communication technologies to help transform the health system.[36] This strategy aims to resolve the problems of the past, clearly articulated in the NSDA 2010-2014:

> Although large sums of money have been used to procure health ICT and Health Information Systems (HIS) in SA in the past, the ICT and HIS within the health system is not meeting the requirements to support the business processes of the health system thus rendering the healthcare system incapable of adequately producing data and information for management and for monitoring and evaluating the performance of the national health system. This results from the lack of technology regulations and a lack of policy frameworks for all aspects of infrastructure delivery.

The new strategy is based on a set of principles starting with getting the basics right (infrastructure, connectivity, basic ICT literacy, human resources and affordability planning). It proposes an incremental approach, building on what already exists and looking for early wins in implementations and benefits to build the confidence of health professionals, patients and the public. It aims to constantly evaluate and measure improvements in order to build an evidence base. National coordination will come through enabling integration between systems, enforcing common standards, norms and systems and establishing common data standards and terminology across information systems. A collaborative approach is required, which will leverage partnerships with the private sector, NGOs, other government departments, other country governments, and research organisations. Lessons globally show the importance of protecting information, confidentiality and patient privacy at all times and promoting information governance in order to use information better. Getting value for money is a key consideration, including consideration of available open source solutions. A key aim is to build the capacity and the systems to obtain official health statistics from a single official source and adhere to the established principles for national HIS information management. Another key principle is that the intellectual property ownership of public sector e-health initiatives should be vested in government.

Establishment of the NHI Fund

The pre-payment of all health services under the future NHI will be through a central fund, with its own management arrangements and governance mechanism. Work has now started on the different options for the roles, responsibilities and relationships of the future NHI funding body, building on considerable and well documented international experience.[37] Key to successful NHI implementation is the introduction of financial incentives to improve

performance, create efficiency gains and control costs. The future "purchasing" and provider payment systems should be linked to service delivery and management improvements. As for the options for funding the NHI, the Treasury is completing its work for the future NHI including consideration of a payroll tax (payable by both employees and employers), a higher value-added tax rate or surcharge on taxable income, or some combination of these. A paper will be available for comment and consultation later in 2013. Also, under the NHI, national procurements will become increasingly important to gain from efficiencies of scale, and a national unit has been set up to manage this.

Accreditation and contracting private providers

Under the future NHI, there will be a clearer delineation of functions, between those responsible for purchasing of services, and those many providers, both public and private, that can provide them. It will be several years before this 'purchaser-provider split' will be fully operational, but opportunities are already arising for exploring these new relationships.

Contracting General Practitioner services: From early 2013, the NDoH will start contracting approximately 600 private general practitioners (GPs) to provide services in the 11 pilot NHI districts. They will be located in facilities for communities that are currently under-served. The GPs will provide services that enhance the current PHC model including:

- health promotion and preventative care, focusing on non-communicable diseases, maternal child health, HIV and TB;
- personal curative services for patients referred by the PHC nurses, ward-based PHC agents and school health teams;
- ensuring effective chronic disease management based on a chronic disease patient record;
- support to antenatal and postnatal care services as determined by the clinical protocols; and
- clinical governance including training and capacity building of the PHC team.

Future phases of this work will focus on locating GPs in clinics where there is currently insufficient space by expanding infrastructure and options for licensing and accrediting existing GP practices under the NHI.

GP contract model: A new national contract model has been developed in collaboration with national and international experts in this area. The national contract will allow for a basic rate as for now, with allowances for the experience of the GP, the amount of travel, working in rural areas, and additional incentives for working in very deprived areas. In addition there will be performance incentives both financial and non-financial such as for Continuing Professional Development. These performance agreements will be agreed locally with oversight from the family physicians in the DCSTs. Initially they will cover basic activity data and simple measures of quality, such as quality of case records, referrals and adherences to HIV, TB and maternal child health protocols as judged by a regular review of case records by members of the DCSTs. The initial agreement will include an upfront commitment to move to more sophisticated performance assessments in future years, focusing on areas such as risk assessments (e.g., smoking activity and alcohol consumption), and finally on outcomes (e.g. the percentage of diabetic patients with blood pressure values under 140/90). GP academic centres in KwaZulu-Natal, Gauteng and the Western Cape will provide the induction and orientation programme for newly contracted GPs, in line with current programmes being used for DCSTs.

Challenges, risks and their mitigation

Consultation and communication: As the quality of public sector services improves, more people and employers are expected to use these facilities. This will have implications for the sector as a whole, requiring further analysis and consultation. Similarly, continued consultation will be required with the various health professions to better understand the implications of more services being required from medical specialists, GPs, and other health professions. Whilst the preparatory work for NHI is now well established, there is still much to be debated. The publication of the NHI White Paper will provide an opportunity to discuss the vision of the NHI and its implications with a wide range of stakeholders. Within districts more emphasis must be placed on discussing the NHI with local communities to better understand local needs and to help ensure expectations are consistent with future NHI plans and timetables.

Harnessing cost-effective health technology: Breakthroughs in technology can improve outcomes and make the delivery of services more efficient, but can be a key driver in raising the cost of services. A policy and institutional mechanism is required to assess the cost effectiveness of new health technology and make recommendations for inclusion or not in NHI-funded services. This will then need to be backed up by appropriate legislation. Collaborations in this area are being explored with other countries, such as with the United Kingdom's National Institute for Health and Clinical Excellence.

Making change happen: As with all major public sector reforms, changing the way districts and central hospitals function in the pilots will be difficult at first. The district work will now be overseen by senior Facility Improvement Project Managers in each province, reporting directly to the Head of Provinces and the NDoH. Once these project managers are all in place, implementation of the NHI business plans in each district should become easier, with more coherent and continuous oversight and supervision.

Building up our knowledge on what works: The experience of other major health sector reforms, such as in China and Mexico, have shown the importance of embedding evaluation, monitoring and assessment into the reform process. The slogan 'experimentation, evaluation, expansion' has been used by the current Minister of Health of China to summarise their approach to reform, which is happening on a large scale and parallels many of the challenges faced in SA.[38] Learning from experience is critically important using the milestones from countries that have successfully reached Universal Health Coverage such as Brazil and Thailand and also form the monitoring, evaluation and operational research of the South African NHI pilot sites.

Retaining the focus on equity: Experience in many other countries shows that health reforms often do not benefit those for whom they are intended.[39] A continued effort will be required to ensure that those who are currently under-served, such as in informal settlements and deep rural areas, get specific attention.

Way forward

SA is building a better understanding of what NHI is and why it must be implemented. There will likely remain many who question the policy for good and bad reasons, so continued consultation and dialogue by all players in society will be essential. The NDoH has agreed on a timetable for implementing the NHI, which is ambitious by international standards, but definitely possible. This review has shown that there has been good progress in many areas but in others there is still considerable work to be done. It will take time for these major changes in the financing and delivery of services to impact on people's lives. Expectations of what will happen and when need to be carefully managed. As SA prepares to launch the White Paper on the introduction of the NHI, we are confident that we are on the right track. Universal coverage is no longer a dream for SA and if all players work together it will become an increasing certainty.

References

1. Minister of Health. National Health Insurance in South Africa Policy Paper. Government Notice 657. Government Gazette No. 34523, 12 August 2011.

2. Fonn S, Padarath A, editors. South African Health Review 2010. Durban: Health Systems Trust; 2010.

3. Padarath A, English R, editors. South African Health Review 2011. Durban: Health Systems Trust; 2011.

4. National Department of Health. National Health Insurance Conference: Lessons for South Africa. National Consultative Health Forum (NCHF); 7-8 December 2011; Johannesburg, South Africa.

5. The Lancet. Mexico: Celebrating universal health coverage. The Lancet. 2012;380(9842)622.

6. Savedoff WD, de Ferranti D, Smith Al, Fan V. Political and economic aspects of the transition to universal health coverage. The Lancet. 2012; 380(9845):924-32.

7. National Department of Health. Policy on the management of public hospitals. Pretoria: National Department of Health; 2011.

8. National Department of Health. Uniform patient fee schedule for paying patients attending public hospitals. Pretoria: National Department of Health; 2009.

9. National Task Team for the Implementation of ICD -10. South African ICD-10 Coding Standards. Version 5. Pretoria: National Department of Health and Council for Medical Schemes; February 2012.

10. Australian Institute of Health and Welfare (AIHW) 2012.National health data dictionary 2012, version 16. Cat. no. HWI 119. Canberra: AIHW; 2012.

11. Minister of Health. National Health Amendment Bill (Bill 24 of 2011). Government Gazette No. 34739, 8 November 2011.

12. Health Systems Trust.Project: National Health Facility Audit (Baseline Audit) [internet]. 2012 [cited 26 Feb 2013]. URL:http://www.hst.org.za/content/project-national-health-facility-audit-baseline-audit

13. National Department of Health. Quality improvement guide: Quality improvement – the key to providing improved quality of care. Pretoria: National Department of Health; 2012.

14. Macinko J, Marinho de Souza Mde F, Guanais FC, da Silva Simões CC. Going to scale with community-based primary care: an analysis of the family health program and infant mortality in Brazil, 1999-2004.MacinkoJSocSci Med. November 2007;65(10):2070-80.

15. Knaul FM, González-Pier E, Gómez-Dantés O, García-Junco D, Arreola-Ornelas H, Barraza-Lloréns M, et al. The quest for universal health coverage: Achieving social protection for all in Mexico. The Lancet. 2012;380(9846):1259-1279.

16. World Health Organization. The World Health Report 2008. Geneva: World Health Organization; 2008.

17. Mayosi BM, Lawn JE, van Niekerk A, Bradshaw D, Abdool Karim SS, Coovadia HM. Health in South Africa: Changes and challenges since 2009. The Lancet. 2012;380(9858): 2029-43.

18. Pillay Y, Barron P. The implementation of PHC re-engineering in South Africa. Public Health Association of South Africa [internet]. 15 November 2011. [cited 26 February 2013]URL:http://www.phasa.org.za/articles/the-implementation-of-phc-re-engineering-in-south-africa.html

19. Ministerial Task Team. District Clinical Specialist Teams in South Africa: Report to the Honourable Minister of Health, Dr Aaron Motsoaledi. Pretoria: National Department of Health; July 2012. URL:http://www.doh.gov.za/docs/reports/2012/District_Clinical_Specialist_Teams_in_South_Africa_Report.pdf

20. World Health Organization. Community health workers: What do we know about them? The state of the evidence on programmes, activities, costs and impact on health outcomes of using community healthworkers. Geneva: World Health Organization; 2007.

21. National Departments of Health and Basic Education. Integrated School Health Policy. Pretoria; National Departments of Health and Basic Education; 2012.

22. National Department of Health. Human Resources for Health South Africa. HRH strategy for the health sector: 2012/13-2016/17. Pretoria: National Department of Health; 2011.

23. World Health Organization. Workload indicators of staffing needs (WISN): User Manual. Geneva: World Health Organisation; 1999.

24. Minister of Health. Launch of the Academy for Leadership and Management in Health Care [internet]. 6 October 2012. National Department of Health [cited: 26 February 2013] URL:http://www.doh.gov.za/show.php?id=3806

25. National Department of Health. Strategic plan for nursing education, training and practice 2012/13 to 2016/17. Pretoria; National Department of Health; 2013.

26. National Department of Health. Negotiated Service Delivery Agreement. A long and healthy life for all South Africans. Pretoria: National Department of Health; 2010.

27. National Department of Health. Health Data Advisory and Co-ordination Committee report 2012. Pretoria: National Department of Health; 2012.

28. National Department of Health. District health management information system policy. Pretoria: National Department of Health. 2011.

29. South Africa Executive Leadership Programme in Health (SAELPH) [cited 26th February 2013] URL:https://www.sapartners.org/what-we-do/education/93-south-african-executive-leadership-program-in-health-saelph.html

30. National Department of Health. Business plans for the NHI conditional grant. Pretoria: National Department of Health; 2012.

31. Minister of Health. Presentation on NHI pilot districts [internet]. 22 March 2012. National Department of Health. [cited 26 February 2013] URL:http://www.doh.gov.za/docs/presentations/2012/nhipilot.pdf

32. Blecher M. National Treasury: Financing NHI and Pilot Districts. GEMS Annual Symposium 2012; 15-16 August 2012; Sandton, South Africa. National Treasury; 2012.

33. McLeod H, Grobler P, van der Berg S. Preliminary Estimate of NHI Costing in 2009 Rand Terms. McLeod-Grobler-Van der Berg Model Methodology and Assumptions. A briefing paper prepared for National Treasury; 18 February 2010

34. Actuarial Society of South Africa. Discussion Document: Burden of Disease. Actuarial Society of South Africa NHI Model; 8 March 2010.

35. Council for Scientific and Industrial Research. Information and Communications Technology in support of NHI. 4th Biennial Conference. Mathew Chetty. 9th October 2012 [cited 26th February]. URL:http://www.conference2012.csir.co.za/sites/default/files/ICT%20for%20NHI%20CSIR%20Conference%202012%20-%20Matthew%20Chetty.pdf

36. National Department of Health. e-health strategy. Pretoria; National Department of Health; 2012.

37. McIntyre D. What healthcare financing changes are needed to reach universal coverage in South Africa? South Afr Med J2012;102:489–90.

38. Eggelston K. Health care for 1.3 billion: An overview of China's health system. Asia Health Policy Program working paper # 28. Stanford, California: Stanford University; 9 January 2012.

39. Gwatkin DR, Wagstaff A, Yazbeck AS. Reaching the poor with health, nutrition and population services: What works, what doesn't and why. Geneva: World Bank; 2005.

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