THE LANCET

Health in South Africa

An Executive Summary for *The Lancet* Series

A nation and a health system under extra pressure from a quadruple health burden, requires extraordinary effort. South Africa has many of the essential ingredients in place to save hundreds of thousands of lives – will we act in time?

Executive Summary

The extensive research and analysis conducted for *The Lancet* "Health in South Africa" Series provides a detailed assessment of the country's health status and health system. Written by a group of South African researchers, physicians, public health specialists, and care providers, the six papers[1-6] and six linked comments[7-12] examine the historical roots of current health challenges, present an overview of the burden of disease in South Africa, and identify priority interventions and actions. This Series culminates in a call for action for the South African Government, for universities, training institutions, health councils, researchers, and civil society. Everyone has a part to play and we all must work together to strengthen the health care system in South Africa - strong leadership and stewardship are critical.

Key messages from *The Lancet* South Africa Series

1. **P**roblem of colliding epidemics: 15 years after its first democratic election and liberation from apartheid, South Africa faces colliding epidemics – explosive HIV and TB epidemics, a high burden of chronic illness, mental health disorders, injury and violence-related deaths as well as a silent epidemic of maternal, neonatal, and child mortality. South Africa's per capita health burden is the highest of any middle-income country in the world. The brunt of all these disease burdens is still carried by the poorest families.
2. **P**aradox of supportive policies with moderate spending on health, yet worsening health outcomes. The extra health burden means more investment in health systems, at least in the medium term, and more effective implementation and effective management at all levels is needed.
3. **P**ressure on the health system, especially at district level to cope with the heavy burden of disease. There is also a disconnect between the public and private sectors. The priorities are:
   - prevention - whether for infections (notably HIV and TB), non-communicable diseases, injury, or for maternal, neonatal and child health (especially prevention of mother-to-child HIV transmission [PMTCT] and improved newborn health).
   - primary health care that is integrated and effective with strong management and capable use of data.
   - practising widespread scale up of successful innovations and relevant and rigorous clinical research.
4. **P**otential for change: South Africa could be on track for the Millennium Development Goals (MDGs) and reduce other epidemics with strategic investment, implementation, leadership and accountability for public and private sectors. Civil society has been key in promoting action for HIV/AIDS and could play a more powerful role for the wider health agenda in South Africa.

Historical roots of current public health challenges in South Africa[1]

As part of a young democracy, the health system is struggling to cope with the collision of four excessive health burdens: communicable disease (especially HIV/AIDS), non-communicable disease, maternal, neonatal and child deaths, and deaths from injury and violence. These current health problems are rooted in distinctive features of South African colonial and apartheid history that divided citizens according to race and gender. The migrant labour system resulted in dispossession and impoverishment of the majority black population and contributed to many of the major current health problems through social changes which led to destruction of family life, alcohol abuse, and violence, particularly gender-based violence. Vast income inequalities resulted from the cumulative effects of wide ranging discrimination and an array of racially-based legislation.

Photo: Peter Magubane/UN

Since the end of apartheid in 1994, the new democratic government has taken some bold steps to improve the status and health care of its citizens, undertaking redistribution of resources between geographic areas and establishing pensions and social grants. The fragmented public health service was consolidated into one South African health care system, shifting the focus towards primary health care. Most successful health programmes in the past 15 years have arisen from centrally regulated approaches (e.g. tobacco control, food fortification, drug pricing), contrasting with suboptimal progress in implementing other critically important policies that require health system capacity. Particularly in the case of HIV/AIDS, denialism and failures in leadership have led to unnecessary loss of life and a runaway epidemic. Political and economic instability in neighbouring Zimbabwe has had a direct effect on health and service provision in South Africa as well as in Zimbabwe.

Major inequities remain within South Africa – there is huge variation in health status and health service access across the nine Provinces, and even between communities who live next to each other. For example, only 14% of citizens are able to access the private health care sector, and yet they benefit from up to 60% of national health expenditure. Despite enthusiastic support from the international community, and a relative abundance of resources, progress in South Africa has faltered because of a lack of leadership and a failure of equitable implementation. Large proportions of the population remain impoverished, disappointed, and without access to quality health care services.

The new administration, installed in April 2009, has the mandate and potential to address the public health emergencies facing the country—will they do so or will another opportunity and many more lives be lost?

Progress for health in South Africa[1,6]

15 years after the first democratic election, this young nation has made some progress towards several intersectoral goals such as primary school enrollment and gender parity in education. However progress has been insufficient or even reversed for many of the health Millennium Development Goals (MDGs). Since 1994, life expectancy has fallen by almost 20 years – mainly because of the rise in HIV-related mortality. Average life expectancy at birth is only 50 years for men and 54 years for women.

MDG 4 target to reduce child deaths by two-thirds is currently off track with child mortality rates having risen since the baseline in 1990 (Figure 1).

For the MDG 5 target of reducing maternal deaths by three-quarters, there has been no measurable progress. Interlinked goals, such as reducing the prevalence of underweight children under-5 years have also been thrown off track. HIV prevalence among young people, a target for MDG 6, rose dramatically in the late 1990s, coinciding with the time when MDG 4 and 5 went off track (Figure 1). HIV has contributed significantly to the insufficient and reversal of progress for the MDGs. Encouragingly, HIV prevalence seems to have reached a plateau but the legacy is 5.5 million South Africans currently living with HIV/AIDS.

While non-communicable disease and deaths relating to injury and violence are missing from MDG targets, these health burdens are also unusually high in South Africa and need to be systematically tracked and addressed.

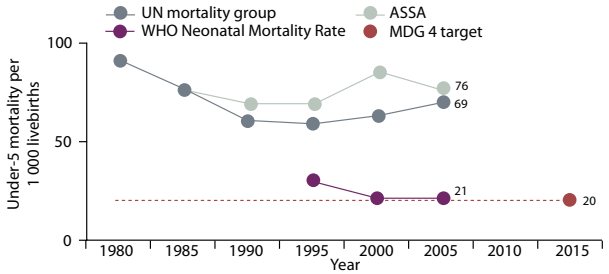
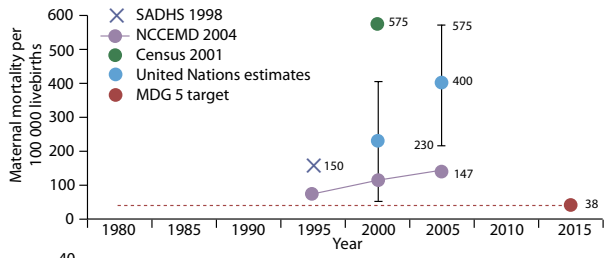
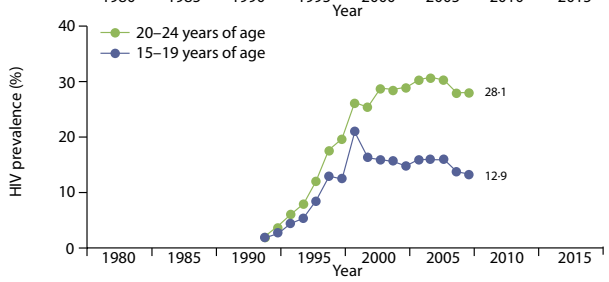
Millennium Development Goals	Progress in South Africa	On track?
1 Eradicate extreme poverty and hunger	Prevalence of underweight children under 5 years: 12% (2000–06); target ≤5% Mean reduction in prevalence per year: –6% (1990–2006); target 2 to 6%	Reversal of progress
2 Achieve universal primary education	Net enrolment in primary school: 87% (2000–06); target 90% (no measurable change, close to target)	Insufficient progress
3 Promote gender equality and empower women	Gender parity ratio (from girl–boy ratio for net enrollment in primary school): 1·0 (2000–06); target 1·0	On track
4 Reduce mortality of children under 5 years of age (target two-thirds reduction 1990–2015)		Reversal of progress
5 Improve maternal health (target three-quarters reduction of maternal mortality per 100 000 livebirths 1990–2015)		No progress
6 Combat HIV, AIDS, malaria, and other diseases	 Data sources: United Nations databases including UNICEF's State of the World's Children 2009, UNICEF progress for Children, Dec 2007, South Africa Demographic Health Surveys, National Confidential Enquiry Maternal Deaths (NCCEMD), South African Census 2001, Actuarial Society of South Africa (ASSA).	Insufficient progress
Non-communicable disease	Mortality related to non-communicable disease is 270 and 180 per 100 000 population for men and women respectively (2002-05), an increase from 209 and 172 respectively in the early 1990s.	No relevant MDG target but data available
Violence and injury	Overall injury death rate of 157.8 per 100 000, twice the global average; homicide rate of 38.6 per 100 000 population with highest rates among men aged 15-29 years (184 per 100 000 population)	No relevant MDG target but data available

Figure 1: **South Africa's progress since 1990 for achieving the Millennium Development Goals by 2015 and addressing the burdens of non communicable disease and injury and violence[6]**

A health system under extra pressure requires extra-ordinary effort

Maternal, newborn and child health (MNCH) (paper 2)[2]

Status: South Africa is off track for achieving MDG 4 and 5 for reducing child and maternal mortality – an "old epidemic". Each year almost 75,000 children die – 23,000 in their first 4 weeks of life. An additional 23,000 babies are stillborn and closely linked to 1,660 maternal deaths. The major causes of maternal death are direct obstetric causes and HIV/AIDS, which increases the risk of maternal death ten-fold. The most common causes of child death are neonatal (over 30%) and HIV/AIDS. South Africa has the ability to address all of these.

Supportive policy: Despite supportive policies, and high coverage of key packages, the unaddressed burden of HIV/AIDS and poor implementation of existing MNCH packages are the main factors that explain the lack of progress towards the MDGs. National MNCH mortality audit data show that the majority of deaths were linked to avoidable factors such as poor use of health care facilities by patients, transport, and the poor quality of care by health care providers.

Systems: Strengthening the health system to achieve full coverage of key packages of interventions such as treatment and prevention of HIV and provision of comprehensive maternal and newborn care would put South Africa on track to achieve MDG 4, and make substantial progress towards MDG 5. Each year 37 200 children could be saved through improving coverage of the prevention of mother-to-child transmission programme and safer infant feeding practices and 11 500 newborns through effective maternal and newborn care.

Solution: Achieving high coverage of priority MNCH interventions is financially feasible, requiring a 2.4% increase in expenditure, but the key is to spend this strategically, especially in district hospitals where 42% of births occur yet avoidable causes of death are highest. Strengthening of leadership, accountability mechanisms and quality of care interventions are also required.

Non-communicable disease (paper 4)[4]

Status: This "new epidemic" of diabetes, cardiovascular disease, cancers, kidney disease and mental illness is disproportionately heavy for the urban poor (two-fold risk compared to the rich) and increasingly affecting rural communities. Major factors include demographic change leading to a rise in the proportion of people older than 60 years, despite the negative effect of HIV/AIDS on life expectancy. Obesity is an increasing problem in South Africa especially for low-income women. Occupational exposure is also important especially for chronic lung disease.

Supportive policy: There have been policy successes, notably for tobacco control, where South Africa has been a global leader. National guidelines for specific non-communicable diseases were published in 2006. There are also specific enabling policies, for example, for essential drugs. The Mental Care Act (2002) has also been a key advance, but implementation is lagging.

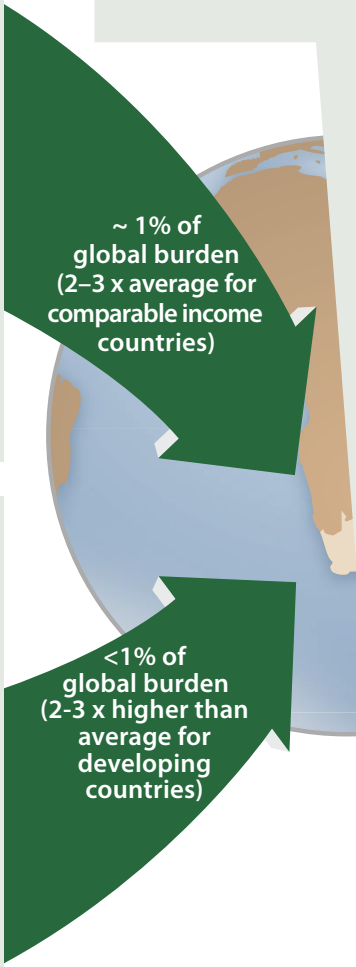
Systems: Prioritisation of key cost effective interventions to include in primary care at high coverage, and effective links to higher level care are critical. The efforts of national and provincial health departments, other non-health sectors, and non-governmental organisations are currently not well harmonised.

Solution: Integration of services at a primary care level, including communicable, non-communicable, and MNCH services, is crucial, as is moving from provider-centred to patient-centred care. Barriers to prevention and care are wider than the health system, and a foundational issue is the need for better data for decision making.

South

48 million people

0.7% of the world's population



Health system status

Human Resources (HR)[1]

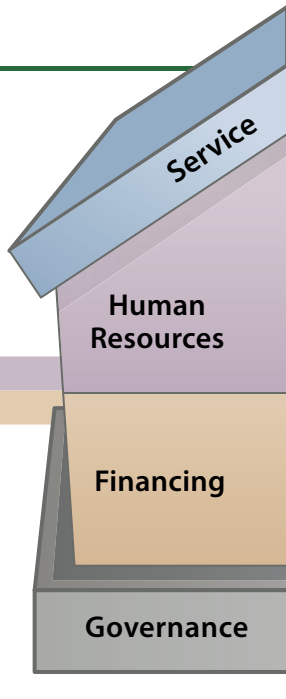
Density of physicians, nurses, and midwives per 1,000 population = 4.9 (2004)
WHO standard = 2.5

BUT, challenges include:
Urban/rural mismatch
79% of doctors work in private sector
Provincial variation of public sector doctors (15-41%)
Brain drain

Financing[1]

Health spending per capita = US$748
WHO standards = above $45
Percentage government spending on health as proportion of total government expenditure = 10.8%
Abuja Target = 15% of government resources
Out-of-pocket expenditure as percentage of total health expenditure = 10.3%

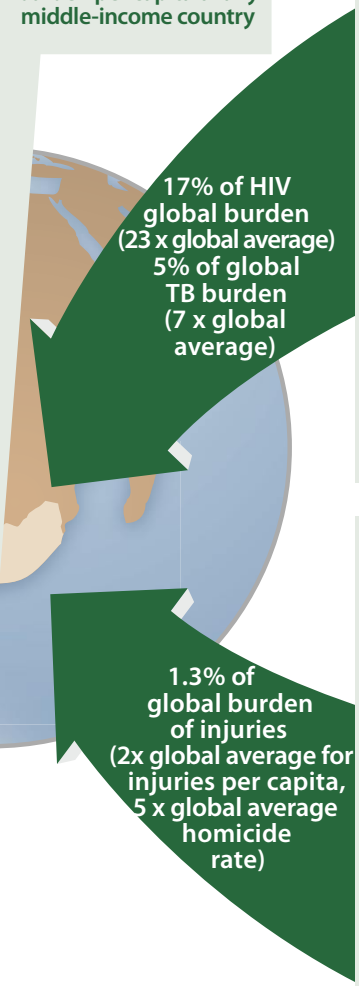
BUT:
Private sector covers 14% of the population, but 60% of the cost
Provincial variation of population covered by medical schemes (9-28%)



Africa

Twice the global average per capita burden of ill-health (DALYs)

The highest health burden per capita of any middle-income country



HIV/AIDS and Tuberculosis (TB) (paper 3)[3]

Status: Conditions were ripe for South Africa's newest epidemics; the intertwined HIV and TB epidemics. With only 0.7% of the world's population, South Africa has 17% of the world's HIV/AIDS cases - 5.5 million people - and the greatest HIV/AIDS burden of any country. This burden is closely linked with an epidemic of TB that has more than doubled since 2001 with significant numbers of multi-drug resistant TB cases and increasing XDR TB - sure signs of a health system that cannot cope. Although TB case notifications have risen four-fold between1986-2006, many cases are still missed. KwaZulu-Natal province is hardest hit with an HIV prevalence of 39.1% and a TB notification rate of 1066 per 100 000.

Supportive policy: Denialism, stigma, and leadership failures led to missed opportunities and loss of lives. Since 2003, free antiretroviral therapy (ART) has been provided in public health services. Had this policy been adopted in 2000, an estimated 330 000 lives could have been saved. More progress is being made now with a comprehensive National Strategic Plan for HIV/AIDS, and increasing coverage of ART. The key gap is implementing the policies well and integrating the HIV/AIDS services with TB services and also with the wider primary health care system.

Systems: There are health system successes – including linkages with private sector – but the huge load on the health system will increase as HIV transits to becoming a chronic disease, risking rising costs of a predicted 1.5 million people on ART and more complex and expensive regimes. HIV/AIDS and TB will increasingly become chronic diseases requiring lifelong treatment and care.

Solution: Action and accountability are foundational. There are four implementation steps to prioritise: (1) HIV prevention especially for adolescent girls; (2) ART roll out at high coverage and adherence; (3) TB control through improved active case finding and cure rates and (4) social mobilisation for wide-scale public health action.

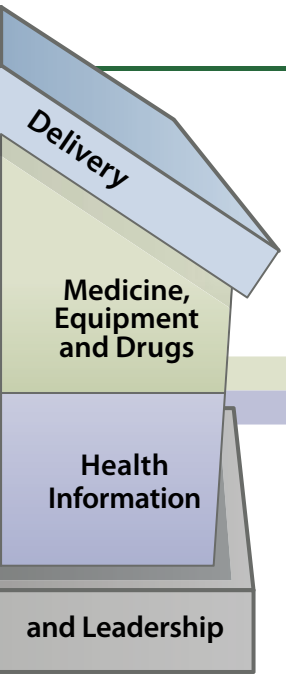
Violence and injury (paper 5)[5]

Status: Violence and injuries together form the second leading cause of death in South Africa. The injury death rate is almost double the global average and nearly half of the injury deaths are from interpersonal violence, mostly between men. About 16 000 road traffic accident deaths occur each year. Gender-based violence is especially high, with the female homicide rate six times the global average, and 50% of these women are killed by partners. 28% of men admit to have raped. Children are also exposed to sexual, physical, and emotional abuse and neglect.

Supportive policy: The roots of violence and injury have many causes including: high levels of poverty and unemployment; constructions of masculinity esteeming toughness and defence of honour, which result in men being both perpetrators and victims of violence; alcohol consumption and drug use; and widespread availability of firearms. These factors are compounded by weak law enforcement.

Systems: There have been successes in social mobilisation in areas such as violence against women, but much more needs to be done. Evidence-based prevention interventions such as gun control exist but need to be widely implemented. Political leadership and commitment are key.

Solution: Coordinated action is essential. Barriers to prevention and care are wider than the health system – progress requires development and implementation of a comprehensive, national, intersectoral, evidence-based action plan.



Medicine, Equipment, and Drugs

Relatively good network of facilities
Beds: 88,000 beds in public facilities
29,000 in private facilities
Equipment: limited data
Drugs: Essential drug list implemented
Facilities with STI medicine out of stock = 13% (range of 2.4% to 24% by province)

BUT often not integrated especially for district planning

Health Information[2]

Relatively good data, not all representative and/or used

Mortality audit
- Maternal confidential inquiry (84% of births)
- Perinatal audit (40% coverage)
- Child audit (over 10% and increasing)

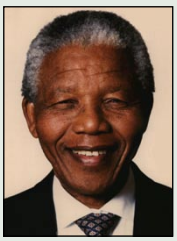
District information (district barometer) available -

BUT how many districts have usable data and how many use the data?

Governance and leadership as a critical foundation for future health[6]

Progress in South Africa has faltered because of serious failures in leadership. Health workers, researchers, citizens, and the newly installed government administration need to work with each other with renewed commitment to the progressive realisation of socioeconomic rights, including the right to health for all citizens. Redistributive growth, imaginative social policies, and more focus on health promotion are key for improved national health status. Leadership and stewardship on the national, provincial, and district level are crucial solutions for a better health system.

Compelling scientific evidence, global experience, and best practices have identified a range of priority actions for re-organisation of the health system, attainment of equity, and removal of social and economic barriers to good health and development to allow district-based services to reach the poorest families. With renewed commitment and implementation of the identified priority actions to address each of these four colliding epidemics, the country still has the potential to achieve the MDGs and make substantial progress in reducing other major health burdens nationally.



Nelson Mandela

"In the face of the grave threat posed by HIV/Aids, we have to rise above our differences and combine our efforts to save our people…The challenge is to move from rhetoric to action, and action at an unprecedented intensity and scale. There is a need for us to focus on what we know works."
(Nelson Mandela speech, closing the 13th International AIDS Conference in Durban, 2000)

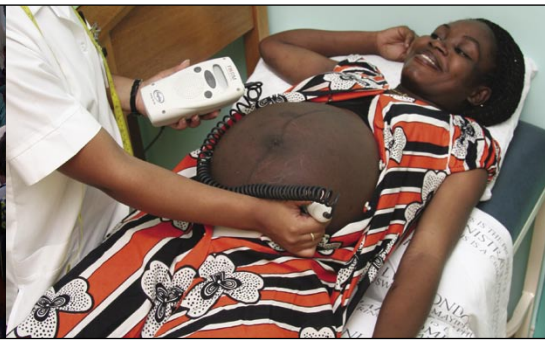
South Africa's Minister of Health: Dr. Aaron Motsoaledi

"The public health system is forced to carry the ever increasing burden of diseases, obviously made worse by poverty, HIV and AIDS, and other communicable diseases. ...Let me accept and acknowledge upfront that some of the factors contributing in no small measure to the problems the health system is carrying, are the following: lack of managerial skills within health institutions; failure to cut on identified deficiencies; delayed response to quality improvement requirements; unsatisfactory maintenance and repair services; poor technological management; poor supply chain management; inability of individuals to take responsibility for their actions; poor disciplinary procedures and corruption; significant problems in clinical areas related to training and poor attitude of staff; and lastly inadequate staffing levels in all areas. We are going to be facing all these issues head on and we will do so without fear and favour. We owe it to our country that these issues be tackled head on."
(Excerpt from Minister Aaron Motsoaledi's Budget Speech, 30 June 2009)

The *Lancet*[7]

"South Africa is a young democracy with pride and hope, and above all with high expectations for a fair, equitable, and peaceful society. Its people deserve a healthy future."
(Sabine Kleinert and Richard Horton, Lancet 2009)[7]





Photos courtesy of Marilyn Keegan, COHSASA/Photoshare, 2005; CAPRISA; Chris Taylor/Save the Children, 2008

Call to action

We urge the South African Government to:

- Restate commitment towards achievement of all MDGs, and make this target a focus of the planning commission to ensure multisectoral actions to address the social and environmental determinants of health
- Reaffirm the comprehensive primary health-care system as the framework for achievement of health for all
- Implement all provisions of the National Health Act (2004), including the development of a decentralised district-based primary health-care system, and establishment of structures for community accountability
- Substantially scale-up HIV prevention actions
- Openly discuss options for health funding with special attention to antiretroviral treatment and national health insurance
- Increase resources for training and retention of health workers in the public sector
- Strengthen surveillance, monitoring, and assessment of public health programmes, with special attention to inequalities
- Link together and benchmark financial and health indicators to ensure cost-effective use of resources
- Ensure increased accountability of policy makers, managers, and health personnel at all levels by strengthening participatory structures and establishing a strong culture of service
- Provide inclusive leadership that engages with all stakeholders

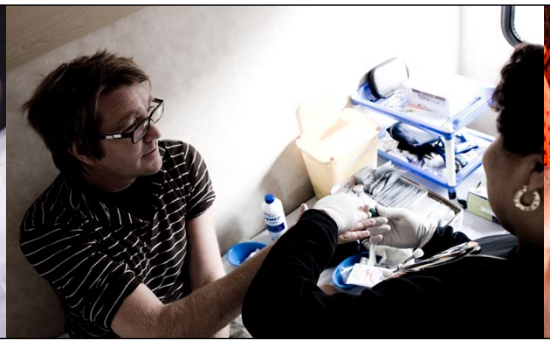
We urge universities, training institutions, health councils, and researchers to:

- Restate commitment to a person-centered comprehensive primary health-care system, and take action to reorder priorities within institutions
- Accelerate production of fully trained nurses and mid-level health workers
- Review training programmes for medical specialists to provide an effective service for the public sector, with increased support for generalist doctors and peripheral facilities
- Review curricula for training of health workers to work in a system focused on primary health care
- Increase resources for research to support implementation and assessment of health interventions
- Increase the priority of actions to address countrywide inequities

We urge civil society to:

- Ensure governance and accountability at all levels of the system (envisaged in the National Health Act) by active participation in clinic committees, hospital boards, and district, provincial, and national health forums
- Strengthen comprehensive primary health care by advocating integration of social determinants of health in programmes and polices
- Engage with communities and their structures during all stages of planning and implemention of primary health-care programmes
- Engage in employment practices that ensure long-term sustainability of the health system
- Support improved working conditions for health personnel in the public sector
- Ensure that provincial and district AIDS councils are established and function effectively
- Use their resources to complement the efforts of the formal public health system

Seize the moment, translate policy into practice, strengthen service delivery, secure health while confronting disease, and save the future.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