ZERO DRAFT
27 September 2016

COVER NOTE

The zero draft of South Africa's next National Strategic Plan on HIV, TB, STIs is being shared for review and comment in the midst of ongoing national consultations and consideration by technical working groups. This version is informed by consultation and research to date, while remaining open to forthcoming inputs. The content is not comprehensive nor is it finalised; key targets and priority actions are still being discussed. This is a strategic document, with detailed thematic monographs which will accompany the final product. Operational and implementation plans will be developed at a later stage. The NSP development team welcomes feedback of any kind on the zero draft at this stage.

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7 MILLION

people living with HIV (the largest epidemic in the world)

3.4 million people accessing antiretroviral therapy (ART)

HIV PREVALENCE OF 19% AMONG ADULTS (15-49)

290,000

290,000 new HIV infections a year

HIV PREVALENCE AMONG PREGNANT WOMEN HAS HOVERED AROUND 30% SINCE 2004

89% OF PREGNANT WOMEN LIVING WITH HIV ALSO HAVE HSV-2 (HERPES SIMPLEX VIRUS)

ONLY 60% OF PEOPLE LIVING WITH HIV KNOW THEIR STATUS

NEARLY 20%

OF SEX WORKERS IN CAPE TOWN HAVE SYPHILIS

13-49%

HIV PREVALENCE AMONG MEN WHO HAVE SEX WITH MEN RANGES FROM 13-49%

OVER 1/3 OF MSM REPORTED RECENT SYMPTOMS OF A SEXUALLY TRANSMITTED INFECTION

TIPPING POINT REACHED:

For every new adult HIV infection, **1.4 people are initiated onto treatment.**

TIPPING POINT NOT REACHED:

For every new child initiated on HIV treatment, there are **1.4 new infections**

150,000

AIDS-related deaths a year. **¼ OF ALL DEATHS** in South Africa.

450,000 NEW TB INFECTIONS A YEAR, including 270,000 in people living with HIV

TB INCIDENCE: 834 CASES PER 100 000 POPULATION

THE NUMBER OF MULTI DRUG-RESISTANT TB (MDR-TB) CASES HAS DOUBLED - FROM 7350 CASES IN 2007 TO 14,161 IN 2012

TB IS THE LEADING CAUSE OF DEATH in the country, accounting for 8.4% of all natural deaths.

72% of sex workers in Johannesburg are living with HIV

Acronyms and Abbreviations
Glossary of Terms

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Preface
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Introduction: Laying the Foundation for Ending the Epidemics
"Towards Elimination by 2030"

i. Remarkable achievements with much left to do

The average South African lives nearly a decade longer today than they did in 2004. This remarkable progress is due in large part to the country's committed response to the HIV epidemic, and related health issues including TB, STIs and sexual and reproductive health. HIV treatment coverage has more than doubled since 2010 and new infections have declined by about 20% since 2003. The cure rate for pulmonary TB has leapt from 57.6% in 2005 to 82.5% in 2015. Yet, South Africa had an estimated 288,000 new HIV infections in 2015, a quarter of all new infections globally.[1] TB remains a national crisis, replacing HIV as the leading cause of death. Up to 50% of potential TB patients remain untreated. High rates of chlamydia, syphilis and bacterial vaginosis exist among young women and sex workers.[2] While our gains are commendable, this is no time for complacency.

South Africa has come a long way since first NSP was published for the period 2000 – 2005 during which time the country was plagued by controversy. The NSP of 2007 – 2011 marked a decisive break from the past and called for a massive expansion of the antiretroviral treatment programme that had been progressing only in spurts and starts since the ART policy had been approved by cabinet in 2004. The next NSP set the ambitious target that 80% of HIV positive people eligible for treatment should be on treatment; and remarkably this has been achieved over the last five years. South Africa now has the largest antiretroviral treatment programme in the world with an estimated 3.4 million people on treatment.

The NSP 2012 – 2016 provided for a more comprehensive response. To the very ambitious treatment objective it added goals linked to prevention and human rights. Notably, it raised the important link of the HIV response to key social and structural drivers and set objectives for addressing these drivers. A notable addition in the NSP 2012 – 2016 was the addition of goals and targets related to TB.

This 4th generation NSP is aimed at putting prevention at its very centre. The flood of new infections must be stopped. Unless the tide is turned against new infections, we will lose all control of the epidemic and the gains of the last decade will be lost. If we continue to have 270 000 new infections each year for the next five years we will face a completely unmanageable situation and our response will be unsustainable. Eventually South Africa will not be able to provide treatment for all who need it and we will slide back to increasing HIV incidence and high mortality.

Government has already adopted a policy to treat all persons who test HIV positive regardless of CD4 count from 1 September 2016. This will further reduce HIV-related morbidity and mortality and significantly reduce TB incidence and TB mortality. Expanding treatment to all (treat all) will also have a prevention benefit which is why this NSP emphasises the scale up and improvement in quality of interventions that retain people in care and ensure good adherence and good viral suppression.

This NSP also emphasises the need for a comprehensive multi sectoral prevention programme that is geographically focussed on high incidence hotspots and that traverses community centres, schools, churches and all community based institutions. A prevention intervention that leads to a massive change in individual risky sexual behaviour such as early sexual debut, low condom use, multiple concurrent partnerships and alcohol and substance abuse but also address social and structural drivers such as intergenerational and transactional sex, sexual coercion and gender based violence, circular migration and the breakdown of marriage and the family, youth unemployment, hopelessness and ignorance.

This NSP also addresses previously neglected populations such as sex workers, prison inmates, drug users and LGBTI communities and highly vulnerable groups such as young women, children (especially orphans) and people living with disabilities.

The next five years will determine whether we are able to bring the HIV, TB and STIs epidemics under control by 2030 as envisaged by the National Development Plan. The NSP must be read together with the NDP especially when thinking about structural drivers such as reducing poverty and unemployment and addressing gender based violence, patriarchy, internal and external migration and overall economic growth and social and human development.

The same picture obtains internationally and in the Southern African region and so we are not alone in facing our challenges or in our analysis of what needs to be done. In 2016, the UN Political Declaration made bold resolutions about expanding treatment and turning the tide against new HIV infections. It also recognised the lacklustre performance of all countries to tackle TB and STIs. This plan is aligned with these global resolutions.

There has been wide consultation in the development of this Draft Zero plan with civil society, government, the private sector, scientists and academics and political principals. Additional consultation, especially for civil society sectors and government is still required.

Once this plan has been discussed at the National Stakeholder Consultation it will need to be improved with additions and corrections and then presented to the SANAC Multi sectoral structures (PRC and Plenary) before it is submitted to the IMC and Cabinet for approval.

ii. National and international context

South Africa's National Strategic Plan for HIV, TB and STIs (2017-2022) is aligned with the country's National Development Plan 2030 (NDP). The NDP acknowledges the profound effect that HIV in particular has had on slowing South Arica's progress.[3] Set against the backdrop of considerable advances in this regard, the NDP aims to harness South Africa's "demographic dividend" - the economic benefits of having a large productive workforce – by addressing issues of health, nutrition, education, employment and mobility.

South Africa's integrated approach to HIV, TB and STIs within a wider social project echoes the international consensus. With the transition from the Millennium Development Goals (MDGs)[4] to the Sustainable Development Goals (SDGs)[5], there is a greater recognition that HIV, TB and other communicable diseases must sit within a broader health and development framework. The NDP 2030 and NSP 2017-2022 internalises this commitment in the South African context. The NSP 2017-2022 also embraces global targets including 90-90-90 for HIV[6] and for TB[7], as well as 70-70 for STIs[8] (see Box 1).

Box 1: Global 2020 Targets Embraced by South Africa's NSP on HIV, TB and STIs (2017-2022)

90-90-90 for HIV:
90% of all people living with HIV will know their HIV status, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy and 90% of all people receiving antiretroviral therapy will have viral suppression.

90-(90)-90 for TB:
90% of all people with TB should be reached, (90%) of key populations should be reached (a subset of the first 90), and 90% treatment success for all those diagnosed with TB.

70-70 for STIs:
70% of countries...
70% of key populations for HIV have access to a full range of services relevant to sexually transmitted infection and HIV, including condoms and lubricants

**Other relevant global targets to be listed.*

One of the most important shifts between the MDGs and the SDGs – and between the last NSP and this one - is the move from a control effort to a targeted elimination effort. Within this context, focusing for impact is the foundation of South Africa's strategy towards eliminating HIV, STIs and TB as public health threats by 2030.

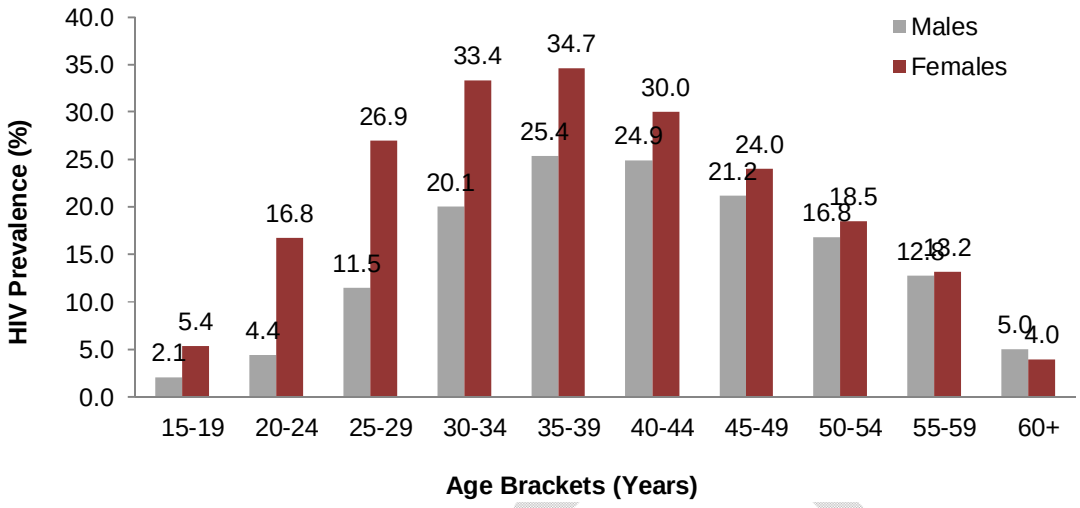
- Important regional and international context to acknowledge include the 2003 Maseru Declaration (the basis for SADC regional response to HIV), The Global End TB Strategy, the 2016 UN Political Declaration on HIV and AIDS, Agenda 2030 (the SDGs) and The African Union Agenda 2063. This NSP must articulate how South Africa will implement over the next five years, towards its commitments at the regional and international level.

iii. Epidemiology, evidence and new opportunities

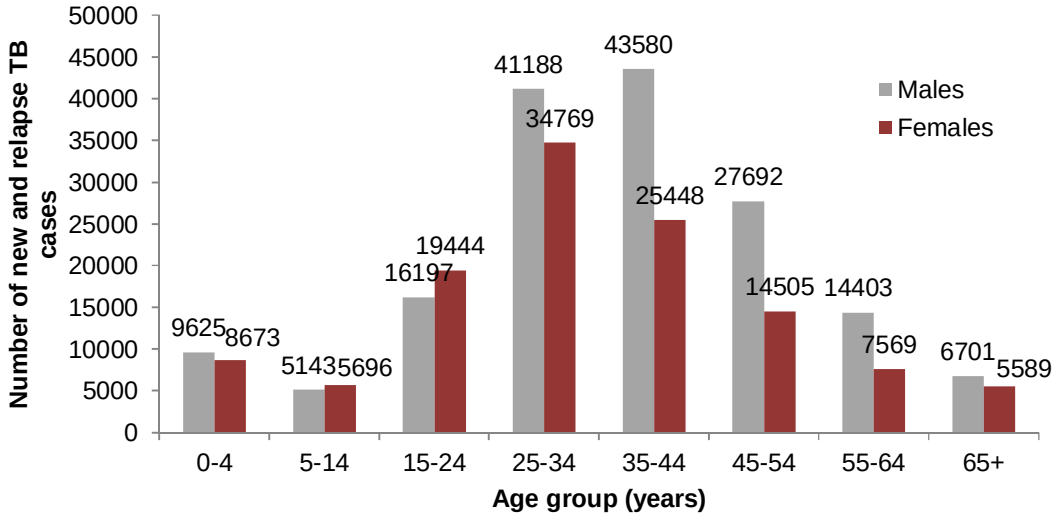
South Africa is home to the world's largest and fastest growing HIV epidemic. The country had an estimated 6.98 million people living with HIV (PLHIV) in 2015, growing at a rate of approximately 288,400 new infections a year. This reflects a prevalence rate of about 12.7% among the entire population, or 19.1% among those age 15-49. HIV prevalence among pregnant women has hovered around 30% since 2004. Rising prevalence over recent years is largely attributed to the successful rollout of anti-retroviral therapy, supporting PLHIV to live longer, healthier lives. That said, nearly 150,340 South Africans are expected to die from AIDS in 2016, about a quarter of all deaths.

This large HIV burden fuels high levels of TB. In 2014, there were an estimated 450,000 new TB infections, 270,000 of which were among PLHIV. This translates into an incidence of 834 cases per 100 000 population. The country's TB prevalence rate decreased somewhat from 2007 to 2010, after which it stabilised. The number of multi drug-resistant TB (MDR-TB) cases has doubled, from 7350 cases in 2007 to 14,161 in 2012. TB is the leading cause of death in the country, accounting for 8.4% of all natural deaths in 2014.

HIV Prevalence in South Africa, by age and sex (2015)[9]



Number of new and relapse TB cases by sex and age, South Africa (2015)[10]



According to the HSRC survey, the prevalence among Black Africans is 15.0%, followed by 3.1% among coloureds in 2012.[11] People living in urban informal areas had the highest HIV prevalence (19.9%), followed by residents in rural informal areas (13.4%) in 2012.[12] There is substantial variation in HIV by province, with KwaZulu-Natal having the highest prevalence (18%), followed by Mpumalanga (15%). The Northern Cape and Western Cape having the lowest HIV prevalence, at 6.8% and 6.6%, respectively.[13]

The baseline survey of the HIV Incidence Provincial Surveillance System (HIPSS) project conduced in 2014/2015 in uMgungundlovu District Municipality, KwaZulu-Natal, found an overall prevalence of 36.3% among men and women 15-49 years.[14] Prevalence in women was higher than in men: 44.1% vs 28.0%. The highest prevalence was found in women aged 30-34 and 35-39 years: 66.2% and 66.4%. Among youth the difference in HIV prevalence between girls/women and boys/men was largest: 11.5% versus 5% among those 15-19 and 32.4 versus 10.1 among those 20-24 years.

While South Africa has generalised HIV and TB epidemics, these are characterised by distinct sub-epidemics among key populations. Chapter 5 (*Tailoring Packages for Key Populations*), discusses the epidemics among marginalised groups, outlining the nuanced approaches that are needed to ensure scaled up access for these populations.

National data on the epidemiology of STIs is limited. The most recent data available is from the 2012 antenatal care survey, which found an HSV-2 (Herpes simplex virus) prevalence of 89.1% among women living with HIV, and 42.5% among women who are HIV negative. According to the 2011 survey, the prevalence of syphilis has decreased from 11.2% in 1997 to 1.6% in 2011.

About 1,144,003 new episodes of STIs were treated amongst males and females 15 years and older in public health facilities during the 2015/16 financial year. [1]This included 303, 000 new cases of Male Urethritis Syndrome (MUS). DHIS data showing the distribution of STI Syndromes by gender have revealed that the commonest presentations in men are Male Urethritis Syndrome (MUS - 59.9%) followed by Genital Ulcer Syndrome (GUS - 19%).[2] KwaZulu-Natal has a high burden of STIs compared to other provinces. According to NICD, *Neisseria gonorrhoeae* is the most commonly detected aetiological agent (72.6%) in men presenting with MUS followed by *Chlamydia trachomatis* (20.2%). Less than 10% of MUS cases are caused by *Mycoplasma genitalium*, and less than 5% by *Trichomonas vaginalis*. Among women with VDS, only 36.5% had a detectable STI pathogen on testing: most STI-pathogen related infections were caused by *Trichomonas vaginalis* (15.7%); followed by *Chlamydia trachomatis* (14.2%). Only 10.6% symptomatic VDS cases were caused by *Neisseria gonorrhoeae*. The majority of VDS cases are attributed to conditions that are not traditionally considered as STIs: bacterial vaginosis (BV) in 50.6%, and candidiasis in 17.5%. 44.2 % with BV and 25.7% with vaginal candidiasis were co-infected with an STI pathogen. For GUS, the major cause is herpes simplex virus (HSV) in 48%; followed by *Treponema pallidum* (TP) in 7.0%. Type-specific PCR revealed that all HSV infections were caused by herpes simplex virus type 2 (HSV-2). There was only 1 case each (0.6%) of *Haemophilus ducreyi* (HD) causing chancroid (Eastern Cape) and *Chlamydia trachomatis* L1-L3 (CT L1-L3) causing lymphogranuloma venereum (Mpumalanga).

New opportunities

For the first time since the advent of antiretroviral treatment, there is a global call for a focus on HIV prevention. Although the world does not have all the solutions for effective prevention, global thought leaders have emphasised that a sufficient number of prevention tools are in existence for prevention efforts to be effective. There is a constantly increasing pool of new knowledge and proven effective interventions in both the biomedical and the social and behaviour sciences that improve our understanding of what works. The launch of the new MAX condom, increasing availability of the female condom and the advent of PrEP are all exciting developments. For the first time we have seen major investments in prevention programmes such as DREAMS, the Global Fund Young Women's programme, ZAZI, Rise, Yolo and She Conquers targeted young women and exceeding R2 billion over the next three years. There is a new commitment to investing in prevention programmes in South Africa and in the region.

There is a slew of new biomedical prevention technologies in the pipeline that are all very exciting and all likely to become available in the next five years. Pre-exposure prophylaxis (PrEP) has already proven to be effective and is now recommended by the WHO for high risk groups defined as any group with a incidence of 3 per 100-person years. It should be noted that the US guidelines set this bar lower at 2 new infections per 100 person years. South Africa has already announced PrEP for sex workers and there are 300 sex workers on PrEP at 11 sites. There are also 2 sites providing PrEP for MSM and 12 sites with demonstration projects for young women.

Work is well under way with a vaginal ring (early results were disappointing) and with an injectable carbotegravir for prevention and another for treatment. There is also exciting new clinical trials with antibody infusions that have already commenced and the first major vaccine trail (HVTN 702) will kick off in South Africa as we go to press with this NSP. This NSP will accommodate any new technologies that become available in the near future. All of these trials are expensive and are largely funded by the NIH. South Africa needs to make strategic investments to ensure that we have a voice in determining which new technologies will suit our needs best.

For the TB epidemic new drugs and diagnostics coming to market in the next five years will have the potential to rapidly accelerate the progress towards ending TB. The discovery of a new diagnostic is a major game changer and exciting options exist for local scientists to make the breakthroughs necessary in this field. However, as demonstrated in the XTEND trial[15]; the morbidity and mortality benefits of new tools will not be fully realised unless robust supportive systems are in place. These systems include robust cohort data recording and collation; close attention to algorithms and significantly improved pharmacovigilance.

STI care has also rapidly changed and the use of new diagnostics and options for the diagnosis and treatment of asymptomatic STIs bacterial vaginosis create room in this NSP to give this the attention it deserves as the multiple links between HIV and STIs becomes ever more evident from a prevention, treatment and surveillance point of view.

The next five years presents a critical window of opportunity to ramp up the HIV, TB and STI response and get on track to end the diseases by 2030. If this opportunity goes unseized, the epidemics could spring back even stronger.

iv. Progress, gaps and challenges

Goals in 2012-2016 NSP	Achievements to Date
Goal 1: Reducing new HIV infections by at least 50% using combination prevention approaches	Sexual transmission of HIV among those aged15-49 has declined, from 410,000 in 2011 to 330,000 in 2014, a decline of 17.5%. 2016 estimates (288,000) suggest the target has not been achieved. But, the prevention of mother-to-child transmission (at 6 weeks) target was reached, which is a major achievement. There has been a marked decline from more than 3.5% in 2010 to the 1.8% in 2014, achieving the NSP's <2% target.
Goal 2: Initiating at least 80% of all eligible patients on ART, with 70% alive and on treatment five years after initiation	The ART initiation target has been reached, with 3.5 million people on treatment as of 2016. This is a major achievement. However, survival on treatment is low (and difficult to measure, in the absence of a unique patient identifier), so the second part of the target has not been achieved.
Goal 3: Reducing the number of new TB infections and deaths from TB by 50%	New TB infections and TB deaths declined, but the targets were not reached. To achieve a 50% reduction in TB deaths South Africa would need to hit 25 per 100,000, but in 2013, an estimated 24,000 TB deaths were reported, reflecting a rate of 44 per 100,000.
Goal 4: Ensuring an enabling and accessible legal framework that protects and promotes human rights in order to support implementation of the NSP	Good progress has been made against this target. According to the 2013 HIV and TB review, South Africa's interventions and policies respect human rights in their conceptualisation and implementation. It was found that HIV testing was taking place with informed consent, women were not denied their sexual and reproductive health, and rape survivors were accessing care.

A key milestone during the 2012-2016 NSP was the HIV testing campaign during which *35* million HIV tests were done over the five year period. Further, South Africa has over 300 GeneXpert machines deployed countrywide and over 2.1 million GeneXpert tests have been conducted.

As of November 2015, South Africa had circumcised 2.3 million men, though this was shy of the 4.2 million target. Creative efforts to increase demand for MMC must be addressed in this NSP.

Although South Africa embraces the SDGs of eliminating HIV, TB, hepatitis and other communicable diseases as public health threats by 2030, the country also acknowledges without effective vaccines or cures, these epidemics and their implications for public policy are likely to persist for at least another generation – possibly two. But, epidemic control is possible and within our grasp. "Delivering game changers for ending the epidemics" - the theme of this NSP – means laying the foundation over the next five years towards eliminating the epidemics as public health threats by 2030.

v. Game changers

Game changers refer to thoughts or ideas that could leapfrog the response to the three epidemics or proven interventions that if implemented well will address the three epidemics or interventions with some evidence that need to be piloted, to understand optimal implementation model, within a defined period and then scaled up. Some critical game changers for this NSP include:

Key strategic-level game changers:

- Focusing for impact
- Prioritising HIV prevention through a combination of treatment and good viral suppression, biomedical prevention, behaviour change and addressing the social and structural drivers
- Prioritising tailored responses for key populations
- Setting strategic objectives and targets for financing, leadership, multi-sectoral implementation, research and monitoring and evaluation. This elevates accountability in this NSP and attribution to the achievement of the NSP goals for 2030 and the linkages to the broader international commitments.
- Mainstreaming of HIV, TB and STIs through a joint inter-sectoral results framework, which compels sectors to work together to plan for and attain targets set.
- Understanding the capacity needs and systems strengthening required for the optimum operationalising of a multi-and inter- sectoral response.
- Addressing Social and Behaviour Change Communication through a multi- and inter-sectoral approach.

Key operational-level game changers:

- Improved coordination with the involvement of communities through integrated ward level programmes (the Operation Sukuma Sakhe model)
- National Health Insurance (NHI) as it supports the health systems strengthening and ongoing quality improvement of comprehensive programming as implemented through the DOH with the support of the private and civil society sectors.
- Implementation of a Unique patient identifier across all municipalities including movement between facilities and community based structures, as this optimises the ability to measure outcomes of service delivery and the impact of specific interventions.

- The implementation of multi-stakeholder driven Total Quality Management across all programmes to improve the tracking of outcomes of patients including the use of programme data for real-time learning and improvements during implementation.
- New District Implementation Plan called DIP Plus that includes a costed multi- and inter-sectoral plan to address the prevention, treatment and care of HIV, TB and STIs at the district level.
- Addressing all policy gaps e.g. new HTS policy that identifies strategies to reach specific target groups including the role of self-testing; a policy for Universal Test and Treat for HIV

Key intervention-level game changers:

- Universal test-and-treat for HIV
- Home-based testing and self-testing for HIV
- Community based initiation and adherence of Antiretroviral therapy
- Provision of Pre-exposure Prophylaxis (PrEP) in communities as part of prevention programmes.
- Targeted screening for TB and STIs among high-risk populations
- Strategic and targeted promotion and distribution of condoms
- Periodic Presumptive STI treatment for female sex workers, especially for those on PrEP who may drop the use of condoms while on PrEP. WHO recommends quarterly or six-monthly treatment. Patient satisfaction/rating surveys (facility linked) – to identify areas for improvement and reward consistent good performance
- Introduction of one robust real-time, electronic data collection system with point of care M-Health applications which records cohort data from the TB symptom screen to treatment outcome.
- Differentiated models of care for key populations
- Social network strategy for HIV testing services for key populations
- Economic empowerment and human rights packages as part of tailored approaches for key populations
- Decriminalisation of sex work and drug use

vi. Mission, vision and values

vii. Strategic objectives

This NSP has 11 strategic objectives - one for each chapter. This includes high-level strategic objectives for areas that were not previously elevated to this level, such as M&E, research, systems strengthening and leadership. Progress against these objectives will be assessed against clear and measurable targets as well as priority actions.

Strategic Objectives for South Africa's NSP 2017-2022

Strategic Objective 1: An optimised response through a targeted and prioritised approach
Strategic Objective 2: Reach all at risk with tailored combination prevention packages
Strategic Objective 3: Human dignity and empowerment to make healthy choices
Strategic Objective 4: Universal access to treatment and adherence support services
Strategic Objective 5: Equitable, tailored, and targeted services to all key populations
Strategic Objective 6: A just and fair society for all
Strategic Objective 7: Strong and sustainable systems for health and development
Strategic Objective 8: Sustained investment in cost-effective evidence-based interventions
Strategic Objective 9: A national research agenda for an evidence-informed response
Strategic Objective 10: Data use for decision-making at all levels
Strategic Objective 11: Shared responsibility among interconnected and interdependent stakeholders

Chapter 1: Focusing for Impact

"Zoom in for Results"

Strategic Objective 1:
An optimised response through a targeted and prioritised approach

Key Targets for 2022:

- Hotspot mapping for HIV incidence in 19 Fast-Track Municipalities
- Hotspot mapping for 29 high TB districts, including top 8 metros
- **consultation for this technical working group was held on Monday 26 September. Additional targets and actions to be updated following inputs from that working group.*

Top Priority Actions:

- Intensified delivery of high-impact interventions in HIV, TB and STI hot spots
- Map all high-burden geographic areas and develop local plans to address epidemic profiles working with local AIDS Councils
- Hot spot mapping for STIs, including layering with HIV hotspots

There is no doubt that South Africa needs to focus its efforts on priority areas and populations in order to achieve the impact required over the next five years. At the same time, it is critical not to neglect pockets of the country with lower population density or disease prevalence.

As part of the Sustainable Development Goals there is renewed focus and commitment to end the AIDS epidemic by 2030. UNAIDS launched a global Fast-Track initiative on World AIDS Day 2014. The Fast-Track approach is guided at the national level for impact at the local level. This approach requires an analysis of the nature of the HIV, TB and STI epidemic patterns, using a location and population approach that focus available resources on evidence-informed, high-impact programmes in a specific geographical areas and among the populations in greatest need [16].

In an era of limited resources, HIV, TB and STI prevention, care, and treatment efforts need to focus on the smartest investments. This means investing in programmes that can have the greatest impact in halting HIV, TB and STI transmission. The effective use of resources requires focusing on high risk populations who have the highest level of HIV infection within a specific location and tackling the barriers that discourage and prevent them from accessing multi-sectoral systems and services.

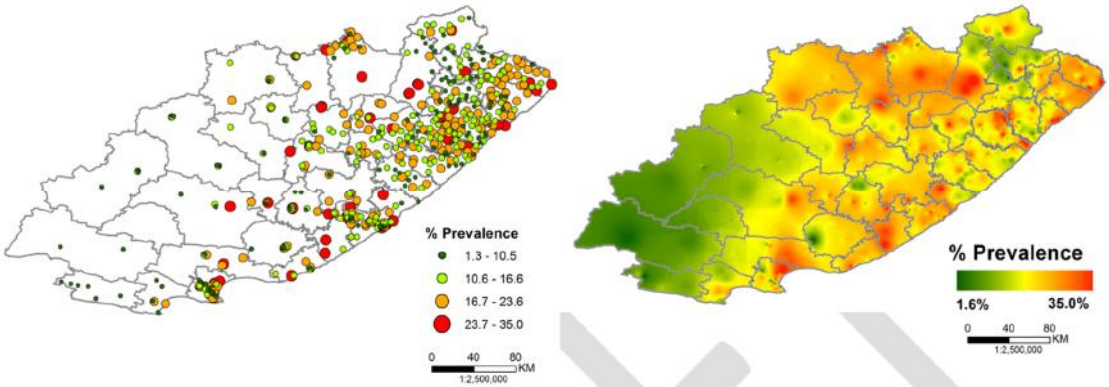
South Africa is prioritising a return to the "know your epidemic, know your response" approach, yet with much finer detail. We need to know our epidemics and what drives them at the lowest possible level. Granular level data on disease burden and what is driving HIV, STIs and TB in certain areas is key for guiding and refining our approach. This means using data from the community level, and disaggregated by age and sex, to make more informed decisions. In addition, sharpening our focus on specific high risk populations is critical to having a more significant impact on the epidemics.

1.1 Geographic targeting

Recognising that HIV, TB and STIs are not evenly distributed across the country, a targeted geographic approach is a smart way to optimise impact with limited resources. For instance, nineteen municipalities represent half of South Africa's population, half of all new HIV infections, and the majority of people living with HIV in need of HIV treatment.[17] These municipalities are coordinating to implement the Fast-Track approach ("South Africa's Fast-Track Cities"). Preliminary estimates produced for the Department of Health and SANAC

suggests that 75% of new infections among girls and young women take place in 24 out of the 52 districts. 80% of TB cases are notified in 29 districts, and just eight metros carry 40% of the country's TB burden. South Africa's "Zero TB Cities" initiative has a targeted geographic focus on 16 high burden municipalities and includes a comprehensive approach to TB elimination.[18] Geospatial mapping is being conducted to enable a more targeted geographic approach. The figure below depicts an example of geospatial mapping of HIV hotspots in the Eastern Cape Province.

Figure: Geospatial Mapping of HIV hotspots in the Eastern Cape Province[19]



Geographical targeting however requires investment of time and resources in the standardisation of data elements to ensure that the various data sources can be integrated into one platform to enable the identification of geographical hotspots. More granular data would therefore allow a lower level or targeted geographical area. Some of the different data sources required to identify and understand HIV, TB and STI hotspots include:

Level that data is available	Possible data sources (lowest level)
Provincial	Thembisa model
District	Behavioural survey, Antenatal Sentinel HIV Prevalence Survey
Health facility	Routine HIV, TB and STI data
Ward	Census 2011 (adjusted)
Community	Community organisations e.g. Operation Sukuma Sakhe "War Rooms" Some data elements collected by ward based outreach teams (WBOTs)

One of the biggest areas of focus during the period for the NSP would be to develop a metadata catalogue to describe the secondary sources of data to enable users to effectively use and understand the data sources. This is similar to the requirements of data sharing promoted by the Spatial Data Infrastructure Act, 2003 (Act No.54 of 2003). It should be noted that to do hotspot mapping the data is aggregated and individuals can no longer be identified.

1.2 Prioritising high-risk populations

Various studies emphases the differences amongst various populations based on their vulnerability or risk to contract HIV, TB or STIs. Using available secondary data some population groups e.g. youth can be identified within a specific geographical area based on census data. This approach would be a starting point for identifying where these high risk populations would likely be found. The identification of geographical areas should however

be supplemented by profiling and understanding the real associated risk (described below) as this is unique for each high-risk population group.

For this NSP, HIV key populations are: key populations for HIV include sex workers, men who have sex with men (MSM), transgender people and other vulnerable LGBTI communities, people who inject drugs (PWID) and inmates. TB key populations are people living with HIV, inmates, miners, those living in informal settlements and migrants, pregnant women, children under 5 years of age, diabetics and all health care workers. Vulnerable populations include people with disabilities, young women and girls, and orphans and vulnerable children. Chapter 5 is dedicated to outlining the tailored approaches that will be taken to reach these populations.

1.3 A special focus on youth

In 2014, South Africa's youth (15-34 years) constituted 36% of the country's population.[20] Just under 50% of the current population are under the age of 25, and just over 20 percent of the population are between the ages of 15 and 24.[21] In 2014, girls and young women aged 15 to 24 made up 9.6 percent of South Africa's population of 54 million. Investing in girls and young women is central to building a robust South Africa. The Sustainable Development Goals, adopted in September 2015, aim to end poverty, protect the planet, and ensure prosperity for all. Each goal has specific targets to be achieved over the next 15 years. In general, the SDGs speak to the creation of a more equitable society where girls and young women have access to health, education, and economic opportunities, and where their rights are upheld. In particular, the targets set for Goal 5—"Achieve gender equality and empower all women and girls"—include addressing discrimination, eliminating all forms of violence including sexual violence, and ensuring universal access to sexual and reproductive rights.

The NDP heavily prioritises young people, with a vision to ensure that a generation of under-20s is largely free of HIV by 2030.[22] This is critical for harnessing the demographic dividend. The youth bulge presents a growing need for HIV prevention among a larger cohort of young people, and young women in particular. Specifically, there are about 25-30% more young women (age 15-30) in South Africa today than there were at the beginning of the epidemic in 1985. Further, youth are the only group for which HIV mortality is rising. In fact, from 2009 to 2014 deaths due to HIV/AIDS among youth in South Africa increased from 11.6% to 28.2% in 2014 for males and 12.6% to 29% for females.[23]

Young people are often considered the face of the HIV epidemic, but TB is also the leading natural cause of death among youth in South Africa, accounting for 14.1% of all natural deaths. As with HIV, TB also disproportionately affects young women, causing 16.8% of all deaths compared to 11.8% in young men.[24] Chlamydia rates have been documented among young women (mean age 18) as high as 42% in Masiphumelele in Cape Town and 17% in Soweto in Johannesburg. Bacterial vaginosis rates are even higher, at 47% in Cape Town and 42% in Johannesburg.[25] The TB/HIV Stigma Survey found that those in the youngest age group (15-24) were most likely to experience fear of potential stigma.[26]

Access to education and employment are critically linked with poverty and inequality, with these factors disproportionally affecting young South Africans. The proportion of economically active youth declined over the last five years. Youth who were not in employment, education or training was at 33.5% in 2013 - the highest rate on record.[27]

The policy environment in South Africa is progressive and represents a commitment to addressing the needs of young people. The National Youth Policy 2015-2020 frames the government's approach to meeting the specific needs of young people, deals with the

structural economic issues that confront young people in South Africa, and aims to mainstream youth across all government departments. The policy speaks to the range of issues confronting young people in South Africa including unemployment and joblessness; high drop-out rates and inadequate skills development; poor health and high HIV prevalence; high rates of violence and substance abuse; lack of access to sporting and recreational facilities; lack of social cohesion and volunteerism; inadequate frameworks for youth work; and disability.28

1.4 Risk profiling

Just as the burden of HIV, STIs and TB is unevenly distributed, the factors which increase the associated risk of these epidemics are also geographically varied. Identifying the geographical HIV, TB and STI hotspots is a first step towards 'knowing the epidemic'. For instance, levels of sexual and gender-based violence differ by location. The proportion of sex workers who experienced any form of violence in the past year varies from 50.9% in Johannesburg and 47.3% in Cape Town, to much lower rates of 14.1% in Durban.[29]

To fully understand the realities within the communities affected in the identified hotspots, it is important that the associated risks be identified in and with each community. Understanding the risk profile for a specific community should be ongoing to track key indicators and data elements to ensure that the multi-sectoral profile is available and that only 'one version of the truth' is used for decision making by all relevant stakeholders at a given point in time.

Understanding these specificities can ensure that interventions are focused where they will have the greatest impact, and that populations most in need of certain services are prioritised to receive them.

Standardisation of data collection and sharing again is important to ensure optimisation of various community based interventions by various stakeholders to serve various communities. This initiative emphasises the importance of community engagement, ownership and accountability through community leadership that links closely with section in the NSP on building resilient systems and will the basis for a collective, multi-sectoral response.

In addition, this link with the section on HIV Prevention that will discuss current risk profiling that is ongoing as part of HIV prevention guidance led by SANAC. It will also allude to the recognition that social and structural factors are unique to different populations, something which the comprehensive packages for key populations increasingly acknowledge and provide for.

1.5 High-impact interventions

Investing in cost-effective, evidence-based and high-impact interventions is a cornerstone of focusing for impact. While overall spending on HIV and TB in South Africa has been steadily increasing, this is happening within a context of very limited fiscal space overall. As a result, value for money is an increasingly necessary lens. Published in March 2016, South Africa's HIV and TB Investment Case helps to guide decisions about which interventions are the "best buys" for generating return on investment. Chapter 7 presents South Africa's approach to strategic financing and more informed prioritisation based on cost-effectiveness analyses.

The TB Targets Exercise was carried out to assess the feasibility of attaining WHO End TB targets of a 50% reduction in incidence and a 75% reduction in mortality by 2025. The assessment covered South Africa, India and China and was conducted on the assumption

that existing or near-existing tools would be used. Social determinants were not modelled because of the absence of data and/or the limitations of the model. The analysis assessed the impact of scaling up existing interventions to levels considered ambitious but feasible. The results were 3 basic messages: 1) WHO 2025 Targets can be met, but this requires a combination treatment and prevention approach including: Early case-finding/ Reduction in the initial loss to follow up (ILTF) and Improved treatment outcomes. 2. Increased screening of clinic attendees for TB may have the greatest epidemiological impact. 3 Strengthening post-diagnosis care can have important impacts on incidence and mortality.[30]

The TB Investment Case modelling though the National Think Tank[31] is an ongoing effort to project the epidemiological impact and cost estimates of implementing the 90-90-90strategy at the national level. Different models have been used but there are no clear winners from an economic perspective. The focus must be on defining interventions along the cascade that are effective as well as low cost.

Focusing for impact is the methodology for this NSP. At its core, it promotes the localisation of responses. This means that stakeholders at all levels are encouraged to identify locations, populations, interventions and approaches which will deliver the greatest results for their context. Focusing for impact implores all sectors to articulate their unique value in the HIV, TB and STI response, to entrench a truly multi- and inter-sectoral solution.

Chapter 2: Revolutionising Prevention

"Breaking the Cycle of Transmission"

Strategic Objective 2:
Reach all at risk with tailored combination prevention packages

Key Targets for 2022:

- Reduce new HIV Infections to less than 100 000
- Reduction in TB incidence by 20% compared to 2015 rate
- 70% reduction of N Gonorrhoea incidence
- 70% reduction in T. Pallidum incidence

Top Priority Actions:

- Localise prevention with a focus on community-level risk reduction and behaviour
- Embark on an aggressive targeted social marketing campaign for condoms and lubricants
- Scale-up TB preventive therapy for people living with HIV and children <5 years
- Enhance TB/HIV integration
- Use male circumcision (medical and traditional), antenatal care and PrEP initiation as entry point for STI screening.
- Scale-up TB preventive therapy for those who are HIV positive and child contacts < 5 years
- Effective TB/HIV as well as HIV/STI integration

2.1 An expanded HIV prevention toolbox

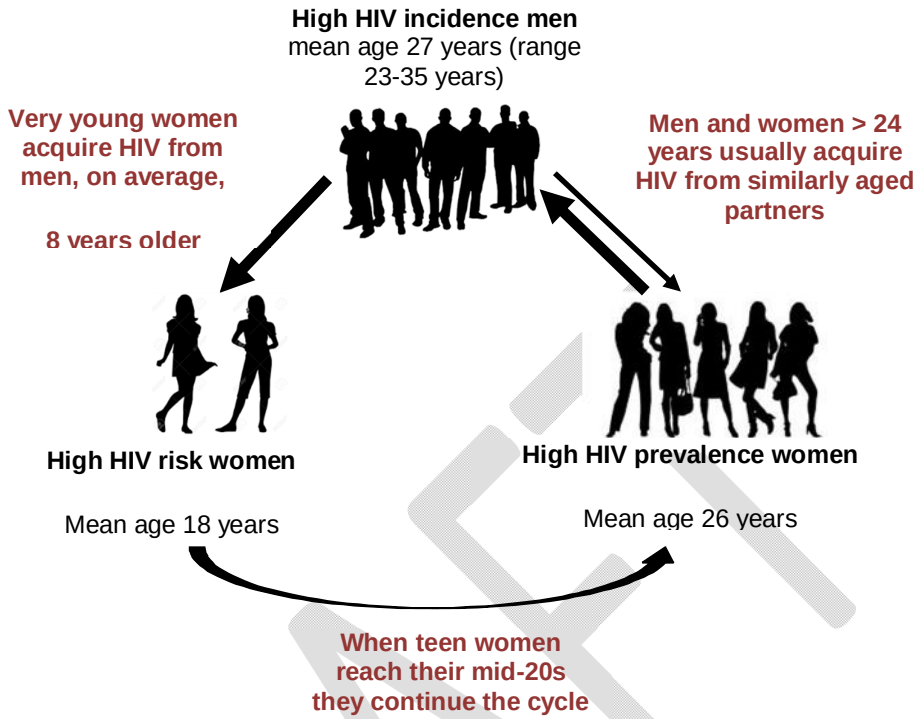
"Under 100,000 by 2022". This is the ambitious vision for HIV prevention in South Africa over the next five years. Reducing new HIV infections to levels below 100,000 per year will require unprecedented commitment from all corners of the response.

Background

South Africa continues to have a severe and generalised HIV epidemic, with around 7 million people infected, and an estimated 288 000 new HIV infections in 2015 (Thembisa Model). This places South Africa as globally the country with the highest number of new infections. In addition to this the rate of decrease of new infections due to sexual transmission has slowed in recent years, having only decreased by about 25% since 2010. South Africa also has great heterogeneity in terms of who gets infected and where they get infected. Young African women between the ages of 18 and 23 have disproportionately high rates of new HIV infections, usually infected by men 5-10 years older than them. However, levels of HIV infection are also high in women in their 20s and 30s, and men in their 30s. In addition to this, there is great geographical heterogeneity in the HIV epidemic, at a macro and micro level.

New evidence also provides insight into "the cycle of new infections" in South Africa (Figure), where new HIV infections in adolescent girls and young women from men, on average 8 years older. This signals the need for tailored prevention interventions for different people at different stages in the cycle.

Figure: The Cycle of HIV Transmission in South Africa[32]



Current NSP achievements and gaps

We have achieved the following during the current NSP[33]:

- South Africa exceeded our targets for reducing MTCT of HIV, with infections levels at 6 weeks post-delivery at less than 1.5%. However there continue to be significant levels of late transmission due to breastfeeding.
- We have rolled out HIV testing to an estimated 11 million people in the last financial year (2014/15).
- South Africa has performed about 2.4 million male circumcisions over the last 3 years, and while this is a note-worthy achievement, it is below our target of around 1.6 million circumcisions per year during the period of this NSP.
- We distributed over 800 million male condoms and over 20 million female condoms in the last financial year, against targets of 1 billion and 25 million respectively.

However, the following remain challenges:

- HIV infections in young people remain at a high level and we have not met our targets. We continue to have about 2000 new infections a week among young women.
- HIV Prevalence among key populations, like sex workers and MSM, is high, although surveillance in these groups has been limited and we don't have trend data.
- We have little new sexual behaviour data, but the data from the 2012 HSRC household survey[34] showed little change in condom use and an increase in the percentage of people with multiple partners. Among the respondents who had sex in the past year, 47% had used a condom at last sex, an increase from 40% reported in the 2008 survey. This survey also showed that 76% of respondents used a condom at last sex with a casual partner. The survey found that 12.6% of respondents had more than one sexual partner in the past 12 months. Trend analysis over the four surveys conducted from 2002

to 2012 show that there has been a steady rise in the percentage of respondents reporting multiple partners in the past 12 months.

- Rates of other Sexually Transmitted Infections remain high in South Africa, and contribute to ongoing HIV transmission[35]. This is also an indication of continuing high levels of unprotected sex.
- Another challenge is the incoherence around monitoring and reporting on prevention interventions by different implementers (Government, NGOs, private sector response).

Game changers since the last NSP was developed:

- New ARV based prevention such as PrEP and new technologies in the pipeline such as the vaginal ring, antibody infusions and injectable antivirals for prevention are potential game changers. The full scale rollout of test and treat is also a game changer for HIV and TB prevention.
- The rise of social media and mobile technologies as tools for prevention
- Focus for impact and the use of data to determine "hot spots" of new HIV infections
- Use of the "prevention cascade", to monitor progress in implementation and to identify gaps in prevention programmes
- New methods to measure HIV Incidence
- Development of the Max condom brand and expansion of choices of female condoms

Priority Actions for HIV Prevention

- Rally around a set of national targets for reducing HIV infections, and flow those down to provincial and district targets
- Finalise and approve the multi-sectoral HIV Combination Prevention Toolkit. This includes the "hot spot" methodology, as well as packages for different levels of the HIV response
- Decide on geographical priorities for an enhanced response. Given the differences in population size and HIV prevalence and incidence, it makes sense to prioritise certain geographic areas for a specifically enhanced response.
- Ensure all priority areas for prevention have functioning AIDS councils which can oversee the implementation of the response, and identify who will be accountable for various aspects of the HIV response
- Implement the "Last Mile" plan for the elimination of vertical transmission of HIV, including conducting bottleneck analyses to determine what needs to be done in districts where there is ongoing transmission
- Develop strategic and targeted condom social marketing campaigns for promotion of condom use amongst each of the key populations and the general population.
- Ensure efficient system for the consistent supply of male and female condoms throughout the country
- Develop and implement risk assessments for people who test HIV negative. This should be implemented by counsellors or via electronic means to ensure risk reduction counselling after HIV testing
- Design and implement an integrated prevention M&E system to monitor all prevention activities and allow for accountability
- Ensure that HIV Prevention programmes are properly funded, moving towards the 25% target set by UNAIDS

Key Decisions needed for this NSP

1. Which areas and populations to prioritise according to the hot spot methodology, and finalise the multi-sectoral combination packages for different populations
2. Which populations apart from sex workers get offered PrEP, and how do we deliver this intervention to ensure adherence?

3. What needs to be done to ensure demand for MMC?
4. How do we ensure accountability at all levels for HIV prevention?
5. How do we balance ensuring knowledge about and access to condoms to all key populations (together with the general population)?

Indicators and Targets

This section requires some modelling to answer the question – to get new infections below 100 000, what interventions at what coverage levels will be needed?

Indicator	Disaggregation	Target
1. Number of new HIV Infections	Sex, age, location	Less than 100 000
2. Transmission of HIV from mother to child	Location	< 1% at 6 weeks, < 2.5% at 18 months
3. Percentage of women and men ages 15-49 who had sexual intercourse with more than one partner in the past 12 months who reported use of a condom during the last sexual encounter	Age, sex	Greater that 70%
4. Number of geographical areas implementing the hot spot methodology		5 per priority sub-district
5. Percentage of priority populations reached with a comprehensive package of prevention interventions	By population, age and sex	TBD

**Targets for condoms, lubricant, MMC, PreP to be added*

Integrated and patient-centered TB prevention

TB prevention is multi-faceted and includes early HIV testing and provision of antiretroviral therapy (ART) infection control and optimal post exposure management. The new "test and treat" strategy for HIV; especially if combined with periodic testing for high risk groups will have a positive impact on TB prevention. Optimal TB infection control requires a multi-sectoral response and significantly increased levels of knowledge and awareness. Implementing the F-A-S-T model (Finding cases Actively by cough surveillance and rapid molecular sputum testing, Separating safely, and Treating effectively based on rapid drug susceptibility testing) [36] will be an important step in promoting TB infection control.

Post exposure management (PEM) encompasses finding people who have been exposed to TB; accurately excluding TB disease; assessing whether the exposed individual is indeed infected with TB (or their risk of acquiring infection) and providing optimal treatment. Some progress has been made with rolling out IPT to HIV positive people; however preventive treatment for children < 5 years remains extremely poorly implemented. Pragmatic implementation plans for scale up are required for both groups and may include adoption of new diagnostics for incipient TB and new, more acceptable regimens as these become available. The impact of preventive therapy may be expanded by treating all household contacts for TB infection regardless of age, as advised by the WHO Strategic Advisory Group for TB in 2016.

Consideration may be given to providing phased scale up of preventive therapy for key populations; regardless of underlying immune or TB infection status as new evidence becomes available.

There is no policy for treatment of TB infection in drug resistant TB contacts, which requires urgent attention; consideration should be given to the use of *levofloxacin* for contacts until

such time as results of ongoing randomised trials are available, two of which are will be conducted in South Africa.

Along with biomedical interventions, the response to TB must have a strong focus on the social and structural enablers for TB prevention. Socioeconomic and psychosocial support as well as improved living and working environments are critical.

Although prior to the escalation of HIV South Africa had a severe TB problem, in the past two decades, the TB epidemic in South Africa has largely been driven by the HIV epidemic. Other underlying determinants and factors associated with a higher risk for TB disease include poverty, medical conditions such as diabetes and silicosis, poor nutritional status, poor living conditions, overcrowding, late presentation to health facilities for care, and inadequate retention in care for the full duration of treatment.

Develop, implement, monitor and evaluate a coherent advocacy, communication and social mobilisation (ACSM) strategy as an integral part of TB prevention and control; use M&E findings to create a virtuous cycle of learning: The Stop TB Strategy promotes ACSM to improve case detection and treatment adherence, combat stigma and discrimination, empower people affected by TB, mobilize political commitment and resources for TB control, and to institute the social change and poverty reduction required for long-term control and elimination of TB.[37] In the new NSP we propose a shift from campaigns to a systematic approach ACSM in which insights from dialogue with stakeholders and research findings inform decisions about the best ways to affect behaviour change. The process should include identification of problems and populations at most risk, defining programme objectives, identifying an overall strategic approach, articulating key messages, selecting new up to date and exciting ACSM tools and channels, and developing a management and M&E system. TB stakeholders (government, private sectors and NGOs) and targeted beneficiaries should be consulted and involved in the planning and development process and community ownership, involvement and participation must drive programme activities. There should be pretesting and quality assurance of the ACSM strategy; learning should be documented and the programme adapted in response.[38] Such a multi-layered intersectoral response would highlight that TB is everybody's business and should be coordinated by SANAC and the appropriate provincial, district and local structures.

Provide social protection for vulnerable households, including those made more vulnerable by TB - TB is a disease of the vulnerable; poor people bear a disproportionate burden of the disease and experience the greatest barriers to care.[39] By 2030, the NDP aspires for South Africa to have a sustainable comprehensive social protection system[40]. TB patients and their families can incur significant direct and indirect costs,[41] which can be catastrophic (>40% of annual discretionary income).[42] Currently some TB patients receive support from DSD in the form of a social relief of distress grant for 3-6 months, meals from community nutrition development centres and in some communities there is the opportunity to participate in sustainable income generating projects such as community food gardens, arts and craft projects etc.[43] The Social Protection Forum should be strengthened to fast track rollout of universal social protection while maintaining the current system as an interim measure. DSD is the lead department in collaboration with other departments e.g. DHS, DBE, DOH, DL, DPW, DWAF, and COGTA.

Promote health and safety in the living and working environment - Overcrowding and poor ventilation in living, working, public transport and congregant settings in communities with a high burden of TB increase the chances of TB transmission.[44] [45] [46] Natural ventilation e.g. by opening windows and doors to increase airflow can decrease the transmission risk significantly[47] as does reducing the length of exposure time by prompt treatment of source cases.[48] There is a need to develop norms and standards for housing ventilation to promote the protection of occupants from airborne diseases to be implemented by developers,

government and housing agencies for all new housing projects and taken into account when informal settlements are upgraded. Spatial Planning and Design guidelines should also be developed for historical congregate settings such as informal settlements, hostels, prisons, transport hubs etc. Retrofitting researched technologies for air disinfection and/or airborne pollutants dilution in public transport (needs more research) and buildings. Local authorities should provide the lead with DHS, Transport (public and private sector), Public Works and DOH as other key players.

Harness new technologies (m-Health) - Mobile phone technology can be utilised to enhance a number of activities including providing educational messages and raising awareness amongst various target groups; engaging with users to understand patients' needs better; risk profiling and understanding enablers that lead to positive behaviour or the barriers which may prevent certain behaviours or actions in order to create personalised targeted communication; real-time data collection; tracking the time lapse between contact tracing and linkage to care; supporting retention in care; staff training and capacity building; support quality improvement and accountability through clinic surveys and feedback loops – asking patients to rate the service in order to improve it and reward consistent good performance; and improve targeting of services through mapping poverty hotspots, patterns of TB transmission or patient migration. Mobile phone technology can also be used to provide educational messages and 'anonymous' online communities of support where this is feasible and appropriate. A challenge for users is the need for a smartphone and data. DOH should lead this process with support from partners and SANAC monitor the multi-sectoral response.

2.3 Preventing STIs

There is a critical need for a holistic approach to addressing STIs. Preventing STIs is an important part of sexual and reproductive health in general, with a particularly strong link to HIV vulnerability. Because of the enhanced HIV vulnerability a person with some STIs faces, preventing STIs means preventing HIV, too. Much of the recent evidence in Africa shows that HIV incidence would be reduced by 25%-35% if the population was entirely unexposed to genital herpes (HSV-2).[49]

The draft global health sector strategy on sexually transmitted infections (2016-2021) focuses primarily on three infections that require immediate action for control and that can be monitored: Neisseria gonorrhoeae, Treponema pallidum (with the elimination of congenital syphilis) and human papillomavirus (HPV). This section will also outlay a national action plan for prevention, care & treatment for hepatitis B and C.

High rates of bacterial vaginosis (some studies show 47% in Cape Town and 42% in Johannesburg among young women, mean age 18)[50] elevate vulnerability to STIs and HIV. Treating bacterial vaginosis could significantly reduce risk for both.

South Africa's priority for the next five years is to focus on strengthening the approach to STI prevention. While treatment is vitally important (see Chapter 4), increasing knowledge of transmission and prevention of STIs and doing targeted screening among high-risk populations (particularly for asymptomatic STIs) is a more effective approach. An important strategy will be to standardise STI screening among key populations in particular. Further, improving the provision of lubricants and knowledge of their importance is a key priority for the prevention of HIV as well as other STIs.

Key priorities for early STI screening include:

Syphilis testing and treatment of all pregnant women: The burden of syphilis in sub-Saharan Africa remains significantly high. More new-born infants are affected by Congenital Syphilis (CS) than any other neonatal infection, including HIV infection. Elimination of CS

would reduce the numbers of miscarriages, stillbirths, preterm births, low-birth-weight infants, and perinatal deaths. Therefore screening and treatment of STIs will help to not only prevent such adverse outcomes but also STIs acquisition by the new born baby.

Effective partner-notification strategies have not been widely implemented to date. There is need to explore strategies that work to help prevent STIs in our setting.

Delivery of vaccination and other biomedical services: With the high burden of HPV among women, there is need for advocacy to increase uptake for HPV vaccination. HPV vaccines could prevent the deaths of more than 4 million women vaccinated over the next decade in low- and middle-income countries if 70% vaccination coverage can be achieved.

Hepatitis B vaccination: There is need to explore ways to screen, treat and vaccinate against hepatitis B virus, from HPV and hepatitis B vaccines.

Promotion of male circumcision: Adult male circumcision not only substantially reduces the risk of heterosexual HIV acquisition, but also provides some protection against other STIs, such as HSV-2 and HPV. No additional biomedical interventions, including microbicides, are currently available for STI prevention.

Strategies to enhance STI-prevention impact can mean scale-up and integration of existing STI services that includes case management and counselling, syndromic management, Partner notification an Treatment, education and condom promotion.

Cash plus care as an intervention has been shown to have impact on preventing STIs. A school-based package of interventions has also shown a significant effect on the reduction of HSV-2 in KwaZulu-Natal.[51]

School based and out of school based youth package of interventions that includes targeted social marketing of female and male condoms to youth.

2.4 Principles of integration for HIV, TB and STI prevention

There is a need to intensify the integration of HIV, STI and TB prevention. This section will discuss actions needed to imbed TB/HIV integration into all implementation and to integrate HIV and TB prevention into maternal and child health (PMTCT), STI prevention and SGBV programs. There also needs to be a clear linkage or referral pathway from prevention activities into treatment programmes. This section will also cover HIV and Hepatitis C and B integration, as well as using HIV services as entry points for STI screening, particularly among key populations as well as MMC for men.

Priority actions for better integration of HIV, TB and STI prevention:

- Condom Promotion as triple prevention – HIV, STIs and pregnancies
    - We know that the provision of condoms alone is not enough to contain HIV, STI infection rates, or unplanned pregnancies. There is a common understanding of a ‘saturation level’ existing beyond which condom distribution does not enhance HIV, STI and pregnancy prevention levels. Yet ensuring access to female and male condoms remains a “best buys” for generating return on investment in South Africa. And globally, condom promotion and distribution remains on the list of “high impact HIV interventions” central to investing strategically to achieve the biggest impact against HIV[52], STIs and unplanned pregnancy.

We have a key opportunity now with a new brand of male condom and a choice of female condoms to use the individual features of these commodities to promote or specifically market the use of condoms for triple prevention amongst individual key populations.

- STI screening for HIV key populations, and HIV screening for people with other STIs
- STI screening at antenatal services as part of PMTCT
- STI screening among the older men when screening for non-communicable diseases, such as hypertension and diabetes.

Chapter 3: Accelerating National Development

"Social and Structural Drivers"

Strategic Objective 3:
Human dignity and empowerment to make healthy choices

Key Targets:

-
-

Priority Actions:

- Focus on social, economic and environmental development through a social ecology model for HIV, TB and STI prevention, treatment and care.
- Ensure that all people in need of psychosocial support who are able to access these services.
- Implement comprehensive sexuality education in all schools, technical and vocational education and training (TVET) institutions and higher education institutions.
- Promote the Isibindi Model for community mobilisation and empowerment
- Scale up access to rehabilitation (with a harm reduction focus) programmes for alcohol and drug users.
- Implement communication campaign to raise awareness of the Equality Courts
- National communication campaign on Human Rights, Access to Justice, Stigma and Discrimination
- Accredited training package developed for law and health facility staff on HIV, TB, Human Rights and Access to Justice
- Development of a multi sectorial measurable, accountable and sustained Human Rights, HIV/TB Charter

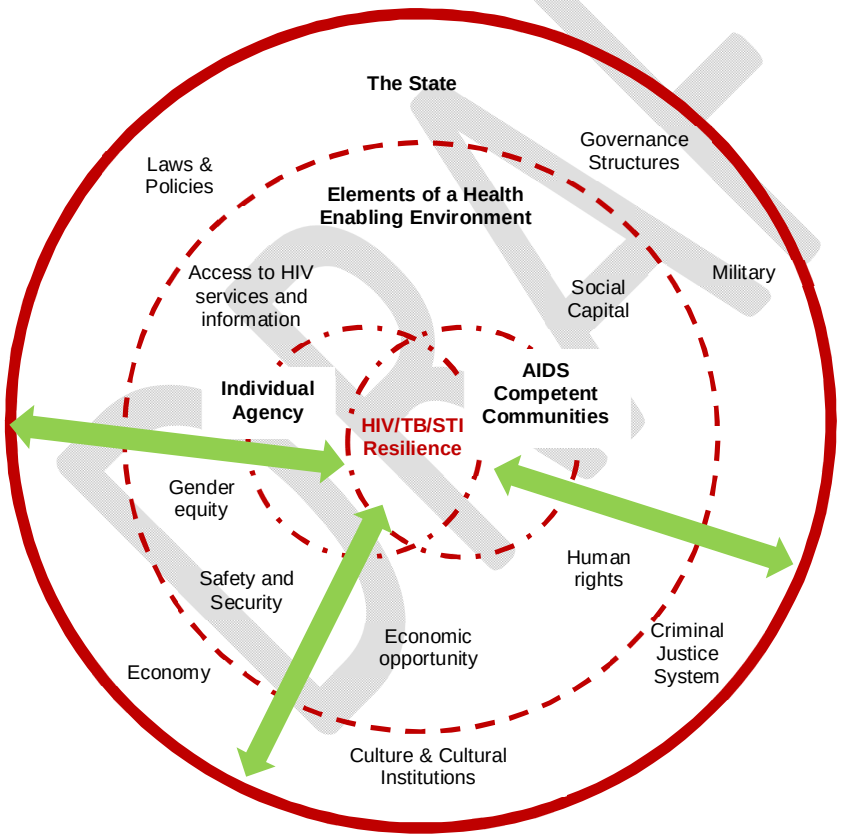
Within the context of the National Development Plan for 2030, South Africa's response to the social and economic determinants of HIV, STIs and TB is fundamentally altered. The location of the NSP within this wider development project means that there is a solid foundation upon which real and lasting structural change can take place - changes that will impact on the incidence of HIV, TB and STIs. That said, this NSP urges that we cannot afford to wait until 2030 for these changes to occur. Crises of violence, stigma and substance use (among others) must be addressed with a matter of extreme urgency over the next five years. We must bend the arc of history towards social justice as rapidly as possible.

An effective response to HIV, TB and STIs cannot be achieved without addressing the social and structural drivers such as poverty, migration, gender inequality and gender-based violence that underpin and fuel the pandemic. These drivers facilitate new infections, deter individuals from undergoing HIV testing or TB/STI screening, inhibit retention in care and treatment, and contribute to internal and external stigma. As the AIDS2031[53] report strongly argues: "The social, socioeconomic and sociocultural contexts in which these epidemics flourish has to be tackled. Ultimately this will determine the outcome of the HIV epidemics and of our efforts to manage their effects."

The challenge in this section is to provide a contextual framework for social and structural drivers of the HIV/AIDS and TB pandemics, to identify new and cost-effective strategies for addressing the most important drivers, and to describe current workable strategies that can be scaled up or suggest new game-changing interventions. The framework needs to be multi- and inter-sectoral and will necessitate an expanded list of indicators for social and structural drivers to monitor progress effectively.

Although there is no single approach for all settings, the following considerations and features are characteristic of good structural programming and should be addressed in the development and implementation of structural approaches in any setting: clear articulation of the causal pathway between the structural factor and HIV risk, and where along the pathway the intervention aims to have impact; understanding of the intervention's possible unintended effects; definition of the macro (national/regional), meso (community), and/or micro (individual/family) levels that the intervention expects to influence; and attention to the needs of marginalised and/or hard-to-reach groups.

Key to understanding and addressing is notion of developing HIV, TB and STI *resilience*,[54] or what has also been described as resilient communities. This section proposes a new *Resilience Model* as the key game changer for social and structural drivers in this NSP. AIDS2031[55] calls for an approach that allows for an alternative strategy to HIV prevention which does not call for isolation to avoid HIV exposure, and which does not value health outcomes to the detriment of other social goals. Instead, the approach changes from one of AIDS isolation, to one which builds the capacity for individuals to manage those risks. This approach will move the NSP beyond individual agency and victimhood and sees personal change existing in a complex relationship with social forces. See the socio-ecological model for structural change and social justice below:



3.1 Harm reduction approaches to alcohol and substance use

Alcohol and other recreational drugs are associated with risky sexual behaviour, elevated levels of violence and challenges with adherence to treatment. For example, one study in Cape Town found that more than a third of women reported being alcohol or drug-impaired and having unprotected sex during their last sexual encounter.[56] Close to half of women

reported that their sexual partner was alcohol or drug-impaired at last sex. The most recent HSRC household survey found that HIV prevalence was 14.3% among high-risk drinkers and 12.7% among recreational drug users.[57] Strengthening existing work to promote health and to address the underlying social and psychological drivers of substance use is necessary. This work should be informed by a harm reduction approach which does not promote abstaining from substances as the only model, but should offer individuals strategies to lessen their dependence. This should include group support, and consideration should be given to Opiate Substitution Therapy (OST) and needle exchange programmes, with effective rehabilitation where desired, for users.

Strategies and responsibilities for harm reduction, rehabilitation and psychosocial support must be specific.

- National Drug Master Plan (2013).

The NDP sets out a key action to "prevent and control epidemic burdens through deterring and treating HIV/AIDS, new epidemics and alcohol abuse."[58] There is also an SDG (Goal 3.5) focusing on "Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol."

3.2 Addressing sexual and gender-based violence

Sexual and gender-based violence (SGBV) is a major structural element that increases vulnerability to HIV and STIs in South Africa. It is estimated that 20–25% of new HIV infections in young women in South Africa are attributable to SGBV.[59] It has also been (conservatively) estimated that sexual and gender-based violence costs South Africa between R28.4 billion and R42.4 billion per year – between 0.9%-3% of GDP annually.[60]

The strategic focus on integrated approaches extends to social and structural factors. Evidence in South Africa suggests that there are strong links between SGBV and other sexual risk behaviours, which present a clear rationale for the need for SGBV prevention to be integrated with HIV prevention programmes in South Africa. One study concluded that women who reported having sex for cash, had multiple partners, reported inconsistent condom use and who reported three or more sex acts in the last two weeks, were significantly more likely to have experienced forced sex.[61]

New evidence has shown that forced sex is the most important risk factor for self-reported HIV infection among the WSW in the Southern African region.[62] In light of this plan's inclusion of LGBTI people as key populations, a coherent response to SGBV experienced by WSW is a new and important priority.

Priority actions:

- Working with and strengthening organisations which have successful and proven interventions which address gender norms. It is vital that GBV and gender norm work involves men and women and promotes reflective, critical discussion in groups and communities.
- Microfinance and other strategies to empower women to be financially independent so that they are less reliant on their partners, and where possible, with men involved as stakeholders so that new power imbalances do not threaten the gains of independence (see gendered empowerment initiatives above). Most effective are micro-finance initiatives in conjunction with a gender transformative intervention, which addresses gender norms while providing livelihood/micro finance strengthening.

- Strengthen and scale up one stop services for victims of GBV, especially the Thuthuzela Care Centres and, linked to this, meaningful policing, prosecution and rehabilitation of offenders.
- Ensure targeted package of HIV,STI and pregnancy prevention which includes specific promotion and access to female but also male condoms for targeted groups, PrEP, PEP and emergency contraception.
- Other recommendations[63] and suggestions from consultation include:
    - Working with other government departments, and CSOs to ensure better documentation (of better quality) of all forms of GBV; better services to those who experience abuse (including the provision of shelter); commitment to existing gun control laws; and the regulation of alcohol

3.3 Social protection

Poverty and inequality are critically linked to the HIV, STIs and TB. TB in particular is fuelled by poverty and inequality, with poor nutrition, poor living conditions, overcrowding, delayed presentation to health facilities, and challenges with retention in care for treatment completion. As a result, the lowest 40% of the population bear 65% of the TB burden compared to 17% in the top 40%.[64] Poverty is also a significant factor affecting HIV vulnerability. The most recent household survey shows that HIV prevalence among people who did not have enough money for basic things like food and clothes was nearly seven times higher than among people money who reported having money for extra things such as holidays and luxury goods.[65]

The NDP notes the sizeable number of AIDS orphans and children requiring concerted support from the state and communities for decades to come.[66]

New evidence is emerging[67] around social protection interventions, including cash transfers, parenting support and educational support ("cash, care and classroom" or "cash plus care").[68] These interventions, as a package, have the potential to reduce the social and economic drivers of HIV risk, improve utilisation of prevention technologies and improve adherence to ART for adolescent populations in high HIV prevalence areas. This NSP recommend that social protection be framed as "family-oriented", using the term broadly to include, for example, informal members (e.g., peers, neighbours), who are often integral to the care and support of children, as well as self-constructed families (such as child-headed households and non-traditional relationships).

Interventions under this heading will include, but not limited to:

- Continuation of government social grants
- Extending and commissioning studies on cash transfers and where evidence shows impact and are feasible, expand these studies as larger interventions
- Parenting support
- Educational support
    - Support during pregnancy to young women who are still in school, to ensure they stay in school.

Table: Social Protection Priorities for South Africa, by age[69]

	Pregnancy/ early childhood	Childhood	Youth	Working age	Old age
Opportunity	Nutrition/ECD, conditional cash transfers	Conditional cash transfers for	Youth employment programmes,	Employment initiatives, entrepreneurship,	Productive aging

	for pre-school	(girls') education	skills	skills development	
Equity	OVC programmes, child care grants	School feeding schemes, child care grants	Public works	Cash & in-kind transfers, public works	Social pensions
Resilience	Maternity allowances	School feeding	Micro insurance schemes	Unemployment, disability insurance	Old age pensions, disability insurance

3.4 Gender and youth focused livelihood protection

Two structural drivers of HIV increase young people's (especially young women) vulnerabilities to HIV, namely: gender inequalities and livelihood insecurity. The latter could somewhat be addressed by the section on social protection, but not completely.

Combined interventions to address gender inequality and livelihood insecurity, resulting in gender and youth focused livelihood protection, include:

- Microfinance and gender empowerment interventions[70] that target women by combining microloans (sometimes micro grants) with business skills training and gender transformative training[71].
    - Specific programmes to targeting key populations, e.g: micro-enterprise services for sex workers[72]
- Supporting greater participation of women and girls in primary and secondary education[73]
- Gender empowerment and financial literacy interventions[74]

Several pilot studies have shown these interventions to have multiple positive outcomes and impact, if or where there is not sufficient evidence of the efficacy of these interventions in 'real world contexts', this NSP should gather such evidence.
Research[75] finds four key lessons learnt from evaluating these interventions:

- Interventions should not have a narrow conceptualisation of livelihoods
- There should not be limited involvement of men and boys in such interventions
- Few studies have been implemented in real-world contexts, and more should be done.
- Successful interventions conducted primarily in rural or educational contexts must be adapted to urban settings and a variety of contexts including among non-school going youth.

3.5 Food security and nutrition

Evidence suggests that food insecurity affects adherence to ART and that HIV affected households may be more likely to be food insecure. The impact of an efficient social grants system cannot be underestimated. Strengthening the work of the Department of Social Development as a key partner on food and nutritional support is critical for this NSP.

3.6 Address psychosocial health of all communities, particularly PLHIV

Mental health aspects remain under-examined and resources for managing mental illness are insufficient. If a holistic view of health is to be supported, then better research, and service provision, on mental health drivers and consequences of HIV, on the internalised

stigma in LGBTI people as well as in PLHIV, and on the mental health needs of women in situations of violence and oppression, is necessary.

3.7 Comprehensive Sexualities Education and access to SRHR and services

Schools are a key site of attitude development and evolution: a comprehensive approach to sexualities education (CSE) in schools should be promoted. Current reviews of the Life orientation curriculum should be accelerated and should promote not just limited change, but that the curriculum is reinvigorated and meaningfully transformed into a comprehensive sexualities education. An essential departure point is that the curriculum should equip young people with the knowledge and skills *to exercise agency in sexual encounters*, whether this be to choose abstinence or safer sex. Effective implementation will require the proper selection and training of Life Orientation teachers, as well as steps to address GBV and the toxic gender environments in many schools. Appropriate, accessible and acceptable comprehensive sexual and reproductive health services (including termination of pregnancy), commodities and information should be readily available and provided in a way that is youth friendly, non-discriminatory and sex positive. Access to information about condoms and supplies of both female and male condoms should be specifically targeted at overcoming youth (and societal) sensitivities to their use and availability.

Out of school youth should not be forgotten as they are particularly vulnerable; a similar comprehensive sexualities education offered through NGOs and faith-based organisations would be of value. The *National Adolescent Sexual and Reproductive Health and Rights Framework Strategy 2014 – 2019*[76] released in 2015 provides a framework within which work with young people can be taken forward.

Universities, TVETS and other sites of post-school education should continue CSE and universities should train teachers that are skilled in CSE.

3.8 Community mobilisation and empowerment

There are various models of community mobilisation and empowerment aimed at promoting community engagement and ownership, with members of communities acting as change agents in relation to diverse issues. In relation to HIV prevention specifically, Kippax *et al.*[77] make an important case for the proper engagement of communities in the enterprise. Recognising the central role that community mobilisation plays in shaping effective responses to the epidemic, they also call attention to the ways in which communities are embedded in wider social and political contexts. This social approach, which has been termed *social public health*, recognises that individual capacities are intimately tied to the enabling (or disabling) character of social norms, practices, and institutions, which are, in turn, understood to be transformed or modified by community mobilisation and social movements. This emphasis on community mobilisation and social movement action focuses attention on the centrality of *collective agency* to any process of meaningful change in response to HIV and AIDS, and highlights the reasons why grassroots activism has so often been more effective in responding to the epidemic than formal public health programmes or interventions.

Chapter 4: Treating All

"90-90-90 in Every District"

Strategic Objective 4: Universal access to treatment and adherence support services

Key Targets:

- 73% of all PLHIV are on ART with suppressed viral load
- 35% reduction in TB deaths by 2020 and a 75% reduction in TB incidence by 2025

Top Priority Actions:

- Strategic HIV testing, including home-based and self-testing for HIV available in communities.
- Strengthen linkage to care, including the use of peers and "treatment buddies" to facilitate swifter initiation on ART following HIV diagnosis.
- Stable patient decanting for drug access to communities and institutionalise the CCMDD model
- Monitoring of and long term adherence and infection prevention support system for decanting patients (including supplies of and information on the need for condom use)
- Increase access to point-of-care Xpert testing for TB to reduce loss to follow up
- Maximise laboratory role
- Implement unique patient identifier
- Monitor and prevent drug resistance
- Support District Implementation Plan (DIP) process
- Targeted facility-based screening of TB
- Household contact tracing of TB index patients
- Reduce Initial Loss to Follow up
- Introduce robust TB treatment literacy and patient-centred adherence support

The NDP confronts the reality that even if the prevention revolution is successful, and an HIV-free generation is achieved, there will still be a sizeable number of HIV-positive people requiring life-long treatment.[78] This poses additional challenges for the TB infection rate and the risk of drug-resistant HIV strains developing if adherence is not improved. In light of this, the NDP indicates that "coverage of antiretroviral treatment to all HIV-positive persons requiring such drugs should be expanded."[79]

It is worth noting that the NDP likely underestimated projections for the total number of people living with HIV, which has significant implications on planning for treatment scale-up, financing, and systems strengthening for delivering services to this growing population. The NDP states that the "number [of PLHIV] is projected to rise to 7.3 million by 2030."[80] However, current modelling (Thembisa) estimates there were already 7.1 million people living with HIV as of 2016, a number that is expected to climb to 7.9 million by 2030.

As with reductions in incidence, the benefits of HIV treatment have not been evenly felt. Globally, adolescents have benefited least from progress against HIV, with smallest drop in mortality since 2000.[81]

4.1 Rolling out universal test-and-treat for HIV

South Africa has embraced the global 90-90-90 targets: By 2020, 90% of all people living with HIV will know their status, 90% of all people with diagnosed HIV will receive sustained

antiretroviral therapy, and 90% of all people receiving antiretroviral therapy will have viral suppression. Modelling suggests that achieving these targets by 2020 is the necessary foundation for ending AIDS as a public health threat by 2030.

The current progress towards 90-90-90 in South Africa shows that testing – both for HIV and viral load – are the sources of the major leaks on the HIV care and treatment cascade. Among those who test positive for HIV, 85% are on treatment, and among those who have viral load tests done, 83% are virally suppressed.

Encouragingly, modelling shows that it is possible for South Africa to reach the first 90 by 2020. However, there is a long way to go; currently, approximately 60% of PLHIV in South Africa are aware of their status. Reaching the first 90 will only be possible with innovative testing strategies to reach PLHIV who are not being reached with current testing services. Studies have shown that about half of new HIV infections are linked to people living with HIV who are unaware of their status. Although modelling indicates that South Africa will not reach the second or third 90s by 2020, the investment case suggests that with maximum effort, the country will achieve 97:88:80 by 2020.

Against this backdrop, South Africa's roll out of universal test-and-treat (UTT) from September 2016 has the potential to be a game changer for the HIV epidemic. South Africa has been a global leader in demonstrating that rapid ART scale-up is possible: ART coverage increased from around 15% in 2010 to more than 40% in 2014. While UTT policy has the potential to move South Africa closer to the second 90, an impact on the epidemic will not be seen unless maximum effort is put into testing the right people, strengthening linkage to care and treatment, providing adherence support, and retaining patients in care. This was evident from the results of the TasP study in Hlabisa, in which UTT had no population level impact on HIV incidence. Although the first 90 was achieved in the study, less than 50% of participants who tested HIV positive initiated ART and the average time to initiate was 6 months.

90% of all PLHIV know their status

South Africa's National HIV Testing Services Policy (2016) supports a strategic set of facility-based testing, including provider- and counsellor-initiated testing (PICT and CICT), and community-based testing, including mobile campaigns, workplace testing, home-based testing, and testing in educational and religious settings. This diverse approach to testing supports the focus for impact strategy of this NSP, as certain testing modalities are more successful at reaching certain priority populations than others. For example, men are not as likely as women to test at facilities, but can be reached more effectively through workplace testing. Additionally, individuals seeking testing at facilities are more likely to have advanced disease than those who are found through community-based testing. As a result, community testing may lead to earlier HIV diagnosis and ART initiation, which results in health benefits for the individual and prevention benefits for the community.

HIV self-testing, during which an individual collects a specimen, performs a test, and interprets the results, often in private, has the potential to increase testing uptake by providing an opportunity for people to test discretely and conveniently. Under the HTS guidelines, HIV self-testing is defined as a screening tool, not a definitive diagnosis, and individuals with a reactive self-test must receive confirmation testing by a trained provider or counsellor. South African studies have shown high levels of acceptability of HIV self-testing and suggest that introducing self-testing could increase early diagnosis, treatment and care, especially for harder-to reach groups, including men.[82,83]

90% of PLHIV who know their status are on ART

Improving linkage to care for individuals who test HIV positive is imperative to the success of Universal Test and Treat. A recent modelling exercise illustrated that if current trends in South Africa in ART initiation with CD4 eligibility continue under UTT, only 19.2% of the newly eligible will initiate ART[84]. Considering that South Africa must approximately double the number of PLHIV on ART to reach the second 90, these results underscore the urgency of ensuring that those who test HIV positive are successfully linked to care. Several innovations that could strengthen to linkage to care have been proposed:

- Community initiation models (e.g. home-based ART initiation)
- Private sector contracting
- Mother-baby pair tracing
- Dedicated men's clinics or clinic days
- Dedicated adolescent clinics or clinic days
- Fast-tracking initiation

Another strategy that will enable a significant scale up in treatment is stable patient decanting. With stable patient decanting, patients who have been on ART and have suppressed viral loads do not have to go to the clinic once a month to pick up ARVs. Instead, patients may receive longer supplies of ARVs (3-6 months) at one time, can pick up their ARVs from more convenient locations, and receive care and adherence support outside the clinic. Components of a successful stable patient decanting model include:

- Facility- or community-based adherence clubs: 20-30 stable adult ART patients meet for one hour every two months; during the club a facilitator provides screening and options for referral and gives out a pre-packed two month supply of medication.
- Routine collection of data on the barriers to patients adhering to treatment and the development of specific adherence support to address those barriers.
- Fast lane appointments, which allow stable patients to pick up medications without waiting
- CCMDD pick up points
- Private pharmacies
- Mobile dispensaries
- Private GPs contracted by the public sector
- Adherence support and defaulter tracing by ward-based outreach teams
- Treatment literacy campaigns around adherence and viral load monitoring
- Extended pharmacy hours to allow working people to pick up medication

Stable patient decanting should increase the capacity for clinics to initiate and manage new clients because the stable ART patients will not be reliant on attending the clinic once a month for ARVs.

Strategic decisions related to the second 90:

- Revisiting the Medicines & Related Substances Act to allow ART prescriptions to be written once a year instead of once every six months
- Change definition of stable patients to those with suppressed viral load at 6 months (currently 12 months)
- Preparing for new drugs that will become available during NSP 2017-2022: dolutegravir (DTG), Tenofovir alafenamide (TAF), and injectable ARVs

90% of individuals on ART have suppressed viral loads

Viral load testing is currently one of the major leaks on the HIV care and treatment cascade. Improving viral load monitoring is essential to achieving the third 90. One strategy that can improve viral load monitoring is to maximise the role of the National Health Laboratory Service (NHLS). Potential game changers and innovations include:

- Point of care viral load (where available)
- Introduction of baseline viral load measurements (in addition to CD4 count)

- Implementation of NHLS road-map, an internal strategy to improve efficiency of NHLS
- Improved clinic-lab interface
    - Accurate specimen collection
    - Improved system for lab result management
    - Designated provider to receive and act on abnormal lab results
    - Correct management of classified information

Achieving the third 90 also depends on treatment adherence. Modelling shows that adherence support is one of the most critical interventions for reducing HIV incidence in South Africa over the next 20 years. This is because as the size of the population on treatment is anticipated to grow, the control of HIV transmission will increasingly depend on maintaining viral suppression in treated patients. ART adherence interventions such as adherence supporters, adherence clubs, SMS contact, and 'return to care' programmes and interventions to limit drug resistance are vital. Further, South Africa's Investment Case shows that adherence clubs are the only cost-saving intervention with the potential to reduce overall ART costs by 13%.[85]

The stable patient decanting strategy should not compromise clients' access to adherence support. An emphasis should be put on understanding the individual's challenges to adherence and all support should be targeted at managing those challenges**.** Psychosocial support should be made available through government or community structures to ensure that stable ART patients are receiving support services even though they may not be attending a facility on a regular basis. Newly diagnosed HIV positive individuals and clients recently initiated on ART in particular should have access to in-depth education and adherence support. The Integrated Access to Care and Treatment (IACT) intervention, which includes a series of sessions covering topics including HIV/AIDS, STIs and Opportunistic Infections, Treatment Literacy and Adherence, Acceptance of Status, Disclosure, Nutrition and Healthy Living Principles, and Prevention with Positives. A trained facilitator is responsible for IACT content and facilitated IACT discussions, individual counseling and support if required, the overall administration of the group, as well as basic screening, referral and follow up for psycho-social support and/or clinical assessment. Cell-phone based innovations for chronic patient behaviour change are also being explored to support treatment, disseminate information, provide anonymous counselling, gather data and link patients to services.

Retention in care is also a key component of achieving the third 90. Currently, patients are considered lost to follow up if they do not return to the same clinic for care because it is difficult to routinely track patients throughout the system. Therefore, if a client decides to seek care at a new clinic, they are considered lost to follow up at the clinic where they initiated. A recent analysis of NHLS data sought to quantify the difference between clinic and system-wide retention[86]. The analysis found that one year after initiating ART, only 79% were retained in clinic but 90% were retained in care across the system; by 9 years post ART initiation, only 17% were retained in clinic, but 54% were still retained in care across the system. Implementing a system that assigns unique identifiers to all clients attending public facilities would make it easier to calculate system-wide retention, rather than relying on clinic-based retention rates, which underestimate retention and overestimate loss to follow up rates. Unique identifiers will also make it easier to track HIV-exposed infants, whose names are often not decided when birth testing occurs, and will enable de-duplication of PCR testing results for accurate monitoring of the PMTCT programme.

Specific considerations for adherence support (Children, adolescents, pregnant & lactating women, AGYW, Men, Migrants, Key Populations):

Children and Adolescents: Children with long-term treatment needs face unique challenges and require support to ensure optimal adherence. Strategies for children and adolescents must be reviewed and adapted to individuals' changing needs as they mature. The transition from childhood to adolescence is frequently associated with deterioration in adherence and worse outcomes than adults.

Pregnant and Lactating Women: There is evidence that adherence to ART and retention in care is particularly challenging for women initiated on PMTCT.

Key Populations: Targeted HIV programming that takes into consideration the societal, structural and individualized barriers facing key populations (KP) has been shown to be effective in reducing HIV incidence in the general population. To-date, however, no national programs exist within the South African HIV response to address the specialized HIV prevention, treatment, care and support needs of KP (men who have sex with men (MSM), lesbians, gays, bi-sexual and transsexual (LGBT), and injecting drug users (IDU) and sex workers (SW)). KP are at increased vulnerability to HIV infection and interventions informed by and tailored to the needs of KP are an essential part of a long-term population response. A minimum service package for all KP groups should include: peer-based outreach activities; provision of appropriate information, and education and communication material.[87]

Drug resistance remains a concern given that the number of people on ART will need to double to achieve the second 90. The number of adolescents on ART is also beginning to rise and this population is known to have particular challenges with adherence. A strategy to prevent rising drug resistance should include:

- Monitoring of Early Warning Indicators at all facilities
- Enhanced viral load monitoring to identify potential drug resistant cases
- Prevention of drug stock out, which will be assisted by the NDOH Stock Visual System and drug stock out hotlines

Issues that cut across the 3 90s:

- Providing youth-friendly prevention, testing, and treatment services
- Improving access to HIV testing and treatment services for men
- Supporting the District Implementation Plan process, which creates a system of accountability down to the facility level for achieving the 90-90-90 targets

4.2 TB's 90s: screen, treat, cure

South Africa has embraced The End TB Strategy, aligning to its three pillars: 1) Integrated, patient-centred care and prevention; 2) Bold policies and supportive systems; 3) Intensified research and innovation. Indeed, a key objective of the NDP is to "progressively improve TB prevention and cure."[88]

The 90-(90)-90 strategy has also been adapted for TB in South Africa, so that by 2020, 90% of all people with TB should be reached, (90%) of key populations should be screened (a subset of the first 90), and 90% treatment success for all those diagnosed with TB. for TB. These targets are also enshrined in the District Implementation Plans (DIPs).

TB detection is currently estimated at only 68%. There has been an increased focus on Active Case Finding (ACF) and Intensified Case Finding (ICF); the mandate to screen every PHC attendee and the more recent 90-(90)-90 district-based targets, but case finding rates are extremely variable. The entry point for TB diagnosis remains the TB symptom screen however, a systematic review showed variable sensitivity and specificity of symptom screening[89] and symptom-based screening may perform poorly; particularly for those who are HIV positive.[90]

Optimal TB detection is dependent on a reliable screen; adequate and correct sample collection; rigorous implementation of algorithms and reliable laboratory procedures and linkages. Interviews of a representative sample of people exiting primary health clinics have revealed a failure to appropriately implement screening of clinic attendees even with respiratory symptoms.[91] and failure to follow clinical protocols.[92] In addition, there is increasing evidence that the current Xpert test performs poorly when used to investigate persons identified through active case finding, who are generally healthier than persons self -presenting with symptoms to the clinic. Optimal TB screening and diagnostic modalities require ongoing interrogation. Facility-based screening should include passive case finding, intensive case finding of high risk groups (people living with HIV, people on dialysis, cancer therapy, anti-TNF therapy, silicotics), and active case finding using symptom screening (cough>2 weeks) for all adults attending a health care facility for any reason. In addition, optimal screening for high risk groups may include universal testing, regardless of symptoms

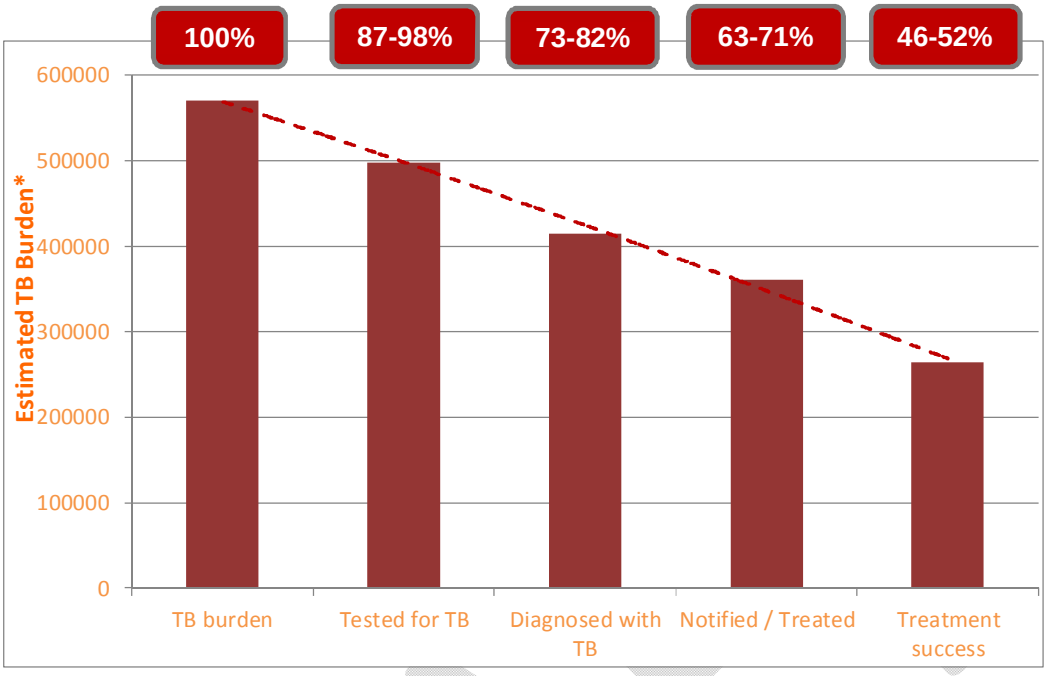
The WHO TB Screening guidelines[93]make a strong recommendation for contact tracing of household and other TB contacts; supported by evidence from a number of studies. [94,95] Although contact tracing has been policy for many years; no mechanism exists for monitoring and implementation is very poor. Implementation needs to be significantly scaled up with dedicated staff and seamless monitoring and needs to be linked to HIV testing and initiation of preventive therapy where appropriate. Priority populations for screening and prevention efforts include those who are HIV Positive, children < 5 years and all contacts of drug-resistant TB patients.

Initial loss to follow up (iLTFU) is a significant problem with rates reported from PHCs ranging between 16% and 25% for drug susceptible (DS)-TB[96,97,98,99,100] and rates as high as 68% were reported in a Johannesburg hospital [101]. Rates of LTFU before commencing appropriate drug resistant (DR)-TB regimens have been reported as high as 63%. [102] Both health systems and patient factors contribute to these unacceptable rates and both will need to be addressed to reduce this critical gap; however summary data from five models assessing ILTF as a single intervention showed that a 75% reduction in ILTF will decrease TB incidence by about 5% and mortality by about 10% by 2025[103]. Activities which are required include facility target setting and the implementation of an electronic system for ongoing monitoring and reporting. To reduce duration and number of visits from symptom onset to treatment; community awareness to promote health seeking behaviour is required in addition to routine counselling of presumptive TB cases and increased facility access to NHLS TrakCare Lab system.

Treatment and cure of Drug-resistant TB remains a priority. A standardized regimen lasting 9 to 12 months with an acceptable safety profile has shown high rates of relapse-free cure in selected MDR-TB patients.[104]

Following the release of the WHO guidelines,[105] the National TB programme (NTP) is planning to introduce the 9-month MDR-TB treatment regimen in 2017; however, as will be the case with all new treatment regimens, significant guideline revision, increased pharmacovigilance, laboratory scale up, supply chain management, systems strengthening, revision of EDR-web and staff training will be required to meet this ambitious deadline.

Figure: TB Care Cascade for Drug-Sensitive TB



To reach maximum impact, targeted, evidence- based facility TB screening and household contact tracing is required. In addition, there is widespread acknowledgement that we need to do the basics better and provide a comprehensive package of prevention and care for TB. Selected sub-districts will be chosen to pilot optimal implementation, driven by a quality improvement approach.

- The role of the private sector as an entry point for TB diagnosis is key, particularly given the focus on working environments (mine workers, health care workers, etc.).
- Primary healthcare reengineering strategy is an exciting platform, particularly for improving our response to TB (see Chapter 6 on Building Resilient Systems). In some districts they are active, in some districts not.

In order to achieve TB's 90s, a strong focus on enabling factors is needed. Three priority actions have been identified to support the achievements of the TB treatment targets:

Provide holistic patient-centred care to promote wellness and improve treatment outcomes - Tuberculosis, like HIV, affects all dimensions of a person's life, i.e. physical, psychological, social and spiritual. TB infection can result in stigma and loss of employment. Psychosocial support for both patients and their families can assist them in making informed decisions, to cope better with the illness and deal better with stigma and discrimination. The biomedical aspects of TB management should be complemented with continuous psychosocial support to provide holistic care. This process should be jointly led by DOH and DSD.

- Psychosocial support and respectful care to promote mental wellness, treatment adherence, reduce harm and decrease stigma e.g. structured pre and post test counselling, adherence clubs, community TB support groups that help to address stigma.[106] Other types of psychosocial support include linking patients to social services and providing compassionate end-of-life care to TB patients, and bereavement follow-up to families.

- Support for alcohol and substance abuse treatment and cessation of tobacco use – heavy alcohol and illicit drug use is associated with a higher incidence of infection and re-infection with TB, higher treatment defaulter rates and development of MDR-TB as well as poorer outcomes.[107,108,109] Heavy smoking (more than 10 cigarettes per day) also increases the chances of TB recurrence.[110] The TB programme should support referral for alcohol and drug rehabilitation and smoking cessation interventions.
- Creating space for people affected by TB to be active participants in their care and inspire

Strengthen community organisations and systems to mount an integrated primary health response to TB - TB is a complex problem and TB management presents the opportunity to address issues by focusing on individuals and families in their home and community contexts to develop their capacity to engage with TB as part of their general health and to expand this in terms of integrating TB care into a broader systems approach to eliminate poverty and build sustainable communities.[111]. This requires an integrated primary health platform to provide comprehensive care, informed by the best available practices and knowledge. Multi-disciplinary teams amongst other things, identify and respond to: high risk individuals and groups (prevention, early detection, disruption of epidemic mechanism); repeated/on-going intensified case finding and screening (homes, educational institutions, workplaces etc.); adherence support and *linkage to a network of care* (including private practitioners and traditional healers); community based MDR/XDR treatment; medicine delivery (CCMDD); health education and anti-stigmatisation; linkage to social services (grants and other social protection mechanisms); health promotion and infection control in homes, facilities, institutions, service sites. TB care should be strengthened as part of the PHC reengineering approach within the community and should build capacity of CBOs towards achieving the NSP goals. This will require a framework for government-NGO-private partnerships to channel funding through appropriate service level agreements to provide services to vulnerable populations that government may not be able to reach as effectively. The system must *link people and services through real time data* in a feedback loop from home to clinic and hospital and back down the chain. This would be facilitated by the implementation of a unique patient identifier system. The process should build on existing local structures and be led by the DOH in collaboration with NGOs and private sector with the support of district. Need DOH and experts to assist schools, workplaces and institutions to develop SOPs or procedural guidelines for system response to suspected TB cases and for active TB patients. These must be clear and simple to understand and be communicated to all involved parties through governance and management structures.

Strengthen the TB capacity within governance, oversight and service delivery structures and systems to create a dynamic task force bringing new thinking, revitalised action, management and accountability – This requires scale up organizational structures for TB at all levels. Delays in seeking health services are influenced by patient's or other users' perceptions of the poor quality of services. [112,113,114,115,116,117] The proposed ACSM strategy will hopefully create a demand for TB services and raise expectations for assured quality of care [strengthening the health service delivery platform and human resources for health are discussed in detail in the TB biomedical section]. SA comes from a long history of civil society activism and the NSP consultations raised the need to reenergise this; there was a strong call to strengthen community voices and hold authorities responsible for service delivery accountable. All the consultations in this NSP development process identified the need to capacitate the TB component of the governance and service delivery structures at all levels in order to create a dynamic SA task force on TB. The current governance and accountability structures - PACs, DACs, LACs, hospital boards and clinic committees – must be strengthened and built upon in order to drive more TB representation. They should also coordinate and oversee local level multi- and inter-sectoral activities to monitor the integrity of systems and ensure seamless connection of TB activities

occurring in the health system and within the community. SANAC holds the mandate for building the capacity of and supporting provincial and local AIDS councils.

4.3 Early STI treatment

Early treatment of STIs is integrally linked with HIV prevention efforts. This is particularly true among key populations. Presumptive periodic treatment (PPT) for STIs among sex workers in Johannesburg could lead to a reduction in HIV incidence of more than 40%.[118]

The current challenge of STI management is use of syndromic approach, which misses those with asymptomatic infection but yet mostly at risk. Screening using sexual history tool through integrated sexual reproductive health services among all populations visiting for primary health care will help in identifying those most at risk and therefore provided for targeted etiologic management of STIs. This will help to reduce STI incidence especially amongst the most at risk populations.

- Screening and treatment for syphilis among pregnant women will help in the elimination of congenital syphilis.
- Comprehensive examination of key populations will help in identifying STIs in the most unusual sites and therefore will enhance surveillance and treatment of most asymptomatic STIs.
- Use of Point of Testing methods for the common STIs will help to screen, and treat STIs and in turn reduce STIs burden.

The occurrence of STIs (and unplanned pregnancy) is a key indicator for being at risk of HIV. Prevention efforts at this time should focus on provision of information and specifically targeted counselling and supplies of female and male condoms.

4.4 Principles of integration for HIV, TB and STI treatment

Integrated care has many benefits for the client and leads to better health outcomes. It reduces the number of clinical consultations the client needs to attend and allows the clinician to consider the client as a whole, rather than focusing on one condition at a time. For HIV positive clients, integrated care can reduce experiences of stigma that arise when HIV care and treatment services are segregated from other services. Additionally, integrated care allows for best practices in chronic treatment to apply to a range of chronic conditions. Much research and work has gone into developing adherence strategies and building treatment literacy in HIV clients, and these principles can be applied to other chronic conditions. Questions have been raised over the traditional Directly Observed Treatment (DOT) model for TB treatment, which has been associated with inability to complete therapy when compared with patient support.[119] Additionally, most TB patients are HIV positive; thus, it makes sense to take a similar approach to TB treatment as is taken to HIV treatment. In addition to TB/HIV coinfection, attention must also be paid to non-communicable co-morbidities that are a growing issue faced by an aging population of HIV positive individuals. Through the Ideal Clinic programme, the Integrated Chronic Disease Management (ICDM) model of managed will be implemented in facilities. ICDM provides integrated prevention, treatment and care services at the primary health level.

Integrated sexual reproductive health services needs to include sexual risk assessments for HIV/STIs, HIV testing and linkage to care, screening for other high risk behaviours like alcohol and substance abuse for everyone.

Chapter 5: Tailoring Packages for Key Populations

"Nobody Left Behind"

Strategic Objective 5:
Equitable, tailored, and targeted services to all key populations

Key Targets for 2022:

- 75% reduction in new adult HIV infections among key populations
- 90% of HIV-negative sex workers on PrEP
- 90% of key populations have access to comprehensive HIV, TB and STI prevention services and commodities such as female and male condoms, including, including human rights and empowerment packages
- 75% of clinic staff in high prevalence areas have been trained on clinical competency and sensitised to key populations' needs
- >90% of controlled mines providing annual TB screening
- 100% of correctional facilities conduct routine screening of inmates for HIV, TB, and STIs

Top Priority Actions:

- Include key populations in decision-making and planning for key populations' interventions
- Establish peer-led and evidence-based interventions for key populations in high prevalence areas
- Develop and roll out standardised sensitisation and clinical training for health and other government service providers (e.g., social workers, police, home affairs)
- Obtain robust sectoral data on number of facility and community health care workers screened for, diagnosed with and treated for TB
- Improved treatment options/formulations for children to improve outcomes and follow up
- Post-violence care and counselling with PEP and PrEP
- Increase focus on service delivery and research on young key populations within and outside of schools

Key populations are broadly defined as people who are disproportionately affected by HIV, TB and STIs due to their higher risk behaviours and/or legal and social issues that increase their vulnerability to HIV, STIs, and TB.[120,121] These populations also have the greatest difficulty in achieving their rights to health, often as a result of social or structural marginalisation. For this NSP, HIV key populations are: key populations for HIV include sex workers, men who have sex with men (MSM), transgender people and other vulnerable LGBTI communities, people who inject drugs (PWID) and inmates. TB key populations are people living with HIV, inmates, miners, those living in informal settlements and migrants, pregnant women, children under 5 years of age, diabetics and all health care workers. Vulnerable populations include people with disabilities, young women and girls, and orphans and vulnerable children.

The estimated 153,000 sex workers[122] have an HIV prevalence ranging from 40% to 72%.[123] Population size of men who have sex with men (MSM) range from 810,000 to 1.2 million[124,125,126] with an average HIV prevalence of 28%.[127] Data on transgender people are sparse, but globally, transwomen are 49 times more likely to be HIV positive.[128] HIV prevalence among women who have sex with women (WSW) ranges from 10% to 14%.[129,130,131] HIV prevalence among the approximate 67,000 people who inject drugs (PWID)[132] is ~14%.[133] No data on HIV and STI prevalence among inmates, but programmatic reports suggest that these may be high. Modelled estimates indicated that 9%

of new HIV infections nationally are attributable to male-to-male sex, and 20% are attributable to sex work.[134] The extraordinarily high HIV prevalence with a distinct lack of targeted services and data, as well as high probability of onward transmission among these concentrated sub-epidemics, makes these populations key to epidemic control.

HIV prevalence among people with disabilities is 16.7%, according to the most recent HSRC household survey (2012), which classifies this group as a highly vulnerable population for South Africa's HIV epidemic. A growing body of evidence identifies significant HIV-risk factors for people with disabilities, which relate to decreased access to health and education (in particular sexuality education), exclusion from and absence of accessible sexuality education, increased risk of sexual abuse and exploitation and increased poverty.

Improving treatment access among children is a priority for this NSP. ART enrolment has slowed down in recent years, particularly among children, possibly due to insufficient attention to diagnosis beyond early infancy. For adults, South Africa has reached the "tipping point" in the HIV epidemic where more people are initiated on treatment than are being newly infected. For every new infection, approximately 1.4 people are initiated onto treatment. This is a major achievement towards epidemic control. However, for children, the opposite is true. In 2015, for every child initiated on treatment there were approximately 1.4 new infections. What's more, this trend is worsening. Since 2010, fewer and fewer children were being initiated on treatment as compared to new paediatric infections.

Girls and young women in South Africa face a burden of health and social problems which widely impact families and communities. They form the cusp of the heterosexual HIV epidemic, with an estimated 1,744 new HIV infections among girls and young women aged 15 to 24 years each week,[135] eight times more than infections in males of the same age.[136] One-third of South African teenage girls become pregnant by age 20.[137] One third of young women who have dated have experienced violence from a boyfriend, and this age group has the highest rate of rape reported to the police. These problems both compound and are compounded by high school dropout and low educational attainment. This results in a large section of the population who are under-equipped for contributing to the national economy and thus many experience long-term unemployment and poverty. These health and social problems are inextricably interconnected, and are driven by biomedical, socio-behavioural and structural factors.

In the context of TB, people who are vulnerable, underserved or at-risk of developing TB are referred to as KP. These include people who have increased exposure to TB due to where they live or work, those who have limited access to quality TB services and those who are at risk due to biological or behavioural factors; these populations vary by country[138].The definition currently includes those who are HIV positive, inmates, miners, those living in informal settlements and migrants, pregnant women, children < 5 years, diabetics and all health care workers. There is emerging evidence regarding TB prevalence in these groups which may assist in refining the definitions to target effective interventions.[139]

5.1 Peer-driven and peer-led interventions

Peers are the foundation of all services, and members of key populations should drive the planning, implementing, and monitoring of all programmes. key populations should be formalised as a SANAC sector, with the sex worker, LGBTI, disabled people, and girls and young women sectors operating as sub-groups under the larger umbrella. Key populations should also be included in the workings of the provincial AIDS Councils. In addition to forming collectives, key populations should also have focal points in police stations, hospitals, and community leaders with whom they can interact on their concerns.

A peer-driven approach is shaped by the opinions key populations and facilitates health seeking and safer sexual practices through targeted approaches acceptable to key populations.[140,141] This is an evidence-based method for identifying and reaching high-risk and hidden individuals among their social networks.[142] Peers assume a variety of responsibilities including psychosocial support, information sharing, adherence support, risk reduction counselling, and HTS. Some implementation studies in South Africa have shown promising evidence on the success of peer navigators who escort key populations through public facilities and ensure successful and continued linkage to care and treatment.[143]

The She Conquers national campaign is a youth-led campaign that was launched by two young women along with the Deputy President on the 24th June 2016. She Conquers is a targeted approach to scale up and fast track efforts to empower young people, especially adolescent girls and young women.

Communication is a key element of this Campaign. The campaign strategy recognizes the importance of mobilizing young women and girls, their social networks and peers, and their communities to drive and maintain momentum of the national campaign.Two of the campaign guiding principles are youth led and peer-led, peer driven and peer support:

- **Youth led** - true engagement at all levels can only be achieved through advocacy, ownership, empowerment, communication and coordination by young people, particularly young women and girls.
- **Peer led, peer driven and peer support** – young women and girls must be supported to drive the Campaign, encouraged to support the implementation of interventions and provide leadership around the strategy and direction of the Campaign.

Peer-driven approaches are also critical for improving the response for children. Some priority actions in this regard include:

- Children's clubs: support systems to address issues faced by children- stigma and discrimination.
- Involve children in the design of programmes that reduce violence in the peer to peer space, such as bullying, and inappropriate sexual behaviour between peers;
- Children-devised strategies for ensuring prevention of HIV, STIs and pregnancy amongst their age groups (which may include the targeted provision of information about and supplies of condoms)
- Involve parents and caregivers in the design and implementation of appropriate parenting programmes.
- Adherence support groups with parents and older children
- Disclosure to children facilitated by parent support groups

Peer-driven approaches for people with disabilities:

- Empowering people with disabilities to support the outreach to marginalised groups: Department of Social Development
- Activity: Train and integrate peer educators in HIV-outreach programmes. This can make use of the Rolling Positive approach
- Consultation with people with disabilities on the location and provision of prevention services specifically tailored to their needs i.e. PEP, PrEP and condoms etc.

5.2 Differentiated care

Differentiated care for HIV, TB, and STIs requires delivery of tailored care packages for people based on their distinct needs. As more people start ART it is important to maximise the quality of care and ensure cost-effective and efficient health services[144]. Since KPs are frequently confronted with barriers to accessing health services it is recommended that a

client-centred approach that integrates targeted HIV, STI and TB across the cascade be adopted to improve service to KP and to reduce unnecessary burdens on the health system.

Within the South African context, innovative and evidence-based approaches to breaking down barriers to accessing health services include co-locating services and cross-training providers, such as providing ARVs at substance use treatment centres; scheduling service hours that are regular, dependable and suit the intended clients with flexible times; ensuring privacy and confidentiality of users; locating services strategically where key populations congregate or transit, and offering mobile clinics. Although these services may be donor and NGO-driven, DoH leadership and oversight is important.

In addition, safe community spaces such as drop-in centres or recovery houses are hubs for the continuum of prevention and care. They are entry points for services such as HTS, psychosocial support, ART and OST adherence, harm reduction and safer sexual behaviours.[145]

The She Conquers approach for girls and young women acknowledges a differentiated geographic approach to combination HIV prevention for girls and young women. The implementation of the Campaign will take place in a stepwise approach, focussing first on high HIV burden areas where the need is greatest. Districts will then be phased until national coverage is achieved.

The approach to reaching girls and young women is also differentiated by age and sex. The primary target for the She Conquers Campaign is young women and girls aged 15-24 years. The secondary target group includes adolescent boys and young men aged 15-35. Boys and men between 15 and 35 are also included as they contribute to the cycle of new infections and pregnancies as well as sexual and gender based violence and are affected by low levels of employment. The Campaign seeks to address particularly vulnerable groups including orphans and vulnerable Children (OVC), youth that are not in employment, young sex workers, youth with disabilities and rural youth.

For children, priority actions for differentiated care include:

- Ensure that services and programmes, including adherence support, is made more contextually relevant for children through designing interventions appropriate to particular age groups. These interventions should be recorded to provide information for other programmes and groups tackling similar issues.
- Post violence counselling and support available at SAPS for children who are victims of sexual violence (increase the capacity of the SAPS Family Violence, Child Protection and Sexual Offences Unit to provide such services)
- Follow up psychological services available for children who are victims of sexual violence including those vulnerable to sexual exploitation
- Expand the focus on enhancing parenting and caregiving and substitute care.
- Improve the identification of and response to violence against children (VAC) – not only among health professionals but inclusive of educators.
- Development of a national HCT plan for children and adolescents as well as part of the current HCT as **HCT Plus** *(a programme where every positive adult triggers their child(ren) being tested*)
- A plan to ensure access to information, targeted appropriate information and access to supplies of female and male condoms.

For people with disabilities, priority actions for differentiated care include

- Provide access to HIV-services for people with disabilities: Department of Health
- Train health care workers with the *Closing the Gap* (FPD) training approach. This also includes a basic disability audit for HIV-services and facilities (26)

- Provide access to comprehensive sexuality education to learners with disabilities (in particular in special schools): Department of Basic Education
- Train educators with the *Breaking the Silence* approach to provide access to comprehensive sexuality education for learners with disabilities, finance evaluation of approach.
- Rehabilitation professionals and services are scarce in South Africa, hence innovative service delivery models such as task shifting (to accommodate comorbid depression) and home or community based rehabilitation need to be strengthened and integrated into care. Research on the feasibility of and potential to upscale these approaches is urgently needed.
- Provision of specifically tailored services for those experiencing violence and abuse including information and access to PEP, etc.
- Prevention information and commodities (female and male condoms) made easily accessible to people with disabilities.

5.3 Agency and empowerment

There are extensive challenges to accessing health services by key populations because of stigmatisation, but also due to lack of health literacy and their rights among key populations. Communication and education on the right to health services, guarantee of confidentiality, establishment of supportive legislation and policy, access to legal support, provision of legal services, and well as informed access to gender affirming treatment and surgery supports development of agency among key populations. Health literacy should be part of the package of services for key populations and should be delivered by peers and through health and social workers.

Promotion of collective identity by establishing unions or networks where problems can be solved and advocacy for human and health rights established. Evidence of collective mobilisation and community-led prevention among SWs shows increased HIV knowledge, increased condom use with clients and partners, and decreased prevalence of HIV and STIs [146,147] and increased uptake of HTS and treatment among MSM[148,149] through interventions based on the theories of social networking and diffusion of innovation.

AIDS councils should use standardised tools to monitor stigma and discrimination at local levels and provide immediate remedial actions. In addition, SANAC and the key populations sector should coordinate campaigns to increase social acceptance and ensure constitutional protection; pre-piloted messaging is important. Access to comprehensive post-rape or violence care and ongoing trauma support should be provided in accordance with WHO and DoH guidelines. Law enforcement officials and health- and social-care providers need to be trained to recognise and uphold the human rights of key populations and to be held accountable if they violate these rights.

Research on gender-based violence prevention interventions has shown that women's economic empowerment interventions, gender empowerment programming, manualised participatory gender transformative interventions which address gender and communication/conflict skills, school-based interventions delivered in the classroom and social norm change interventions focusing on building gender equity and reducing the use of violence through work in the community, and combinations of interventions, are effective in building gender equity and reducing the risk of violence. For girls and young women, economic empowerment is a key tenet of the national response. The She Conquers campaign underscores the need for agency and empowerment aspects as fundamental for success in HIV prevention among this population.

For children, priority actions for agency and empowerment include:

- Evidence based psychosocial programmes to address psychosocial effects of sexual violence- trauma counselling, debriefing, ongoing psychological support at critical psychosocial developmental stages of a child's life.
- Ensuring that boys are not left behind – both sexes to be included equally and given the opportunity to have agency.
- Programming to focus on:
    - Parent and caregiver agency and empowerment with regard to the prevention of violence in the home
    - The empowerment of children to enable responsible decision making in relationships;
    - Participation from a rights *and* responsibilities perspective

5.4 Sensitisation and clinical competency

Sensitive and clinically competent HIV, TB and STI services throughout the country will ensure increased key populations access to health services.[150] Clinical competency should focus on each specific key populations sub-group, considering distinct health needs and risk behaviours, while sensitisation can follow more of a one-size fits all approach. Screening and treatment for mental health disorders that may impede HIV prevention and care is a critical component of clinical training.

Sensitisation and clinical competency training should be conducted through the Department of Health's (DoH's) Regional Training Centres together with representatives from the KP community. This standardized approach should ensure wider reach of health care workers. The DoH should ensure that on-the-job support leads to an organisational norm of inclusiveness and non-discrimination.

Simultaneously, health professions' pre-service education (medical and nursing schools, and the allied health sciences) should include key population competency and sensitisation elements. Training should target all public workers including police and correctional services officers, and should promote the Batho Pele Principles. The Health Professions Council of South Africa (HPCSA) and the South African Nursing Council should include KP-competent care as key clinical skills for registration as health care provider.

There is recognition of the occurrence of burn out and poor levels of morale amongst service providers managing an ever-increasing workload. Targeted supervision and support with skills review should be made available to staff members to help address this pressure and reduce the incidence of provider bias.

For girls and young women, the response must intensify efforts to coordinate and create synergy across all current sectors and programmes working with young people to foster a targeted, sensitised, co-ordinated and evidence based response. All stakeholders must help to deliver the comprehensive package of interventions in a coordinated fashion, to deliver a country-owned and country-led response to address the needs of young women and girls. This may require the development of a capacity strengthening agenda for implementers on the ground.

Besides bringing new approaches and resources, one of the key objectives of tailoring packages for girls and young women is to ensure that we join up of dots, that is creates synergies to ensure that the maximum value from investments is achieved. Led by the Office of the Premier in each province, District and Provincial AIDS Councils will play a lead role in coordinating the She Conquers activities. Their competency will therefore be a key influencer in the effective roll out and scale up of She Conquers

For children, priority actions for sensitisation and clinical competency include:

- Enhanced screening procedures/protocols at all healthcare facilities for children at risk for HIV and TB
- Improved skills amongst all healthcare providers on management of childhood HIV and TB
- Risk and vulnerability assessment of children at clinical and community level
- Sensitisation programmes for SAPS, clinical staff, community based cadres on child sexual abuse- identification of vulnerable children and referral to clinical services and psychosocial support services, follow up care and support.
- Ensure that clinics and other service points where there is interaction with children, are child friendly and confidential. Consideration of flexible hours for clinics.
- Improve the quality and prioritise life skills education in schools and ensure the active participation of children in life skills education
- Increase professional and clinical competencies in clinics and schools by ensuring that staff are much better able to:
    - Identify VAC and factors putting children at risk
    - Undertake appropriate referral and follow-up

For people with disabilities:

- Ensure early detection of functional limitations and referral to care (therapy, assistive devices, other rehabilitation services) Department of Health and Social Development
- As people age with HIV, they may be at increased risk of developing functional limitations, yet these complications are not identified early and treated. Hence early identification and treatment of dysfunction on all body systems (mental, physical, and sensory) is needed in order to prevent long-term disability.

5.5 Targeted interventions

The National Sex Worker Plan and the draft LGBTI Framework should accompany this Strategy for detailed targeted interventions and recommendations. Several other interventions specific to KP are listed below.

Specialised SBCC: SBCC ranked third most effective intervention South Africa's HIV Investment Case. SBCC activities are useful in effecting social and behaviour change at all levels of the socio-ecological model (i.e., individual, family, community, society). Messaging should be piloted and refined to distinct recipients, and should address KP needs such as PEP, PrEP, consistent condom and other barrier use (e.g., finger cots, latex gloves, dental dams). Gender norms and dynamics as well as gender-based violence in the context of KP should be dedicated topics. Social marketing and social media interventions are effective in reaching MSM and YKP, particularly non-gay identified men to maintain anonymity.[151]

Reaching the first 90: Social network strategy (SNS), based on reaching into hidden social networks using respondent driven sampling (RDS) techniques is useful in finding people who have not been tested before.[152] HIV Self-testing/HIVST with online linkages to confirmatory tests and psycho-social support is a novel method that protects confidentiality.[153] HIV self-testing can be enhanced through online and electronic systems (e.g., supervised online self-testing platform providing real-time chatting with trained counsellors.

Post-Exposure Prophylaxis (PEP) accompanied by an educational and awareness campaign should be rolled out among key populations *and* health workers; reports indicated that both KP and health providers lack PEP knowledge.

Pre-Exposure Prophylaxis (PrEP) for all populations at substantial risk should be accompanied by improved recruitment of hidden populations, access to services, and

adherence support. Information provision on PrEP must be improved, and provided in appropriate languages. Periodic Presumptive Treatment (PPT) of STIs should be provided to female sex workers on a quarterly or biannual basis to reduce the prevalence of gonorrhoea, chlamydia and ulcerative chancroid,[154] particularly among those who are on PrEP.

Sexual and Reproductive Health (SRH): SRH for all key populations, taking their specific needs into account, should be available at public health services. Urgent MTCT services should be made accessible to female sex workers and transmen to prevent vertical transmission.[155] Dual protection commodities including female and male condoms as well as access to emergency contraception and Choice of Termination of Pregnancy (CTOP) should be offered. Specifically targeted social marketing of female and male condoms to individual key populations will be developed based on overcoming the barriers to use faced by these populations. Cervical cancer screening, annual PAP smears and HPV vaccines must be made available to female sex workers and transgender people according to WHO guidelines.[156]

As mentioned above, companion guidelines should be consulted on specific key populations. However, some populations deserve specific mention:

Young key populations should be prioritised as they are most vulnerable, due to increased risk-taking or naivety of youth, compounded by other risk factors faced by key populations[157]. Interventions for youth must be conducted within the socio-ecological context of young people and take advantage of the innovations that youth have incorporated into their daily lives (e.g., smart phones), and include PreP and combination prevention. A sustained focus on HIV research, policy and advocacy for young key populations must be conducted in and outside of schools[158].

Transgender People: Although LGBTI rights are entrenched in the South African constitution the health needs and rights of transgender and gender non-conforming people are not recognised. Relevant services such as gender-affirming hormone treatment and gender reassignment surgery should be freely available in public health facilities[159].

For inmates, the Department of Correctional Services and the Department of Health should collaborate to improve re-entry into communities post-incarceration and to ensure linkage to care and treatment within public health facilities and in correctional facilities. Access to specifically targeted information for those in correctional services together with supplies of both female and male condoms will be strongly encouraged.

Harm Reduction package of services[160] must be made available to PWID and interventions to address those at risk of transitioning to injecting are needed. In addition to needle and syringe programmes and opioid substitution treatment PWID must also be provided with overdose prevention and management, wound care and vein maintenance, HTS; ART; prevention and treatment of STIs, TB and viral hepatitis, female and male condoms, targeted IEC, and services for homeless people.

It is important to recognise that key populations are complex and are not homogenous groups. Although there are commonalities, each sub-group has distinct needs and tailored packages – rather than simple scale up of prevention activities -- should be developed and delivered through the leadership of members of these groups in collaboration with government and donor organisations.

The comprehensive package for girls and young women (the She Conquers interventions) will be scaled up to address current barriers experienced by young women and girls. This includes biomedical, socio-behavioural and structural interventions to increase access to information, services and support. Biomedical interventions seek to increase access to

sexual and reproductive health (SRH) information and services through adolescent and youth friendly clinics and the Integrated School Health Programme. Socio-behavioural interventions focus on increasing community mobilization and support; access to peer groups and clubs; opportunities for awareness and information on gender, violence against women and girls, substance abuse, stigma and discrimination; and access to parenting programmes for parents of teenagers and for teenage and young parents. Structural interventions seek to increase access to economic opportunities like grants and other forms of social protection, bursaries and funding to increase access to post school education, and increase post-schooling options including employment, mentorship and internships for youth.

The vision for interventions specifically highlighted for inclusion in a comprehensive HIV prevention package for girls and young women include:

- Increased access to social assistance by girls and young women
- Increased access and uptake of youth friendly combination HIV prevention, SRHR, and treatment and care services
- Increased access to psychosocial support services for girls and young women
- Increased access to co-curricular support (peer ed, homework assistance, social and drama and sport) for girls and young women
- Schools that meet minimum requirements for school safety increased
- Increased risk perception & knowledge about HIV prevention treatment, care, SRH, & gender issues among girls & young women
- Alcohol and drug prevention programmes scaled up
- Increased coverage of intensive SBCC programmes for girls and young women
- Scale up of peer education programmes for girls and young women
- Increased access to skills and employment progammes by girls and young women
- Increased entrepreneurial skills of girls and young women
- Positive parenting programmes scaled up
- Age-appropriate comprehensive sex education, which explicitly addresses issues of gender and power implemented in all schools
- Increased access to GBV services [screening, counselling and support, PEP, CTOP]

The 3 year Campaign, from June 2016 to July 2019, will be phased in and implemented in all districts in South Africa. The first phase will prioritise 51 sub-districts that have been selected because of the high HIV prevalence, teenage pregnancy and orphanhood among young women and girls. The Campaign will intensify efforts to coordinate and create synergy across all current sectors and programmes working with young people to foster a targeted, coordinated and evidence based response. All stakeholders must help to deliver the comprehensive package of interventions in a coordinated fashion, to deliver a country-owned and country-led response to address the needs of young women and girls.

Besides bringing new approaches and resources, one of the key objectives of this Campaign is to ensure that we join up of dots, that is create synergies to ensure that the maximum value from investments is achieved. Led by the Office of the Premier in each province, District and Provincial AIDS Councils will play a lead role in coordinating Campaign activities.

The implementation of the Campaign will take place in a stepwise approach, focussing first on high HIV burden areas where the need is greatest. Districts will then be phased until national coverage is achieved.

For people with disabilities, priority actions include:

- Improve coverage of rehabilitative care through innovating provision of care

- Ensure that all key programmes report on disability, hence standardise reporting requirements in the same way as gender, highlight that at least 7% of each programme need to reach out to people with disabilities.
- Investigate how alternative ways of delivering rehabilitative services can be used to provide care for people living with HIV (assess best models and develop a pilot project)
- Investigate how to integrate innovative disability screening tools into HIV care
- Access to information about and supplies of condoms

For children, priority targeted interventions include:

- Risk and vulnerability assessment of children in households through home visits by community based cadres
- Improved referral systems in place from community to facility level and from facility to community for child protection and gender based violence
- PREP and PEP provided for children who are victims of sexual violence
- Age appropriate sexual and reproductive health programmes at community and facility level for children
- Family planning programmes at facilities and community based organisations
- Contraceptives available and distributed at community based organisations and facilities for children
- Harm reduction in relation to victimisation
- Focus on boys and promote appropriate perceptions of masculinity
- HIV testing protocols of breastfeeding women to be established and monitored.
- Nutritional support for HIV-exposed children and follow up
- Special focus on HIV-infected teenage pregnancies - high risk of transmission/adverse infant and maternal outcomes
- Improved referral systems in place from primary healthcare clinics/EPI (expanded programme of immunization) programmes into treatment for either HIV or TB

**Specific sections to be added which spell out plans for sex workers (in line with the National Sex Worker HIV Plan 2016-2019), LGBTI communities (in line with the Draft South African National LGBTI HIV Framework, 2017-2022), people who inject drugs and inmates .*

Chapter 6: Human Rights, Stigma and Discrimination

"Equal Treatment and Social Justice"

Strategic Objective 6: A just and fair society for all

Key Targets:

- Reduce the percentage of people living with HIV who report having experienced discrimination and/or stigma due to their HIV status by x% by 2022
- Reduce the percentage of people with TB who report having experienced discrimination and/or stigma by x% by 2022

Top Priority Actions:

- Ensuring a rights-based framework for all
- Improving access to legal support
- Secure a commitment for decriminalisation of sex work and drug use which enables access to services.
- Reduce stigma and discrimination, especially for key populations

6.1 Protecting human rights and increasing access to justice

HIV does not affect all people equally and barriers to human rights prevent us from achieving impact. As TB remains the leading cause of death among people with HIV, a strengthen human rights and access to justice framework that considers HIV, TB and STIs is essential. The 2017-2022 NSP similarly advances an agenda which is intended to promote, protect and fulfill human rights and ensure access to justice for all. Along with this, an over-reliance on biomedical solutions for HIV and TB prevention at the expense of equity, social justice, and human rights must be avoided.

Centrality of human rights and access to justice in an effective HIV, STI and TB response

Globally, HIV policy documents underscore the centrality of human rights to an effective response to HIV.[161] These policies ground responses to HIV in a commitment to human rights and articulate actions to address human rights abuses, stigma and discrimination. They reflect the human rights dimensions of HIV prevention, treatment, care and support and provide guidance on how best to respect, protect and fulfill human rights.

Some contextual issues to be considered in the context of human rights and access to justice are:

- Race
- Age and gender
- Sexual orientation and gender identity and expression

Existing legal, policy and institutional framework for the protection of human rights in the context of HIV

At a minimum, the protection of human rights in the context of HIV, requires a supportive and enabling legal and policy environment in which people are able to access justice. South Africa's legal framework is informed by a progressive Constitution, which guarantees a broad

range of civil, political and socio-economic rights including in particular the right to equality and non-discrimination, access to justice, the right to privacy, the right to dignity, the right to health and other basic human rights. The Constitution is South Africa's supreme law and all other laws must be consistent with the Constitution. There are a number of laws and policies that relate to human rights and access to justice in the context of HIV.[162]

In addition, a Judicial Matters Amendment Bill is currently before Parliament. If passed in its current form, it will establish HIV status as a listed ground on which discrimination will be prohibited. HIV status is not currently included in the list of prohibited grounds provided for in section 9(3) of the Constitution. However, it has been found that discrimination on the basis of HIV status is in violation of the right to equality and non-discrimination guaranteed by section 9 of the Constitution.[163]

The South African Constitution establishes a number of institutions that are intended to protect and support our constitutional democracy. Known as chapter 9 institutions, the ones most relevant to human rights and access to justice are the South African Human Rights Commission, the Office of the Public Protector and the Commission for Gender Equality. In addition to the chapter 9 institutions, the courts are an important avenue through which justice can be accessed although the costs and time associated with court processes act as a significant barrier. Specialized equality courts, which were established in terms of the Promotion of Equality and Prevention of Unfair Discrimination Act, are intended to handle cases alleging violation of the right to equality and non-discrimination. In addition, Legal Aid SA and civil society organizations which provide direct legal services play an important role in protecting human rights and ensuring access to justice.

Strengthening a supportive and enabling legal and policy environment

- This section will include an assessment of laws and policies and their application and implementation and, based on this, highlight any contradictions, misapplications, alignment with ethical guidelines and codes of conduct and then make recommendations around strengthening the legal and policy environment. For example, it will consider the impact of sex work criminalisation, people who inject drugs, the status of migrants (NDP says “South Africa will need to adopt a much more progressive migration policy in relation to skilled as well as unskilled migrants.”[164]), the development of the SANAC law and human rights charter, strategies and laws relating to HIV prevention, treatment, care and support in detention, access to medicines, policies to enhance access to comprehensive post sexual assault services, policies on comprehensive sexuality education and an overall accountability mechanism.
- This section will articulate why a human rights approach to HIV, TB and STI is critical. It will also describe how human rights linked to HIV, STIs and TB span many different sectors – the right to health, the right to information, the right to child survival, the right to education, among others – which necessitates multi-sectoral cooperation. A focus will be on ensuring that rights which are enshrined in the constitution translate into rights on the ground. This is linked with shifting norms and attitudes. For example, in a recent nationally representative survey, 51% of all South Africans believe that gay people should have the same human rights as all other citizens, yet 72% feel that same-sex sexual activity is ‘morally wrong’.[165] These views result in discrimination which is contrary to the constitutional rights of South Africans.

6.2 Legal reform of the Sexual Offenses Act

In March 2016 the Deputy President launched the National Sex Worker HIV Plan. The Plan will reach 70 000 sex workers with a comprehensive prevention and treatment package of

services but also includes psycho social support, economic empowerment opportunities and protection from human rights violations and abuse by clients, police and communities.

It has been the view of the Technical Working Group that the current legislation is a barrier to the full implementation of the Plan and needs to be addressed.

With this in mind the Ministry of Justice is working with the Law Reform Commission to prepare legislation for consideration by parliament. SANAC is working with the Justice Ministry to release the report of the Law Reform Commission and prepare the public for debate and dialogue on the decriminalisation of sex work in South Africa.

6.3 Review of drug policy

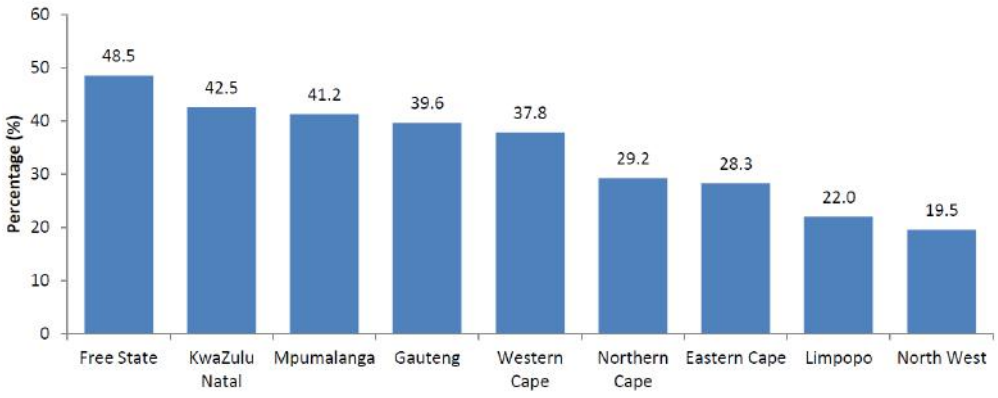
There has been a substantial increase in the use of opioid-based substances in South Africa with the growth in the use of Nyaope. As Nyaope is heroin-based there is a significant risk of transition from smoking to injecting. If this were to become the trend South Africa could very well face an exploding new HIV epidemic through the use of shared unclean needles and syringes. An opportunity exists for implementing effective clean needle and syringe exchange programmes to nip this epidemic in the bud. SANAC is working with the Department of Social Development and the Central Drug Authority to review its approach to the criminalisation of drug users as this is globally known as a key barrier to harm reduction and opioid substitution therapy programmes.

6.4 Reducing stigma and discrimination

The People Living with HIV (PLHIV) Stigma Index found moderate levels of HIV-related stigma and discrimination when using the composite scores derived from combining various individual sub-modules in the questionnaire. Although the study found moderate levels of external stigma (36%), internalized stigma experienced in the last 12 months were reported by 43% of respondents.[166] This is a concern because the majority of the respondents reported being members of PLHIV support groups. The survey also found that stigma and discrimination is greater for TB than it is for HIV. An active response to improving the management of PLHIV at family, community, facility and societal levels include:

- Strengthening community based support for eradicating stigma and discrimination, utilizing traditional structures
- Strengthening the leadership of PLHIV to drive the human rights and access to justice agenda

Figure: % of Stigma Index Respondents who Report External Stigma, By Province[167]



This NSP seeks to build on the existing work of SANAC to strengthen stigma research and interventions. These include the ongoing support for the national PLHIV Stigma Index survey, the Legal Aid South Africa helpline and legal aid, and promotion of access to justice through Chapter 9 bodies and greater use of the PEPUDA Act-based Equality Courts. In addition the successful community based empowerment model for stigma reduction demonstrated in the Eastern Cape should be scaled up nationally, and adapted for local relevance. In addition, work with SABCOHA and the labour movement should strengthen stigma mitigation in the workplace context and should promote a review of existing HIV protection laws for their efficacy.

Across the world, people forming part of key populations are impacted disproportionately by the dynamics of HIV, TB and STIs and are exposed to greater risk of stigma, discrimination and violence. In South Africa, key populations and other groups that bear a significant burden of stigma and discrimination include sex workers, men who have sex with men, women, young girls and women, migrants, LGBTI persons, people who inject drugs, and people living with HIV or TB. People who form part of key population groups may experience disempowerment as a result of social, cultural, political, legal or economic factors that make them susceptible to human rights abuses. Accordingly, HIV, STI and TB strategies and responses need to incorporate measures and protections that are aimed at addressing disempowerment, harms, human rights violations, stigma, discrimination and violence.

**Still to populate sections on stigma, discrimination and inequality among the following key populations, with specific reference to the impact of laws and policies on the human rights with regards to:*

- Girls and young women
- Sex workers
- Transgender people
- Detention
- People who inject drugs
- People with disabilities
- People with mental health challenges

Chapter 7: Building Resilient Systems

"Mind the Implementation Gap"

Strategic Objective 7: Strong and sustainable systems for health and development

Key Targets:

- **consultation not yet held – content will be updated based on input from working group*
-

Priority Actions:

-

7.1 National Health Insurance

The Alma Ata declaration was an important development for public health. It recognises the importance of multi-sectoral engagements and the development of coherent responses to the disease burden. The emergence of diseases such as HIV and TB brought back to the fore these principles of developing a multi-sectoral approach to address the disease burden. National Health Insurance (NHI) is a health financing system designed to provide access to quality, affordable health care services for all South Africans based on their health needs, irrespective of their socio-economic status through pooling of funds and risks. NHI is intended to ensure that the use of health services does not result in financial hardships for individuals and their families. NHI represents a substantial policy shift that will necessitate a massive reorganisation of the current health care system, both public and private and also derives its mandate from the National Development Plan (NDP) of the country.[168]

In the early part of the second phase of the NHI implementation, the South African population will be registered and issued with an NHI Card at designated public facilities using the unique identifier linked to the Department of Home Affairs. Vulnerable groups such as children, orphans, the aged, adolescents, and people with disabilities, women and rural communities will be prioritised.[169] The implementation of the NSP will optimise the gains of the roll-out of the unique identifier during its implementation.

Within the public sector there are multiple funding pools across the different spheres of government. This fragmentation is exacerbated by several funding streams such as equitable share allocations, conditional grants and locally generated revenues. This fragmentation does not allow for effective planning, and contribute towards uncertainty in the availability of funding for services.[170] Reorganisation of the health system will be required to create a new platform for service provision and health care financing. This may require legislative changes, rearrangements of functions, responsibilities and relationships within the three spheres of government pertaining to governance, concurrency, financing and delivery of health services.[171]

The NDP 2030 envisions promoting health and wellness as critical, preventing and managing diseases of lifestyle that are likely to pose a major threat over the next few years. Optimal collaboration between stakeholders from government and non-government sectors is required to address the risk factors that contribute to diseases of lifestyle and in the case of the NSP priorities HIV, TB and STIs. A National Health Commission will be established to ensure the required multi-sectoral collaboration.[172]

This chapter deals with the various components of the multi-sectoral collaboration to build resilient systems.

The introduction of NHI will bring much needed resources into the health sector. Increased investments in health care and improvements in the overall functioning of the health system at ward, clinic and hospital level will greatly enhance the implementation of the NSP in respect of HIV, TB and STIs.

The NHI will also create space for the use of private GPs, hospitals and pharmacies for the treatment and care of patients with HIV, TB and STIs thereby expanding the platform for treatment provision.

Service delivery arrangements

There are many NGOs delivering prevention, care and support services in communities. It is therefore critically important that at provincial, district and local levels that effective partnerships are formed to ensure that there is compliance to health policies and protocols, effective referrals between government and civil society led services, one M&E system. Where parallel services are implemented, perhaps for key populations, extra care will be taken to coordinate and integrate service delivery, providing logistical support to acquire and distribute medicines, dovetail reporting, data integration and joint analysis impact of services.

Systems to ensure linkage and retention in care are needed within the health sector but also as patients move between correctional facilities and communities and across borders. The existing Primary Health Care Reengineering strategy which includes the PHC Ward Based Outreach Teams and School Health Services must be leveraged to include TB prevention and care as a priority.

TB is a complex problem and TB management presents the opportunity to address issues by focusing on individuals and families in their home and community contexts to develop their capacity to engage with TB as part of their general health. This requires an integrated primary health platform to provide comprehensive care, informed by the best available practices and knowledge. Multi-disciplinary teams amongst other things, identify and respond to: high risk individuals and groups (prevention, early detection, disruption of epidemic mechanism); repeated/ongoing intensified case finding and screening; adherence support and linkage to a network of care (including private practitioners and traditional healers); community based MDR/XDR treatment; medicine delivery (CCMDD); health education and anti-stigmatisation; linkage to social services (grants and other social protection mechanisms); health promotion and infection control in homes, facilities, institutions, service sites. TB care should be strengthened as part of the PHC reengineering approach within the community and should build capacity of CBOs towards achieving the NSP goals. This will require a framework for government-NGO-private partnerships to channel funding through appropriate service level agreements to provide services to vulnerable populations that government may not be able to reach as effectively. The system must link people and services through real time data in a feedback loop from home to clinic and hospital and back down the chain. This would be facilitated by the implementation of a unique patient identifier system. The process should build on existing local structures and be led by the DOH in collaboration with NGOs and private sector with the support of district development and implementation partners.

‘Resuscitate’ NGOs and support CBOs to develop an empowered community to actively support TB control efforts - Community based organisations have long played a role in the TB response and have the opportunity to expand this in terms of integrating TB care into a broader systems approach to eliminate poverty and build sustainable communities. SA

comes from a long history of civil society activism and the NSP consultations raised the need to reenergise this; there was a strong call to strengthen community voices and hold authorities responsible for service delivery accountable. SANAC is responsible for building the capacity and supporting provincial and local AIDS councils.

Although the youth friendly clinic initiative has been running for some time, many young people still experience stigmatising attitudes and discrimination at clinics and hospitals. Access to services remains a challenge for young people, and creative ways need to be found to address this problem, including mobile services and hours set aside at the clinics for young people. Likewise, many men are reluctant to access health services, for a variety of complex services. Seeing as the benefit of treatment as prevention may rely in getting men in ART, it seems like a priority to find ways to make services more "men-friendly".

Strengthening human resources capacity

The NDP says that "In South Africa, community health workers' interventions have been limited, in particular to HIV/AIDS care and prevention. Community health workers can contribute to effective, comprehensive health care, including treating common, acute, and childhood illnesses"[173] . In addition, a key action in the NDP is to "improve the allocation of resources and the availability of health personnel in the public sector; and improve the quality of care, operational efficiency, health worker morale and leadership and innovation."[174]

With a view to national priorities of devolving or "decanting" the care of HIV and TB patients to primary health and community-based services, it is imperative that South Africa rapidly increases the number of PHC-skilled nurses produced by tertiary institutions, and that these graduates have been exposed to a curriculum that is grounded in PHC theory coupled with frequent practicums in a PHC and community-based setting throughout their training. This strategy needs to be supplemented by a recruitment drive to promote nursing with school-leavers, and a bursary scheme similar to the one that has successfully attracted school-leavers to a Teaching career.

7.2 Information and record systems

The South African health systems need to have a range of tools and solutions at hand that allow the gradual transition from paper-based and manual approaches to health care delivery to building on opportunities created by e-and m-health solutions. Any transition will need to happen in a non-uniform manner due to inequities that exist across the country. These inequities affect access to health services and the implementation of ICT solutions and are most pronounced when comparing urban to rural settings. Thus, a range of tools will be needed to cater for all kinds of circumstances, and which can be deployed, and allow the health system to gradually embrace modern technology.

In addition to the need for an unique identifier that can be used across various service providers and levels of care, the need for one electronic patient management system across these service partners need to be prioritised. Resources should be consolidated for maximum impact rather than developing parallel, unintegrated patient record systems.

There is a need for real-time, linked data collection which covers the TB cascade from screening to outcome (as described under "game changers" above). Currently; TB symptom screening is recorded as "PHC headcount" in DHIS and doesn't link with the manual "TB suspect" register data which doesn't link with ETR. Much of the data collation is manual, is not in a cohort form and occurs retrospectively. Due to these complexities, it is only reported

quarterly after a lengthy collation process and this does not allow for real-time intervention; assessment of quality of care or robust cascade monitoring. The system should include m-Health at point of contact (hospital, facility, household and community) and a live link to the laboratory. There is currently a process underway to merge the TB data into the "Tier" system; this will require rigorous oversight form the NDOH to ensure that the resultant system satisfies all of the abovementioned requirements.

7.3 Procurement and supply chain management

One of our challenges lie in ensuring that we can respond to this information, ensure that medicine stock-outs do not occur, and that laboratory results get fed back to patients within an acceptable turnaround time. Our tools for epidemic reporting are being refined, and adjusted to accommodate technologies to ensure response times are reduced. Integration of key data elements between various multi-sectoral partners needs to be strengthened to facilitate efficiencies and maximise impact.

A key challenge within supply chain management is consistent and adequate supplies of female and male condoms. Since the propensity of HIV and STI infections amongst women and young girls there is an urgent need to review the supplies and retain an adequate choice of female condoms in the country. The consistency of supplies of female and male condoms through both established formal and non-formal sites will be monitored and shortcomings addressed.

7.4 Scaling up community responses

A community can be considered as a group of individuals who may or may not live within the same geographical area, who often share a similar culture, habits and resources. Community arrangements can be complex and dynamic and so are the factors that increase their vulnerability and the health associated risks that challenge them. These factors (e.g. physical, emotional, environmental and social) are also interconnected and therefore require a holistic, multi-disciplinary and multi-sectoral response[175]. Across the world there is a growing consensus that community responses itself is essential for longer-term impacts, sustainability, and greater effectiveness of national health programmes. Consensus is based the following principles[176]:

Knowledge: Communities (and the CBOs working with them) have greater knowledge about their HIV and AIDS-related needs.
Behaviour: Communities are best placed to engineer behavioural changes because the social customs and norms of communities influence individual behaviour.
Capacity: Communities (and community groups) have capacity to identify, implement, and manage some HIV and AIDS activities. Their operations are less bureaucratic. This brings more community ownership, lower costs and long-term sustainability, and capacity is built within the community.
Social change: Community response strengthens social capital in the form of increased trust and reduced stigma and strengthened positive social changes.

Community responses must be at the centre of how we address HIV, STIs and TB. The 2016 Political Declaration on HIV and AIDS includes a commitment to expand community-led service delivery to cover at least 30% of all service delivery by 2030. This section will include concrete evidence to support scaling up community responses. For example, community responses have been shown to encourage treatment uptake. In a randomized controlled trial in South Africa, peer adherence support increased the timeliness of clinic visits.[177] This section is closely linked with the previous sections on service delivery and human resources, placing increased emphasis on the need to decongest health facilities and

scale up treatment and prevention through devolved models that can be delivered at community level.

Scaling up community responses means ensuring they are well resourced and well linked. This means increasing the level and predictability of funding for civil society and community-based organisations. It also means formalising linkages between community responses and the health system, as well as strengthening ties with other social and development sectors.
Despite the unique ability of community organisations and networks to interact with affected communities, to react quickly to community needs and to advocate for improved programming and policy environments, community responses often face challenges that can reduce its effectiveness:

- Weak capacity: Due to lack of skills, training opportunities and funds community response may be slow in expanding activities.
- Limited collaboration and coordination: Communities may face challenges in interacting with one another and other partners resulting in duplication, as well as coverage and service gaps.
- Weak accountability: Organisations and groupings may lack the needed institutional framework to monitor results and spending.
- Funding challenges: Donor expectations in terms of counterpart funding, or not recurrent costs (such as staff salaries) associated with the delivery of services. Sometimes services will grind to a halt when funding ends or organisations try to continue their services through the use of volunteers which is not always reliable.

The Community Systems Strengthening programmes implemented within all provinces in South Africa is aimed at supporting efficient and compassionate people, doing effective work within sustainable and accountable organisations. A combination of training, technical assistance, mentoring and coaching, networking and dialogue helps build thinking, strategic, responsive and sustainable organisations and systems.

- The institutional capacity includes the ability to create an organisational mission, vision, strategic and operational plan; establishing organisational structures and management systems such as governance, leadership, financial management, human resource management, risk management and human resource management and administrative processes
- The knowledge and skills of individuals in the organisation includes technical skills and knowledge on specific programme areas
- The influencing ability of organisations - focusing on organisations' ability to form partnerships, be part of local advocacy campaigns and joint planning different levels. The facilitation of community dialogues is utilized as a powerful tool to mobilize around the implementation of the NSP.
- The adaptive capacity of organisations - focusing on organisations' ability to review current operations and models and to investigate new ones, to apply lessons learnt, stay relevant and remain sustainable over time.

In terms of community systems strengthening the main goal of the NSP is to support functional, effective community systems with various linkages and to enable community based and emerging NPOs to fulfil their role in contributing to national planning outcomes. This will be done through maintenance and strengthening of provincial, district and local structures (see section 6.12).

SANAC to encourage donors to invest in community mobilisation efforts that promote human rights, access to services, key population involvement, improvement of the social and legal environment, particularly for marginalized or key populations and the use of community based participation methodologies.

National and Provincial levels

Participation in these structures by government, business, civil society, communities and other stakeholders will ensure dialogues about the implementation of the NSP. Provincial role-players include Provincial AIDS Council; DOH, Primary Health Care; DSD, DOL; DBE; Local government – Mayors, MECs; Public Works- EPWP; Correctional Services- HIV, CSOs, etc. These are the Multi-Sector forums that drive NSP/PSP coordination, implementation and monitoring oversight for the Province. In most provinces engagement processes take place at provincial level. However, there is hardly any link with district and local structures as these are often weak with no proper coordination.

District Level

Quarterly District Consultative Forum Meetings will be facilitated by network organisations to provide a platform for variety of stakeholders in communities to discuss key issues and strengthen coordination. Benefits of such platforms include:

1. A participatory model, with a community driven agenda for development planning, involving the affected communities and as many other relevant role-players as possible, especially for key population programming.
2. Demystifying national, provincial and district priorities translating them into local priorities so that local organisations can identify with them, see their own role in the process and are able to align their own projects and programmes accordingly.
3. This is particularly important for engaging the District Plans and ensuring that all stakeholders understand and work towards achieving the objectives of the DIPS.
4. Co-ordination on a District, and Provincial level contributes towards the implementation and evaluation of integrated service delivery by NGOs, CBOs and other sectors thus ensuring that:
    a. Communities' voices are heard
    b. Community led responses are identified
    c. Resource co-ordination and support for civil society organisations in the battle against HIV AIDS and TB is prioritised
5. District-level consultative forums enable stakeholders to share learnings and support the implementation of the NSP and PSP thus ensuring that the provincial and national priorities are discussed regularly.
6. Strengthening networks for the role of advocates, watchdogs, and technical assistance providers is an investment towards effective implementation of service delivery and contributing towards the broader environment for health. Issues and action plan are either resolved locally or escalated to Provincial level through participation in Provincial Structures.
7. Consultative Forums also have a vital role to play in technical assistance, due to their ability to act as knowledge hubs, contribute to development of communities of practice, and distribute appropriate information through their networks, for example on technical tools, good practices, etc.

Local Level

There needs to be coordination of role players, service providers and community members at sub-district and community level together to contribute towards a process of information sharing, consultation and planning to respond to local health outcomes, with specific focus on HIV, TB, child and maternal health, harmful gender norms and gender based violence and other social determinants of health, including primary health care priorities. This process aims to facilitate joint, coordinated action and a united response through consultation and buy-in at various levels. Steps in this include:

- Development/strengthening of health-focused forums in each of sub-districts
- Ensuring that sub-district plans are developed as an outcome of community dialogues and consultative processes in each of these sub-districts

- Building the capacity of health staff, service providers and community members to implement these plans and to advocate for change

Sub District role-players include local municipalities: municipal managers, IDP managers, health managers; police forums, traditional healers and traditional leaders and headmen in rural areas, all government departments, NGOs, CBOs, business chambers, religious leaders (representatives from main bodies); principal's forum representatives; representatives from private medical services. Agriforum in rural communities, all other sectors, especially at local level where a community centred integrated approach is critical.

7.5 Quality improvement

Strong guidelines, trained staff and sufficient resources do not always translate into successful programme implementation and the ability of a system to benefit from treatment protocols is contingent upon the ability of the system to deliver it to the right patients, at the right time, in the right way. A health systems and improvement methodology has the potential to overcome barriers to implementation.

Chapter 8: Investing Strategically

"Spend Now, Save Later"

Strategic Objective 8:
Sustained investment in cost-effective evidence-based interventions

Key Targets:
- Increase investment in HIV prevention to 25%
- Reduce the funding gap for the NSP to less than 10%

Top Priority Actions:
- Review budget allocations within the current funding envelope for HIV and TB and re-prioritise to achieve alignment with the new NSP.
- Forge a shared financing plan for the response with domestic and external partners.
- Implement strategies to achieve higher technical and allocative efficiencies.
- Align provincial HIV and TB budgets with disease burden and need.
- Identify innovative finance mechanisms to mobilise additional domestic resources.

The investment case is clear that spending significantly more on HIV and TB over the next five years is a smart decision for substantially reducing future costs. For both HIV and TB, front-loading investments during this NSP means saving money later. The costs of HIV programme will fall relative to baseline after 10 to 15 years, but only if investment is increased now. Spending domestic resources in AIDS should be seen as an attractive investment. For upper-middle income countries like South Africa, the economic returns for ending AIDS by 2030 are approximately R8 for every R1 of additional expenditure.[178] There is also a R43 return for R1 invested in TB programmes.

Successful implementation of the NSP will require significantly more funding over the next 5 years. This NSP adopts a "front-loading" approach to investing in the response as recommended by the South African HIV and TB investment cases to maximise impact and reduce total costs over the long term. The NSP however reflects a level of prudence in planning a phased scale up of targeted interventions in consideration of constraints in the fiscal envelope, health systems and levels of service uptake.

8.1 Fiscal landscape

Fiscal space in South Africa is currently limited by the low economic growth and high levels of government debt.[179] Fiscal space for increased HIV and TB spending is likely to be constrained for the NSP period.

The South African Government (SAG) however continues to finance over 80% of the annual cost of the national response. R8.9 billion was budgeted for the ART programme in 2015/16. The annual real growth in annual government spending on HIV is expected to average R0.9 billion per annum over the medium term (2016/17 to 2018/19).[180]

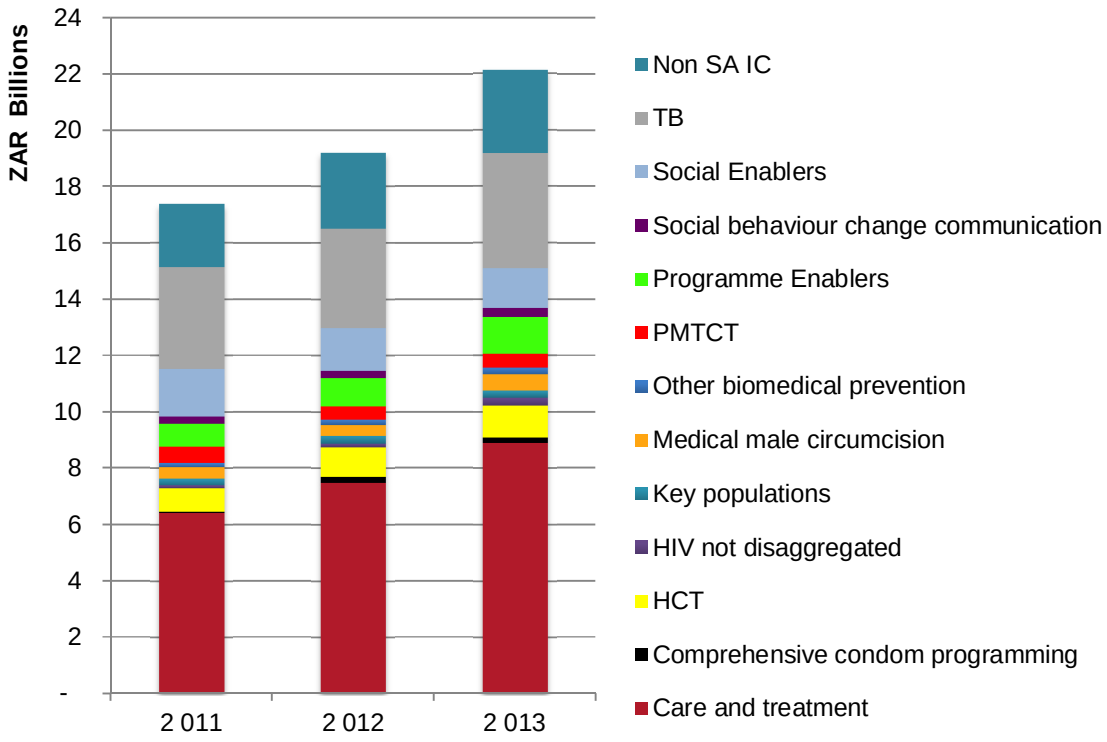
Although the SAG is committed to sustainable financing through the gradual reduction of external partner funding over the long term, it is acknowledged that the financing of this NSP will require continued levels of support from the country's main development partners (most notably the United States Government and the Global Fund).

New funding for the HIV and TB response may possibly become available through South Africa's National Health Insurance (NHI).[181] However, the NHI will take several years to be

fully functional and generating the revenues anticipated and will not likely be a source of funding during this NSP period.

A review of historical spending on HIV and TB programmes shows a pattern of relatively low levels of spending on prevention and structural drivers compared to treatment and care. Spending data from 2013/14 shows that spending on treatment comprised 51% of total spend, whilst HIV and TB screening was 10% and youth-focused prevention 1% of total spend respectively[182].

Figure: HIV and TB Spending According to the Investment Case Priority Interventions (South African Government, PEPFAR and Global Fund) (2011/12-2013/14, ZAR bill)[183]



Modelling for the South African investment case for HIV demonstrated that there should be increased investment in prevention efforts, specifically condom programming, medical male circumcision and social and behaviour change communication targeting youth, in addition to universal test and treat, to achieve the 90-90-90 targets. However it should be noted that analysis during phase 2 of the South African investment case found that even if provincial HIV and TB programmes achieved maximum allocative efficiency, they would still require substantial, sustained increases in the funding envelope in the long run.

8.2 Funding needed to reach NSP targets

This section will provide a 5-year forecast of how much funding needs to be invested annually in specified programme areas in order to reach the targets of the NSP. The financial forecast will be generated by a detailed costing model reflecting the new NSP interventions, coverage targets and unit costs.

The section will also provide commentary on the proportion of total costs that are driven by prevention interventions, social and structural drivers, treatment and care and programme enablers.

8.3 Available funding and potential funding shortfalls

This section will estimate available funding over the 5-year period from public sector, development partner and private sector sources and calculate possible annual gaps in funding.

The funding gap will be disaggregated by year and by pillars of the response (prevention, treatment and care etc.).

8.4 Sustainable financing of the NSP

According to Blecher et al[184], fiscal sustainability refers to the ability of countries to afford and continue to implement programmes using domestic funding in the short, medium and long term, without jeopardizing their national fiscal position and unduly burdening future generations with debt.

It is recommended that a financing plan be developed for the NSP that articulates how the national response will be financed for the NSP period and beyond. The plan will outline the financing role of all departments in the SAG as well as development partners and the private sector.

The following priority actions should be pursued to achieve sustainable financing of the NSP:

- Test and implement new and innovative funding mechanisms to fill the funding gaps arising from the new NSP response. Mechanisms could include development financing instruments such as social impact bonds and blended finance.
- Review existing programmes and budgets under the current MTEF funding envelope and development partner frameworks and align with the new NSP to achieve higher impact and value for money.
- Develop evidence-specific provincial and district plans and budgets that reflect the best buys for each particular area. For instance, while medical male circumcision is a highly cost-effective intervention across most of the country, it ranks far lower as a best-buy in the Northern Cape and the Western Cape.[185]
- Implement strategies to achieve higher technical efficiencies to achieve cost savings in HIV and TB services, for instance through more targeted community based testing, expanding the Central Chronic Medicine Delivery and Dispensing Programme and rolling out adherence clubs in facilities and communities.
- Extend the period of planned funding commitments from development partners to improve the predictability of funding and to provide sufficient time for transition planning if partner funding is to be reduced.
- Harmonise budgeting and financial reporting frameworks for HIV and TB across departments and development partners (see section below).
- Improve tracking of HIV and TB expenditure for improved decision making and accountability.
- Emphasis on documenting HIV, TB and STI responses by programmes, dissemination and funds for scaling up as they become available

8.5 Coordination of budgeting, financial monitoring and financial reporting

This NSP is intended to be the overarching framework to guide all efforts in a coordinated manner. Implementation of the NSP requires improved coordination of financial resource allocations and monitoring of financial performance, both between the government and the development partners, as well as between the different government departments. Currently, budgeting and financial reporting methods for HIV and TB programmes varies across

government departments and development partners. Budgeting and financial reporting for HIV and TB under funding streams other than conditional grants have generally been more difficult to track and analyse.

For the South African investment case, a historical expenditure review consolidated the government's HIV and TB spending with the GF and PEPFAR data so as to provide an almost comprehensive view of the utilisation of these funds (excluding smaller development partners and the private sector). This should be repeated on an annual basis to allow for joint coordinated reporting and hence improve future coordinated planning to ensure the NSP objectives are achieved. It could be expanded to all the development partners, and would require them to submit their expenditure in a simplified format, on a routine basis.

The above mentioned expenditure mapping process highlighted weaknesses in the three data sources and their reporting mechanisms that would need to be addressed so as to improve coordinating reporting. Some of the recommendations relate to adjustments to the Standard Charter of Accounts (SCOA), the improvement of the BAS codification of expenditures, the classifications of the development partners' expenditure and other measures to enable the routine consolidation of spending by a common, detailed set of classifications of the interventions. For detailed recommendations please see annexure *xx*.

Chapter 9: Finding New Solutions

"Always Innovating"

Strategic Objective 9:
A national research agenda for an evidence-informed response

Key Targets:

-

Priority Actions:

- Determine where and how we collect the data
  - Improve a uniform management information system including unique identifiers[1]
  - Collect more granular data: District/sub-district level; sex and age disaggregation[1]
  - Strengthen routine data collection systems and surveillance activities
- Review existing evidence[1] and ideal timing and type of routine national surveys
- Identify critical research questions[1] to achieve the objectives of the NSP
- Define the National Research Strategy to put research on the 'fast-track' and South Africa at the centre[1]
  - Build research timelines into global rhetoric and national strategies on ending the epidemic
  - Ensure that epidemiological data inform research priorities and existing gaps
  - Tailor the strategy to the needs of specific South African population segments
- Establish multi-sectoral and inter-sectoral (research and academic institutions, private and public sector) integration of research agendas with assigned accountability and responsibilities[1] to ensure inter-sectoral action and compliance at all levels?[1]
- Improve and sustain a central national registry of ongoing research to avoid duplication and for easy reference
- Develop a multi-tiered strategy to create research capacity for SA[1]
- Create national good community participatory guidelines for research that include dissemination and adoption procedures of research findings
- dissemination and adoption procedures of research findings
- Ensure all community programmes are well documented and the results are disseminated in regular and comprehensive ways.

With around 7 million people living with HIV in South Africa; nearly 290,000 new HIV infections per year; only 48% of those living with HIV on treatment; and only 43% of those on treatment with viral load suppression,[186] merely expanding our current programs will not get us to the target of ending HIV by 2030.[187] Although HIV incidence and mortality decreased over the past few years in the general population, and new TB cases and deaths reached a plateau, and despite South Africa's impressive research output and knowledge base, much remains unknown.[188]

To determine these unknowns, South Africa needs to prioritise research studies and topics, consolidate research agendas and commit funding to perform the research necessary to maximise SA health outcomes on HIV, TB and STIs. In line with the ambitious UNAIDS 909090 targets,[189] the HIV/TB investment case[190] recommended identifying 90% of people living with HIV and/or TB, initiating treatment in 90% of those with HIV and TB, 90% treatment success for TB and viral suppression for HIV[191] and identified a need to measure the impact of critical enablers without which medical interventions will never reach full coverage. To achieve this, the SANAC Research Sector engaged within and beyond government-structures to include the private sector and civil society to create a strong commitment to research in this NSP 2017-2022.

Research breakthroughs have brought drugs, technologies, and tools to understand the epidemic and evaluate program effectiveness. Without the research successes over the past 20 years, we would not have reached where we are today. And given the challenges ahead, we cannot reach our goals without continued commitment to research to develop innovations and improve our understanding of program effectiveness. We have a commitment to evidence based programming, and we need the continued commitment to generating the evidence (What needs to be done? Do we know how to do it efficiently? Is it cost effective? Is this what the target population want? How do we translate research into practice?). This commitment starts with a prioritised research agenda and includes a commitment to build capacity to conduct research, identify better ways to collect and disseminate research findings, and dedicate funding (2% of annual health budget[192]) to research.

Collaborative approach: Current stakeholders in and out of government (including Department of Science and Technology (DST), SA Medical Research Council (SAMRC), Human Science Research Council (HSRC), Council for Scientific and Industrial Research (CSIR), National Research Foundation (NRF) and all of the remarkable researchers and research institutes) are assets on which South African research can build. The NSP will propose ways these stakeholders can continue to make coordinated contributions over the next 5 years and beyond.

9.1 Social and anthropological science: developing social vaccines

Trying to end an epidemic without a vaccine or a cure is an exceptional ambition in global public health. Emerging evidence suggests we cannot treat our way out of the HIV epidemic (TasP trial data) and the HIV/TB Investment Case tells us that prevention is a “best buy”.

To respond to the HIV, TB and STI epidemics we need good data and insight into the South African context and recommend the establishment of a social and structural driver research think tank. Drawing on those working in the social sciences and humanities so that “social” is not reduced to “behavioural”, that is, psychological factors which are too narrowly individualistic in their focus. An inter-disciplinary approach to research, which is deep, comprehensive and qualitative, needs to be developed and sustained, to understand and address the social and structural factors.

9.2 Research for innovation: what’s in the pipeline?

New drugs: Two drugs, dolutegravir (DTG) and Tenofovir alafenamide (TAF), have been or are currently in the process of being licenced to multiple generic manufacturers. DTG is a more tolerable drug with a higher resistance barrier, meaning that it could limit the need for people to transition to more expensive and more toxic next-line treatments. TAF is substantially cheaper than TDF and is less toxic than current formulations. The savings mean that if South Africa phases in DTG-TAF based regimens, the country could cover the ART drug costs of treating an additional two million people using today’s budget. New drugs and diagnostics for TB which will come to market in the next five years have the potential to accelerate progress. There is an urgent need for safer, simpler, accessible and more effective treatment regimens for TB. New shorter TB regimens which preclude the need for rifampicin, true point of care TB tests and effective TB vaccines and are critical to ending TB. While much of the research and development occurs outside of South Africa, the country must continue to play a critical role in enabling research and development.

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and development occurs outside of South Africa, the country should continue to play a critical role in enabling research and development. In addition, we must ensure that we have a health and pharmacovigilance systems, and regulatory approval processes which is ready to absorb and effectively implement new treatment regimens, vaccines and diagnostics as soon as these become available.

9.3 Surveillance and vital statistics

You can't manage what you can't measure. Some critical research priorities will include accurate and recent epidemiological data (incidence and prevalence), population size estimations, and treatment cascades for all populations, especially those at highest risk. Making use of programme data is also critical, in order to have real-time information to identify what is working and where challenges and bottlenecks are, so that operations and approaches can be timeously adjusted to keep on target.

- Strengthen STI surveillance: How can the health systems information system best be enhanced at lowest cost to deliver the most useful additional information? There is weak data capturing at health facilities. Most data available is collected routinely through DHIS, with lack of aetiological data to help improve STI management. Consistent STI aetiological sentinel surveillance is important for HIV risk profiling at local level.
- Key populations: Data on key populations is sparse, and there has been little coordination on data collection and dissemination to date. In the context of a generalised HIV epidemic, there has been limited investment in HIV surveillance and prevention, care and treatment programming for key populations. This may rest on the assumption that concentrated sub-epidemics are not significant to the sustained transmission of HIV, and that interventions designed to reach "all segments of society" will reach KP as effectively,[193194195] discounting stigma as a barrier to accessing health care.
- Care cascades: Monitoring the cascade or continuum of HIV services - ranging from outreach services to viral suppression is critical to controlling the HIV epidemic. The HIV continuum typically utilises clinic-based care and treatment monitoring data and helps identify gaps and inform programme improvements[196], but since key populations data is not captured on DHIS or regular surveys, and since there are barriers to key populations visiting public clinics, and due to limited documentation, regular key populations surveys and size estimations must be conducted. On-going collection of strategic information to understand population sizes, cascades, programme reach, gaps to help understand breakpoints in the HIV care continuum are of paramount importance for the development of HIV care cascades. Internationally validated scales for substance use and mental health disorders should be included to explore the impact of these issues on key populations risk and vulnerability for HIV.

9.4 Implementation science and the learning agenda

Given the importance of the next five years – the fragile window of opportunity to fast-track our response to HIV and TB – there needs to be a process of real-time learning. South Africa's HIV, TB and STI Think Tanks are vital assets in the country, driving innovative solutions in programmes, delivery and research.

9.5 Research systems strengthening

With a generalised HIV epidemic, the third highest TB burden in the world and high prevalence of STI, managing the tension between saving lives and livelihoods and starting the process of re-building the system is a particular challenge in South Africa.

- South Africa must build capacity of local researchers to improve indigenous research output. To achieve this, we need to make individual research institutions responsible for the attraction, nurturing, and retention of research staff.
- We must ensure that we have a health and pharmacovigilance systems, and regulatory approval processes which are ready to absorb and effectively implement new treatment regimens, vaccines and diagnostics as soon as these become available.
- Budget must be allocated to achieve the objectives of the national research agenda. International research funding must be aligned with South African research priorities.

Chapter 10: Monitoring and Evaluating Progress

"Data-Driven Action"

Strategic Objective 10: Data use for decision-making at all levels

Key Targets:

- Costed M & E plan to effectively monitor implementation of the NSP.
- Functional and coordinated national M&E system able to monitor NSP progress across all sectors and levels using standardised and define core indicators.
- 90% of NSP Core indicators are reported on through the multi-sectoral M&E system.
- National and district data warehouses to capture, verify, analyse, and present programme monitoring data from all levels and sectors.
- NSP community based routine monitoring system established and providing comprehensive information on NSP progress.

Priority Actions:

- Strengthen and promote multi-sectoral ownership and accountability of the NSP M&E system.
- Ensure harmonised, timely and comprehensive routine systems to provide quality HIV data at national, provincial, district and levels and across sectors.
- Strengthen M&E capacity to effectively use available data to monitor NSP performance and HIV, TB and STI epidemics at all levels.
- Use program data to evaluate implementation of the NSP, between formal reviews.

Monitoring and evaluation (M&E) is critical for building a strong reporting system to track progress and inform decision-making and implementation of programmes at all levels. While the previous NSP (2012-2016) made great strides towards advancing M&E in the country, some key weaknesses have been identified which include, but are not limited to, the following:

- Inadequate human resources and coordination mechanisms to ensure timely data collection from all sectors and generation of comprehensive progress reports;
- Insufficient financial resources to collect, synthesise and interpret routine programme data at national, provincial and district levels;
- Limited non health-indicators to measure structural aspects of the response;
- Inadequate systems to collect and integrate response data from the private sector and civil society;
- Lack of indicator harmonisation and unclear performance targets for specific population groups – such as children and key populations.

In addition to addressing the above weaknesses, the NSP (2017-2022) introduces important innovations to strengthen M&E coordination structures, facilitate timely reporting from all sectors, promote shared accountability and support data driven decision making. Furthermore, the improved M&E system aims to build capacity for data collection and analysis at subnational levels so as to ensure improved understanding, responsiveness and resource allocation with regard to priority locations and populations.

10.1 Establishing a strong M&E system

The overall objective of the multi-sectoral M&E system is to strengthen ownership, accountability and responsiveness by all stakeholders involved in the national HIV, TB and

STI response. Noted below are key strategies that will be implemented to ensure effective monitoring and evaluation of the NSP.

The M&E system for the NSP is based on a comprehensive 5-year M&E Plan, M&E Framework. The M&E plan will details the core indicators, their definitions, data sources, data collection tools, data flow mechanisms, reporting timelines as well as roles and responsibilities of all stakeholders to ensure mutual accountability for the M&E of the NSP. Efforts will be made to allocate sufficient human and financial resources to ensure successful implementation of the M&E Operational Plan. A strong M&E Unit within SANAC with support from the provinces, districts, local municipalities and wards, will oversee and facilitate the consistent implementation of the 5-year M&E plan. A strong centre of government including COGTA, DPSA, DPME, Treasury and STATSSA is also critical.

SANAC will develop a National 5-year Monitoring and Evaluation Plan to accompany the NSP. The Plan is a companion to the new National Strategic Plan, and will not only guide the collection, collation, analysis, interpretation, and dissemination of information for the NSP, but also contain a costed M&E operational plan of how it will be realized. The specific objectives of the 5-year M&E plan are as follows:

- To direct gathering and reporting of information that is useful in monitoring and evaluating implementation of the NSP
- To guide the development and strengthening of stakeholders' M&E systems.
- To assist all HIV, TB and STIs stakeholders in conceptualizing and harmonizing a coordinated M&E system for the national response.
- To increase the understanding of trends and changes in HIV, TB and STIs prevalence over time.
- To promote utilization of M&E data in planning and program management.
- To establish a multi-sectoral and integrated real-time data hub to provide updates on the epidemic, response accountability at all levels
- An information base for timely reporting on its national, regional and global commitments and targets.
- To determine the resource needs and strategies for resource mobilization

The data from the relevant Government departments and sectors will be integrated into the overall M&E system through the use of an enterprise information system approach. Of particular note is the need to ensure streamlining and consolidation of data received from civil society and the private sector. Ensuring a harmonised and coherent system will require coordination and co-funding by all participating sectors and departments in order to develop and maintain the M&E system.

A centralised data warehouse will be built and dashboards developed with flexible and predefined templates to facilitate standardised reporting, data interpretation and gap analysis. Timely and accurate reporting will be essential by all stakeholders.

The strengthening of the M&E system can only be achieved with appropriate leadership and governance by all sectors as well as allocation of sufficient human and financial resources.

10.2 Establishing and maintaining effective coordination structures

As noted above, SANAC, in collaboration with the AIDS Councils, will continue to oversee the coordination of the M&E system through its M & E Unit and in coordination with M&E capacity that is allocated to the provinces, districts, and local levels. All AIDS councils include representatives of the key stakeholders in the response, and progress against the

core NSP indicators will be reviewed as a regular agenda item during technical and AIDS council meetings.

Each province has an M&E Officer whose role is to support all council AIDS M&E activities in their province and to collate, analyse and disseminate the data reported to them by all the sectors and districts. Capacity for multi-sectoral and inter-sectoral M&E will be strengthened at the district, municipal and ward levels to support this effort. Furthermore, the various government departments and civil society and private sectors are expected to allocate sufficient financial and human resources in order to fulfil their NSP monitoring, evaluation and reporting requirements. Leadership is essential to ensure that M&E functions and deliverables are included in the performance management of staff who fulfil the M&E role for their ward, district, province, sector and/or organisation. The capacity of these staff will continue to be strengthened with the support of SANAC to ensure they can adequately carry out their M&E responsibilities.

It should be noted, however, that the responsibility to report in a timely manner lies with the sectors and government departments themselves. While SANAC can coordinate and provide training, tools and technologically advanced platforms, ultimately the quality and effectiveness of the M&E system will depend on the provision of timeous, complete and accurate data from the multiple stakeholders who are implementing the response. Incomplete and delayed reporting has been a fundamental barrier to effective M&E and data use during the previous NSP. Steps will therefore be taken to strengthen the understanding of all stakeholders on the importance of using data to guide decision-making.

Simplifying and harmonising M&E

The revamped M&E system for the NSP will aim to simplify and harmonise data collection processes. While the DHIS, NHLS and Tier.net are some of the primary sources of strategic information for monitoring and evaluating the biomedical aspects of the HIV, TB and STI programme, other M&E subsystems such as LURITS, EMIS,, and SOCPEN, are critical to ensuring effective reporting of the multi-sectoral response. Systems for community-based monitoring and reporting such as CBMIS will also be integrated into the system.

Furthermore, concrete efforts will be made to establish a common web-based data repository on core indicators that is linked to other existing systems in government. This tool will support rapid data dissemination and production of M&E reports, which will help improve responsiveness to the situation on the ground.

Of critical priority to the simplification and improvement of the M&E system is the roll out of unique patient identifiers to help in tracking individuals across sectors and geographic locations and eliminate duplication of data. This will not only facilitate better monitoring of patients, but also ensure gaps and challenges in service access and delivery are identified and addressed in a timely manner. As such it will help to strengthen the quality of data collected as well as the public health and social protection systems in the country. However there is the recognition that unique patient identifiers could also potentially jeopardise the privacy of these systems. The NSP will therefore ensure that the adoption of a unique patient identifier is cognisant of the South Africa's Protection of Personal Information Act gazetted in November 2013.

Furthermore, efforts will be made to streamline paper-based record keeping and scale up Tier.net and ETR.net across the majority of health facilities.

10.3 Aligning indicators and targets

The 30 core indicators in the M&E plan and corresponding baselines and targets have been determined at national level in consultation with the provinces and are based on all available data sources. They are aligned to the NDP 2030 and 90-90-90 objectives and form the basis of reporting and assessing performance against the NSP for all stakeholders. The provincial and district level indicators are aligned to the national impact and outcomes and informed by existing data sources and M&E systems.

Where available and appropriate for the South African context, regional and international definitions for core indicators have been used so as to facilitate global reporting and foster comparability of data. Specific attention has been given to the need for valid and reliable indicators for social and structural aspects of the response, which are highlighted in Chapter 2 of the (2017-2022) NSP. Table *X* provides a list of the core indicators as well as their definitions and data sources.

Baselines were obtained for most of the indicators, and targets were set for the NSP mid-term time point (Financial Year 2019/20) and end period in FY 2021/22. To effectively address the specific needs of provinces and districts, there is a need to cascade target setting up to district level. Working with the different sectors, SANAC will establish mid-term and end-term targets for all the NSP indicators

10.4 Routine data collection and reporting

The NSP M&E system will rely on a variety of data sub-systems: routine, periodic collection and collation systems, which are supported and maintained by various stakeholders. In general, these sub-systems are both not well harmonised and not comprehensive enough to address the comprehensive set of indicators required for the multi-sectoral approach.

Routine data collection will be based on the identified core indicators noted above using standardised operating procedures and agreed processes. The functioning District Health Information System (DHIS) that routinely collects data on HIV, TB and STI services at health and other facilities will continue to inform the NSP reports and other information products. SANAC will establish a community based sub-system to routinely capture the NSP activities that take place at the community level. The system will provide essential information needed by the SANAC and sub-national government levels to coordinate service delivery and monitor the response comprehensively. Community-level data will be obtained from all organisations providing community-based HIV, TB and STI services, such as those funded directly by the government as well as those funded through other sources (e.g., by development partners). The Community Based system will draw from existing systems to reduce duplication.

While the quality of HIV, TB and STI data has improved, at this stage in the response, there is a need to strengthen the granularity of data at multiple levels so as to adequately interpret and understand the heterogeneity of the epidemic and the response. Therefore the following activities will be implemented to strengthen the timeliness and quality of data used for monitoring and evaluation of the 2017-2022 NSP:

- Collection of geographically-referenced data;
- Disaggregation of all relevant data by age and sex;
- Establishment of a common data architecture;
- Establishment of an integrated, electronic NSP information system;
- Integration of quantitative and qualitative data from communities using innovative community level M&E approaches.

As indicated in the National Strategic Plan for HIV, TB and STI Surveillance and Surveys, the routine programme data collected through the M&E system will be supplemented by

routine surveillance activities, such as the Annual Antenatal Sentinel Surveillance, the Household HIV Prevalence Survey, the Integrated Bio-Behavioural Surveillance Study among key populations as well as other non-routine survey and research activities.

10.5 Promoting use of data for action

Perhaps the most critical objective of ensuring effective M&E is to assist stakeholders to use their data to adapt and improve their programmes. The NSP (2017-2022) M&E plan will therefore take steps to guide and capacitate all stakeholders in analysing their performance so as to foster a culture of "data-driven action".

Recent processes initiated during the previous NSP to Fast-Track action on HIV, TB and STIs in municipalities and districts have adopted the concepts of bottleneck analysis, bottom up and locality specific planning and data-driven action at their core. The strengthened multi-sectoral M&E system is critical to providing the necessary data to populate the cascades and other tools that are being used to address gaps and inform planning in these processes.
To further the objective of use of data for action and decision-making, specific mechanisms and activities will be put into place. These include the following:

- Use of Geographic Information System (GIS) techniques to integrate, visualise, and facilitate special analysis of geographically-referenced data including spatial view of services;
- Introduce processes, technology and feedback mechanisms to facilitate the availability and use of real-time data;
- Use of available data to identify the major gaps in knowledge including the social and structural determinants of vulnerability, especially among young women and girls;
- Use of information from the data warehouse to generate NSP performance reports at multiple levels;
- Conduct annual NSP information review and analysis sessions with provinces and districts.

All sectors and localities will be supported to track progress, measure results and interrogate their data so as to adapt and improve programmes and strengthen the response on a continual basis. Progress against core indicators will be reviewed and assessed at provincial and national levels by the AIDS councils and relevant department on a monthly to quarterly basis. In addition to evaluating the performance against the targets for core indicators, the completeness, accuracy and timely submission of data will also be assessed. Feedback mechanisms will be established to ensure that poor performance by individual sectors and/or in specific locations is addressed in a timely manner.

The M&E plan will make provisions for a robust and inclusive mid-term review which, depending on the outcome and performance results, will allow for adjustments in programming and resource allocation for the second half of the NSP. During this review SANAC will support the coordination of data reporting and synthesis to assess progress toward achieving the goals of the NSP. This review will also provide an opportunity for stakeholders to revise targets as necessary. A final review will be conducted at the end of the term to evaluate the 5 year period of the NSP. Following each of the annual, mid-term and end term reviews, the SANAC will oversee feedback at all levels, and provide guidance and support for the use of data for program strengthening.

10.6 The Learning Agenda

Based on the continuous analysis of performance against the core indicators and targets, gaps in knowledge will be identified and research questions will be developed to inform a

comprehensive learning agenda for public and community health in South Africa. This will require non-routine data collection such as special surveys and operational research activities which go beyond those included in the M&E framework and the National Strategic Plan for HIV, TB and STI Surveillance and Surveys.

Such behavioural, epidemiological, and operational research as well as impact evaluations will generate knowledge and evidence to further improve and enhance the targeting of priority interventions as well as the allocation of resources for an effective and efficient national HIV, TB and STI response.

Recommended M&E interventions

Table: Recommendation M&E Interventions with Roles and Responsibilities

Recommended Interventions	Responsible
Develop an annual costed national M&E work plan, including the specific and costed M&E activities of all relevant stakeholders and identified sources of funding	SANAC PCA
Establish a National M&E Technical Task Team to coordinate and maintain partnerships among stakeholders who are involved in planning and managing the NSP M&E system.	SANAC PCA
Conduct M&E capacity assessment at national, provincial and district levels, and strengthen skilled human resources to complete all tasks defined in the annual costed NSP M&E work plan.	SANAC, PCA
Strengthen routine health and non-health information systems	SANAC, PCA, Government Sectors, CBOs Private sector
Conduct routine M&E supervision, and periodic data quality audit, verification and feedback	SANAC, PCA, DAC, Sectors
Fulfil global, regional, national and country HIV reporting obligations	SANAC, Sectors
Establish well-defined and managed national and sub-national data warehouses to capture, verify, analyse, and present programme monitoring data from all levels and sectors	SANAC, PCA
National NSP communication strategy includes a specific M&E communication and advocacy plan.	SANAC
Develop data use plan guiding data dissemination to inform policy formulation and programme planning and improvement.	SANAC PCA

10.7 The NSP M&E framework

The NSP M&E Framework presents a core set of indicators that will be used to measure the overall outcome-level and impact results of the NSP. Other additional indicators that will be used to monitor the NSP results at the provincial, district and local programme level addition to the core indicators will be detailed in the NSP 5-year M&E Plan.

These M&E framework consists of 30 core indicators that cover all NSP areas of focus. For each core indicator, the framework provides a description of what it will measure, numerator and denominator where applicable, level of disaggregation, baseline where available, targets, sources, frequency of reporting and the institution responsible. Baselines were obtained for most of the indicators, and targets were set for the NSP mid-term time point (FY 2019/20) and end period in FY 2021/22. Protocols for each of the indicators will be outlined in the M&E plan to facilitate reporting on the indicators by all stakeholders.

**The full M&E Framework for the NSP still being developed. See Annex 1 and Annex 2 for the Zero Draft Indicator Matrix and Zero Draft High Level Impact Indicators and Targets.*

Chapter 11: Leading the Response

"Mutual Accountability"

Strategic Objective 11:
Shared responsibility among interconnected and interdependent stakeholders

Key Targets:

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Priority Actions:

- Establish an accountability framework
- Establish functional integrated ward programmes in every province
- Strengthen the role of the SANAC Secretariat in respect of social mobilisation to tackle TB.

In line with focusing for impact, localising approaches to HIV, STIs and TB is vital. Those who operationalise the NSP at the provincial, district and community level in particular are encouraged to identify their own priorities from within the plan to amplify in their specific setting, according to their needs.

Over the next five years, the SANAC Trust must determine the optimal institutional arrangements for the full implementation of the multi sectoral NSP. The Trustees are appointed by the Deputy President. The Trust and the Secretariat should be strengthened to carry out its responsibilities as recommended by this NSP and the Trust Deed.

Inter-sectoral collaboration between government departments, civil society and the private sector remains critical. Cross –border collaboration remains critical for migrant labourers; particularly mine workers. The private sector is playing an increasingly important role in TB diagnosis, prevention and care, and robust private sector engagement should include collaborations with private health-care providers: clinics, general practitioners, pharmacies and Traditional Health Practitioners.

11.1 A strong SANAC for effective coordination

The response to the three epidemics of HIV, TB and STIs is led at the highest level in the form of the SANAC Plenary and the SANAC Inter-Ministerial Committee; both of which are led by the Deputy President of the Republic of South Africa. The Minister of Health is the Minister in both these structures.

There will be a need for intensive monitoring of inputs, processes, outputs and outcomes of the key interventions which finally comprise the NSP, including the enablers. This is a role that the SANAC secretariat is well positioned to fulfil as they are responsible for monitoring and evaluating the country's response to HIV, TB and STIs. In addition; the District AIDS councils are well placed to ensure that health system strengthening efforts; including quality improvement and human resources strengthening is occurring at facility and sub-district level as mandated by the NSP.

11.2 A multi- and inter-sectoral government response

There is active leadership from numerous ministries including Science and Technology, Social Development, Basic and Higher Education, Justice and Correctional Services,

Labour, Minerals, Transport and the Minister in the Presidency responsible for planning and performance monitoring of all government departments. Almost every government department has a role to play in the implementation of the NSP.

At provincial, district and local government level the leadership role of Premiers, MECs and mayors needs to be strengthened. In the period of this NSP the most important level of leadership to be strengthened is at the community level at ward level or a grouping of wards constituting a well-established town, township or village. Multi sectoral behaviour change programmes can only occur at this level and community leadership is essential to achieve the goals of this NSP.

- Five levels of implementation (ward, municipality, district, provincial and national) through three spheres of government (municipal, provincial and national).
- All three levels need to work together at local level – at ward, municipality and district level.
- Strengthen and scale up the integrated ward programmes. These are a game-changer for multi-sectoral cooperation at the local level. Currently, integrated ward programmes have been set up in five out of the nine provinces, with varying degrees of functionality. There is Operation Sukuma Sakhe in KwaZulu-Natal, Ntirhisano in Gauteng, Operation Hlasela in Free State, Masi Phathisane in the Eastern Cape, and xx in Mpumalanga. Dubbed "War Rooms", these integrated ward programmes bring together all government departments alongside civil society and the private sector to entrench a combined effort. They work on multiple levels, from provincial, to metro district level, metro region/local councils as well as wards. Referral and reporting systems are important topics. Integrated ward programmes were adopted as SANAC policy in 2014 and reinforced and prioritised in 2015. The Deputy President briefed the Premiers on this strategy in 2015/2016.

A recent Treasury Review of the Secretariat indicated that it needs to improve its capacity to support the provincial, district and local aids councils and that it should improve upon its fundraising and resource mobilisation capacity especially among donors and the private sector. It also recommends an improvement in the monitoring and evaluation capacity and that, in future years, the Secretariat should be supported by multiple government departments in keeping with the multi sectoral and multi departmental nature of its mandate in respect of HIV, TB and STIs.

In line with the overall approach of this plan – focusing for impact – tailoring the response to specific locations and populations is critical to maximise outcomes. This means that districts need to be the architects of their own responses with the NSP, with provincial and national leadership supporting a bottom-up approach. It also means ensuring that development partners respond to local priorities.

11.3 Developing and implementing a multi- and Inter-sectoral response for TB

A key priority for this NSP is to strengthen the role of the SANAC Secretariat in respect of social mobilisation to tackle TB. The SANAC Trust and the Secretariat have not given any attention to the multi sectoral response to TB. The SANAC secretariat has the responsibility of building the capacity of and mentoring the Provincial and District AIDS councils to optimise a multi-sectoral and inter-sectoral response through ensuring amongst others: optimal collaboration and co-operation between multiple government departments and civil society and private sectors, advocacy, mobilisation of communities, improved prevention and treatment efforts and reduced stigma for HIV and TB. Hence it becomes necessary to

harness the expertise, experience and networks of the SANAC secretariat to transform the TB response in communities and promote demand-driven care.

A robust multi-sectoral response is critical to ending the TB epidemic and eradicating the disease; enhanced standards of living and social approaches decreased the burden of TB before the introduction of chemotherapy in the 1940s.

A critical component of a multi-sectoral response to TB is advocacy; stakeholders need to clearly understand that TB is a crisis and how their sector contributes to this crisis and its remediation. Stakeholders include 1) Government Departments: Correctional Services, Mining, Education, Social Development, Human Settlements, Public Works, Agriculture, Health, Forestry and Fisheries, Home Affairs, Labour, Treasury, Transport and taxi industry. 2) Community based stakeholders including community based organisations (CBOS) and faith-based organizations.

11.4 A central role for civil society and community groups

Almost all of the programmes in this NSP require the active participation of the civil society leaders, NGOS and the private sector. The role of civil society leadership at national, provincial and local level is critical to the success of the community response and also to ensure that programmes are implemented effectively and efficiently, without stigma and discrimination and that the needs of key and highly vulnerable populations are addressed.

Commitment, political will and buy-in is required which will be facilitated by a clear framework which includes a clear definition of deliverables and scope, activities and roles. A specific framework is required for partnership between government and NGOs that will provide sustainable funding to NGOs to help achieve the NSP targets. This framework will allow NGOs to enter into multi-year service level agreements to provide services to vulnerable populations that government may not be able to reach as effectively. This will be supported by a coordinating body consisting of representatives from all stakeholder groups and memoranda of agreement signed by all parties. Interventions should be guided by updated data and trends.

11.5 Leadership by affected communities: Nothing about us without us

- Key population leadership and engagement
- This section will also address the central role that people living with and affected by HIV, TB and STIs have to play in preventing new infections.
- The involvement of people with disabilities in the planning, implementation and monitoring of service delivery for people with disabilities is critical.

11.6 A committed private sector

The private sector is a critical addition to the national partnership in this NSP. Previous NSPs did not cater adequately for the role and contribution of the private sector in the response to HIV, TB and STIs. For the first time in this NSP the private sector has been engaged as a partner and has laid out a vision and a plan to increase its contribution to all aspects of the NSP. There is a great deal of expertise and talent and leadership and management in the private sector and other sectors should benefit from these attributes.

11.7 Ensuring mutual accountability

The key to the success of this NSP will be mutual accountability. In 2002, Government established the SANAC Trust to ensure the overall coordination of the development, implementation and monitoring of the NSP and to ensure dialogue, consensus and multi stakeholder participation in the response. The SANAC Trust has established a Secretariat to implement its goals and objectives while retaining a governance, fundraising and fiduciary role of the activities of the Secretariat.

The SANAC Secretariat needs to work with government departments at national and provincial level, municipalities, NGOs and civil society and the private sector to ensure accountability mechanisms are in place to ensure that each sector meets it objectives and that the right level of resources are available to implement agreed programmes.

- Include indicators and targets collected and measured by multiple sectors.
- The Africa Peer Review Mechanism as part of accountability for implementation.

Conclusion: Accepting the Challenge

"The Time Is Now"

The NDP notes that if the correct policies are put in place, average life expectancy of about 70 years can be achieved by 2030.[197]

Remind the reader of the NDP's Vision for 2030

- Raise the life expectancy of South Africans to at least 70 years
- Ensure that the generation of under-20s is largely free of HIV
- Significantly reduce the burden of disease

Appendices

Catalogue of existing strategies and plans

Reference reports on epidemiology and evidence

Guides to implementation

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