REPUPLIC OF BOTSWANA

THE THIRD BOTSWANA NATIONAL STRATEGIC FRAMEWORK FOR HIV & AIDS

2019 – 2023

ENHANCING EFFICIENCIES THROUGH AN INTEGRATED APPROACH

"PHENYO KA 2030"

BOTSWANA
Our pride, your destination

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The Third Botswana National Strategic Framework III (NSF III) for HIV and AIDS spells out priority areas for the implementation of the national HIV response. It will provide guidance to all implementers and other stakeholders during the period 2019 -- 2023. The NSF III document may be freely used, quoted, translated or distributed, in part or in full, provided the source is duly acknowledged. The publisher expressly forbids the use of the document for commercial purposes, profit or benefit in any form.

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FOREWORD

The first case of HIV in Botswana was diagnosed in 1985. Since then the virus spread rapidly and led to a crisis unprecedented in the history of post-independence Botswana. However, through a series of innovative interventions and the combined efforts of the Government of Botswana, the Civil Society Organisations, Development Partners and other stakeholders such as communities, the tide was gradually reversed.

The use of National Strategic Frameworks to guide the response to HIV and AIDS has over the years proved to be one of the most effective interventions Botswana has employed. Botswana is now in its third National Strategic Framework (NSF III). The third Botswana National Strategic Framework for HIV and AIDS constitutes a blueprint that will guide the multi-sectoral response to HIV and AIDS for the period 2019 to 2023. The Strategy identifies priority areas where concerted effort has to be directed to create the desired impact in the fight against HIV and AIDS. Such priority areas include districts bearing a greater burden of the disease and certain population groups that are at greater risk of contracting HIV.

NSF III recognises successes scored in preventing new HIV infections and treating a section of the population already infected with HIV. In the same vein, it notes that we are at a delicate point in the fight against HIV and AIDS. We can either work hard to sustain and build on our gains or allow complacency to creep in and go backwards. The new Strategic Framework therefore spells out clear, concrete actions as to what needs to be done to sustain our achievements.

NSF III sets a very ambitious target for Botswana of ending AIDS by 2030. This is consistent with Sustainable Development Goal 3 adopted by UN member states in 2015. While achieving this target may seem a tall order to some, the target is attainable if we direct our energies towards prevention of new HIV infections and individuals take personal responsibility to avoid getting infected with HIV. Botswana is also on course to reaching the 90-90-90 treatment targets, which will take the country towards reaching epidemiological control of the disease.

The National AIDS and Health Promotion Agency (NAHPA), which coordinated the development of NSF III, has been in the forefront of the fight against HIV and AIDS since its inception in 1999. In order for the nation to benefit from the model NAHPA has successfully employed over the years in coordinating the response to HIV and AIDS, Cabinet approved the expansion of NAHPA's mandate in 2018 to include Non-Communicable Diseases (NCDs). This means NCDs will also benefit from the experience NAHPA has gained over the years in coordinating efforts against AIDS.

Lastly, the third National Strategic Framework should give fresh impetus to the fight against HIV and AIDS and renewed hope that we will one day have an AIDS free generation in Botswana.

Nonofo Molefhi

Minister for Presidential Affairs, Governance and Public Administration

ACKNOWLEDGEMENTS

The development of Botswana's third National Strategic Framework (NSF III) for the period 2019 to 2024 benefited from the contributions of essentially all the stakeholders in the national response to HIV and AIDS. We commend them for the role they played in the development of NSF III as this was a hugely demanding exercise which could not be accomplished without their support. We thank them for the many sacrifices that they made in the form of hours and days that went into the production of this document.

The National AIDS and Health Promotion Agency (NAHPA) is particularly grateful to MAIPET Investment (Pty) Ltd who developed the initial draft of NSF III as well as the associated drafts of National Operational Plan and Monitoring and Evaluation Framework. In the same vein, we thank Tom Mogeni and Warren Parker, the international consultants who made valuable input by peer reviewing and further refining the NSF III document.

NAHPA is also greatly indebted to our Development Partners for the key role they played in making the development of NSF III a success. We are especially grateful to UNAIDS for their outstanding contribution to the exercise. UNAIDS provided the much needed Technical Support for the NSF development process which helped greatly in accelerating completion of the document. Other development Partners who took part in this process are UNDP, UNFPA, WHO, UNIICEF, PEPFAR, CDC and USAID.

We thank as well Civil Society Organisations, BONASO, ACHAP, BONELA, BOCAIP, BONEPWA, PCI, BOFWA, Tebelopele and BBCA for their invaluable contributions to the above exercise.

We owe a debt of gratitude to a great number of Government Ministries that took part in NSF III development. Programme Officers and other participants were drawn from different Ministries to join working groups that focused on different thematic areas of NSF III. We thank in particular the Ministry of Health and Wellness for providing valuable data and other information used in the NSF document.

Lastly, we would like to thank NAHPA staff members and the leadership for the many hours they spent going through the NSF draft line by line to ensure that the entire document is factually accurate.

Leka moso

Richard K. Matlhare
National Coordinator
National AIDS and Health Promotion Agency

ACRONYMS AND ABBREVIATIONS

ACHAP	African Comprehensive HIV and AIDS Partnership
AIDS	Acquire Immunity Deficiency Syndrome
AGYW	Adolescent Girls and Young Women
ART	Anti-Retroviral Therapy
BBCA	Botswana Business Coalition on AIDS
BAIS	Botswana AIDS Impact Survey
BBSS	Behavoural and Biological Surveillance Survey
BOCAIP	Botswana Christian AIDS Intervention Programme
BOFWA	Botswana Family Welfare Association
BONASO	Botswana Network of AIDS Service Organisation
BONELA	Botswana Network on Ethics, Law and HIV/AIDS
BONEPWA	Botswana Network of People Living with HIV/AIDS
CATCH	Communities Acting Together to Control HIV
CBOs	Community Based Organisations
CSOs	Civil Society Organisations
CDC	Centre for Disease Control
CMS	Central Medical Stores
DAC	District AIDS Coordinator
DDC	District Development Committee
DHIS	District Health Information System
DHMT	District Health Management Team
DMSAC	District Multi-sectoral AIDS Committee
e-LMIS	electronic Logistics Information Management System
FBOs	Faith Based Organisations
FSW	Female Sex Workers
HIV	Human Immunodeficiency Virus
HTS	HIV Testing Services
IPMS	Integrated Patient Management System
IEC	Information, Education and Communication
JOC	Joint Oversight Committee
MSM	Men Who Have Sex with Men
NAHPC	National AIDS and Health Promotion Council
NDP 11	National Development Plan 11
NGOs	Non-Governmental Organisations
NCDs	Non-Communicable Diseases
PCI	Project Concern International
PEP	Post-exposure Prophylaxis
PIMS	Patient Information Management System
PLHIV	People Living with HIV
PEPFAR	President's Emergency Fund for AIDS Relief
PMTCT	Prevention of Mother to Child Transmission
PreP	Pre-exposure Prophylaxis
RMNCAH	Reproductive, Maternal, Neonatal, Child and Adolescent Health
SBCC	Social and Behavour Change Communication
SDGs	Sustainable Development Goals

SRHR	Sexual Reproductive Health and Rights
STI	Sexually Transmitted Infection
TWG	Technical Working Group
TB	Tuberculosis
USAID	United States Agency for International
VDC	Village Development Committee
VMMC	Voluntary Male Medical Circumcision
VMSAC	Village Multi-sectoral AIDS Committee
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organisation
YRBBSS	Youth Risk, Biological and Behavioural Surveillance Survey

SECTION 1:
INTRODUCTION

"This third Botswana National Strategic Framework (NSF III) is for HIV and AIDS is a five-year plan from 2019 to 2023 outlining the priority interventions to guide a collaborative, multi-sectoral national response to the HIV epidemic in Botswana."

SECTION 1: INTRODUCTION

This third Botswana National Strategic Framework (NSF III) for HIV and AIDS is a five-year plan from 2019 to 2023 outlining the priority interventions to guide a collaborative, multi-sectoral national response to the HIV epidemic in Botswana. The framework builds on Botswana's success in combating the HIV epidemic. At a political level, NSF III sustains the Government of Botswana (GoB)'s commitment to combating HIV. Botswana is committed to the ambitious global targets for ending AIDS as a public health threat, and HIV is prioritised within the national and sector development plans.

As a result of a sustained HIV response, Botswana has been ranked among the countries that are approaching achievement of the UNAIDS 90-90-90 HIV treatment which have nearly achieved the HIV treatment cascade targets. By 2017, an estimated 86% (310,000) of people living with HIV in Botswana knew their HIV status, 84% (300,000) were receiving antiretroviral treatment (ART) and 81% of ART recipients were virally suppressed (280,000).[1] The mother to child transmission rate for HIV declined from 3.9% in 2010 to 1.4%, and the annual number of children newly infected declined from a peak of 33,000 in 1990s to around 13,000 in 2017.

While these achievements signal important progress in combating the HIV epidemic, much more work needs to be done. The annual number of people newly infected with HIV increased by about 4% between 2010 and 2017 after more than a decade of decline[2]. Adolescents and young people, particularly girls and young women, were estimated to have accounted for more than a third of new HIV infections, adult men and women in unions for over a quarter of new infections, and single men for 14.1%.[3] Uptake of ART by men, adolescents and young people lags behind that of women. Key populations (female sex workers and men who have sex with men) continue to face social and structural hurdles in accessing HIV services, while non-citizens have limited access to HIV treatment as it is currently not provided to them for free.

The HIV epidemic has shifted from being generalised throughout Botswana to a series of micro-epidemics affecting different populations in different ways. Modification of strategies is required to address the increasingly varied burden of HIV across diverse populations and settings. NSF III outlines strategies for implementing customized interventions that provide HIV service packages tailored to prioritised populations in prioritised locations, to ensure that no one is left behind. NSF III also establishes ambitious goals and targets that firmly place Botswana on the last sprint towards achieving epidemic control by 2023 and ending AIDS as a public health threat by 2030.

Over the next five years, Botswana will focus on scaling-up high impact interventions and prioritising populations that are more vulnerable to HIV infection to ensure no one is left behind. The involvement of all sectors at all levels of society will be emphasised in the implementation of the HIV response to ensure that behavioural, biomedical and structural factors influencing the epidemic are effectively and synergistically addressed. Evidence will guide results-driven interventions at national, district and local levels, with the goal of reducing the number of new HIV infections and AIDS-related illness and death. Coordination mechanisms will be reconfigured to improve localised prioritisation of the response and delivery of locally relevant and integrated interventions.

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1 UNAIDS 2016 Data for Botswana, SPECTRUM. Also, UNAIDS. (2017). Ending AIDS. Progress towards the 90-90-90 targets, Global AIDS update 2017. Geneva. UNAIDS.

2 Spectrum 2018

3 Incidence Patterns Modelling, 2016

SECTION 2:
CURRENT EPIDEMIOLOGICAL STATUS

" Annual new HIV infections in Botswana peaked at 33,000 in 1995, but thereafter began to decline, reaching about 12,000 in 2006. "

2

SECTION 2: CURRENT EPIDEMIOLOGICAL STATUS

Botswana has the third highest HIV prevalence in the world, following eSwatini and Lesotho in 2016.[4] In 2017, 23.7% of people aged 15 years and older in Botswana were living with HIV with women accounting for 27.2% compared to 20.3% for men.[5] An estimated 378,193 persons of all ages were living with HIV in 2017, comprising 215,361 females and 162,832 males. HIV prevalence among young people (aged 15-24 years) was 8.4% in 2017, with females having higher prevalence (11.2 %) than males (5.6%). An estimated 34,742 young people (15-24) were living with HIV, of whom 66% (23,089) were female. About 9,018 children aged 0-14 were also living with HIV.[6]

HIV prevalence in Botswana varies considerably among districts. Prevalence ranges from 13.3% in Hukuntsi district to 33.4% in Mahalapye district. Higher HIV prevalence in some districts has been attributed to the prevalence of mining operations, which separate families and exposes mineworkers and their partners to higher-risk sexual behaviours.[7]

Table 1: HIV prevalence among people aged 15-49 years in Botswana and by District[8]

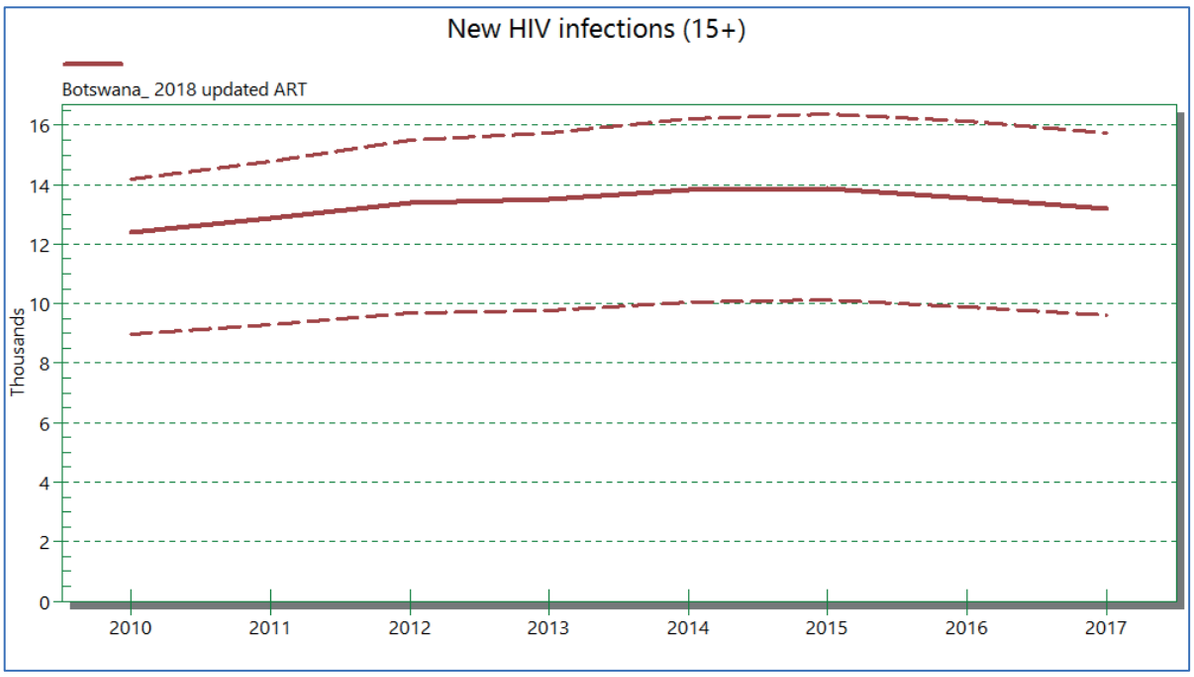
District	HIV Prevalence 15-49 years (BAIS IV)	District	HIV Prevalence 15-49 years (BAIS IV)
Kweneng East	26.8	Southern	18.2
Francistown	29.9	Ngamiland	17.3
Mahalapye	33.4	SouthEast	23.3
Kgatleng	24.6	Okavango	20.3
Selebi Phikwe	30.8	Lobatse	22.3
Gaborone	20.3	Jwaneng	15.9
Serowe/Palapye	20.7	Chobe	22.3
Tutume	28.7	Kgalagadi	27.3
Bobirwa	29.7	Mabutsane	25.6
North East	30.8	Gantsi	19.6
Goodhope	27.3	Kweneng West	20.0
Boteti	25.3	Hukuntsi	13.3

Annual new HIV infections in Botswana peaked at 33,000 in 1995, but thereafter began to decline, reaching about 12,000 in 2006. However, since 2010, new HIV infections increased by 4% (from 12,381 in 2010 to 13,191 in 2017)[9]. This reversal of the downward trend of new infections threatens Botswana's quest to achieve epidemic control and underscores the urgent need to reinvigorate HIV prevention strategies.

NOTE: At the time of printing this strategy, the 2019 Botswana SPECTRUM data was being finalized and indicated a decline of approximately 30% from 2010 to 2018; which significantly differs from the 2018 Botswana SPECTRUM data used in this strategy.

4 UNAIDS. (2017). UNAIDS Data 2017. Geneva: UNAIDS
5 Botswana SPECTRUM data, 2018
6 Botswana SPECTRUM data, 2018
7 Kandala, N.B., Campbell, E.K., Rakgoasi, S.D., Madi-Segwagwe, B.C., & Fako, T.T. (2012). The geography of HIV/AIDS prevalence rates in Botswana. *HIV/AIDS*, 4(95).
8 BAIS 1V
9 Spectrum 2018

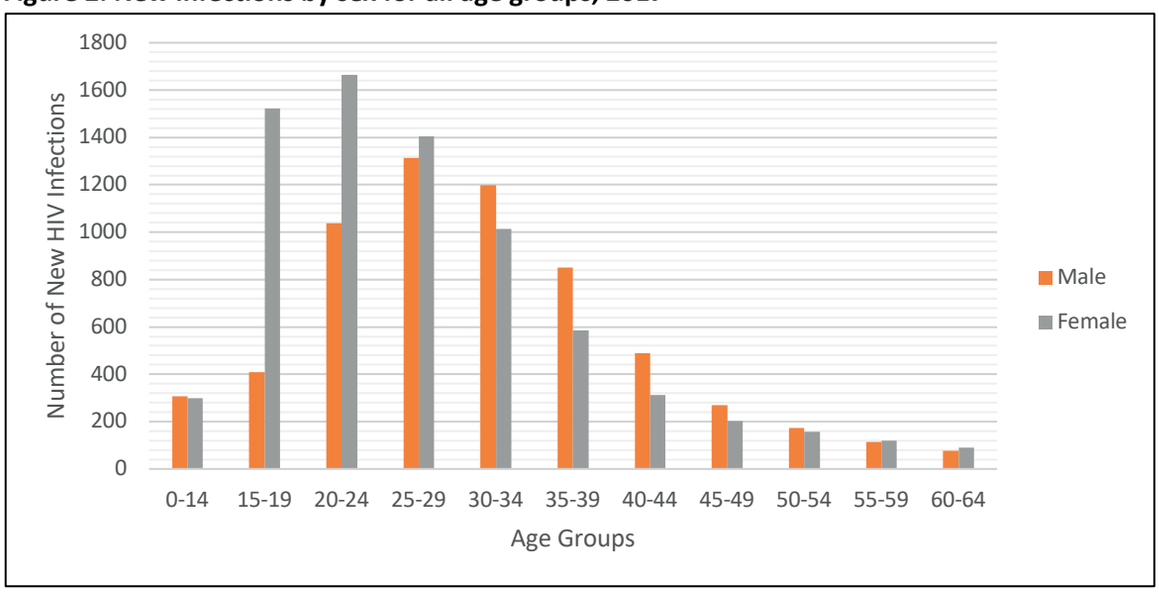
Figure 1: Estimated new HIV infections among people aged 15 and older, 1995-2017



Data source: Spectrum, 2018

New HIV infections in Botswana vary by age group. About 69% of new infections occur among persons aged 15-34 years, with new infections increasing earlier among females than males as shown in Figure 2 below. Girls and women aged 15-34 account for 5,609 of new HIV infections, comprising 75% of new infections among all females and 40.6% of new infections among the population as a whole. Boys and men aged 15-34 account for 3,957 of new HIV infections, comprising 62.6% of new infections among all males and 28.6% of new infections among the population as a whole. While adolescents and young adults are disproportionately vulnerable to HIV acquisition, new infections occur throughout adulthood, with persons aged 40 and older contributing to 2,191 (15.8%) of new infections among the population as a whole.

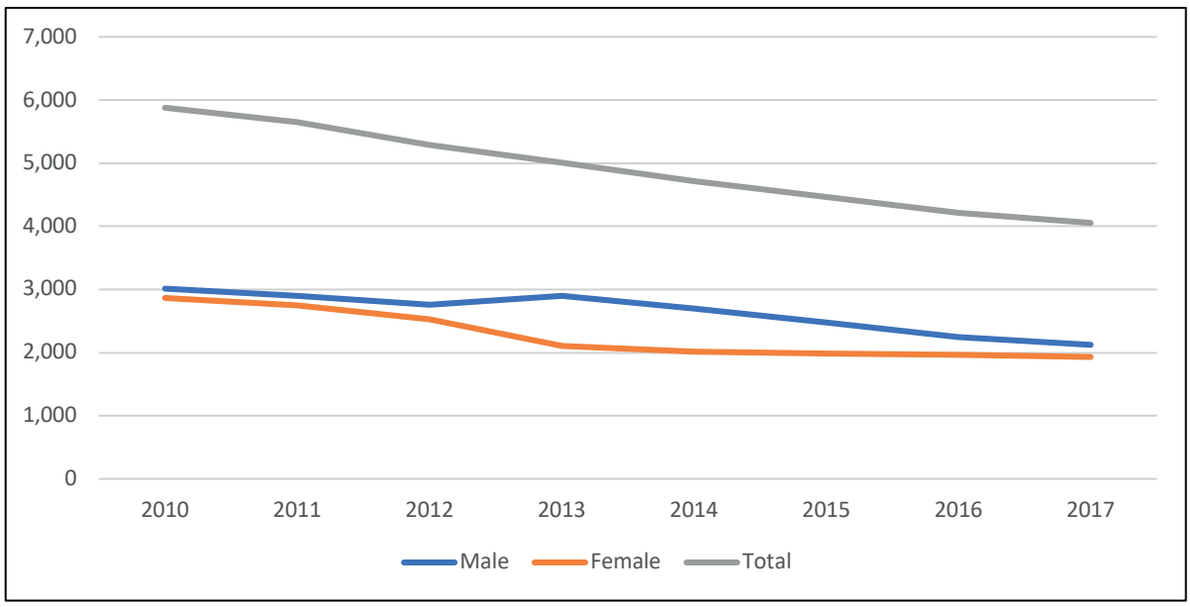
Figure 2: New infections by sex for all age groups, 2017



Data source: Spectrum, 2018

AIDS-related deaths declined by 31% between 2010 and 2017 (from 5,878 in 2010 to 4,054 in 2017) to a large extent due to the continued ART scale up and retention of people living with HIV (PLHIV) in care and treatment services. Although more women than men are living with HIV, more AIDS deaths occurred among men than women, due to men's tendency to present late for treatment and the lower ART coverage among men compared to women. This underscores the need to prioritise the scale up of HIV treatment services among men. Figure 3 below illustrates the trend in AIDS-related deaths since 2010.

Figure 3: Trend in AIDS deaths from 2010 to 2017



Data source: Spectrum, 2018

The second Behavioral and Biological Surveillance Survey of HIV/STI among select High-Risk Sub-populations in Botswana (BBSS II) indicates that 42.8% of female sex workers (FSW) and 14.8% of men who have sex with men (MSM) are living with HIV compared BBSS I reported prevalence 61.9% and

13.1% respectively. Similarly, the same study also found active syphilis among 9.4% of FSW and 3.2% of MSM compared to previous findings of 3.5% and 2.7% respectively[10]. Botswana has established HIV prevention, treatment, care and support interventions for key populations, and these will be scaled up, more effectively packaged, targeted and better coordinated over the next five years.

Botswana has made major strides toward elimination of new HIV infections among children. In 2017, the mother to child transmission (MTCT) rate was estimated at 1.4%[11]; nearly two-third reduction in just seven years. Spectrum 2018 estimates that 600 new infections occur among children 0-14 years. About 9,000 children are living with HIV, including 68% (6,122) who are receiving ART. Ninety percent (10,958) of the roughly 12,210 pregnant women who need Prevention of Mother to Child Transmission (PMTCT) services received them. Elimination of MTCT is a key priority for the country in the next five years.

Botswana is among the top 30 countries globally with a high burden of tuberculosis (TB) and HIV co-infection. Sixty percent of TB patients were co-infected with HIV in 2016.[12] About 1,400 deaths among PLHIV were attributed to TB in 2016.[13] Nonetheless, TB treatment success rates for PLHIV in Botswana are good at 78% in 2015.[14]

Other opportunistic infections and non-communicable diseases remain a major concern for PLHIV and an important health focus for Botswana. People living with HIV are at elevated risk of numerous infections, including Cryptococcal Meningitis, Pneumocystis Carinii Pneumonia, and hepatitis B and C. Ageing with HIV also increases the prevalence of non-communicable diseases (NCDs), including cardiovascular diseases and diabetes, which contributed to 18% and 4% of deaths respectively in 2017. Cancer contributes to 5% of all deaths, with cervical cancer accounting for 26% of cancer diagnoses in women.

Stigma and discrimination has negative effects on the health, wellbeing and service uptake by PLHIV, MSM, FSW and other marginalised groups. Stigma and discrimination may increase risky sexual behaviours and reduce access to HIV prevention, treatment and care services.[15] While there is no contemporary data available on stigma and discrimination towards key populations in Botswana, a stigma survey conducted in 2014 addressing stigma and discrimination towards PLHIV indicated that internal and external stigma persist and warrant policy and programmatic intervention.[16]

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10 2018 Behavioral and Biological Surveillance Survey of HIV/STI among select High-Risk Sub-populations in Botswana

11 PMTCT programme data

12 MOHW. (2015). TB programme data.

13 UNAIDS. (2018). Botswana Country Factsheet, 2016. www.unaids.org/en/regionscountries/countries/botswana

14 WHO. (2016). Global TB Report. Geneva: WHO

15 UNAIDS. (2017). Confronting discrimination: overcoming HIV-related stigma and discrimination in health-care settings and beyond. Geneva: UNAIDS.

16 BONEPWA+. (2014).Botswana Stigma Index Survey. Mogoditshane: BONEPWA+.

SECTION 3:

FRAMEWORKS INFORMING THE NEW AGENDA FOR THE NSF III

" NSF III provides guidance on resource allocation, planning and implementation of the HIV response during the period 2019-2023. This strategic framework has been informed by relevant global, regional and national policy and strategic frameworks. "

SECTION 3: FRAMEWORKS INFORMING THE NEW AGENDA FOR THE NSF III

NSF III provides guidance on resource allocation, planning and implementation of the HIV response during the period 2019-2023. This strategic framework has been informed by relevant global, regional and national policy and strategic frameworks.

At the global level, NSF III is linked to and aligned with the Sustainable Development Goals, as follows:

- Goal 3 on reducing maternal and child mortality, preventing early and unwanted pregnancies, ending the epidemics of HIV and TB, combating hepatitis and non-communicable diseases, improving access to health services, and promoting mental health and wellbeing;
- Goal 5 on the elimination of violence including sexual violence against girls and women in all settings, elimination of harmful practices such as early and forced marriages, and increasing access to sexual and reproductive health and reproductive rights;
- Goal 10 on promoting inclusion, reducing inequality and addressing stigma and discrimination;
- Goal 16 on promoting inclusive societies for sustainable development and providing access to justice for all including people subjected to physical, psychological or sexual violence, and;
- Goal 17 on ensuring sustainable financing for sustainable development though increased domestic funding, strengthening integrated service delivery and strengthening monitoring and reporting.[17]

Multi-sectoral and multi-stakeholder partnerships are key to efforts of attaining the SDGs. This involves harmonising the efforts of governments, international organisations, donors, non-governmental and community-based organisations and the private sector. The SDGs are grounded in human rights principles, emphasising the participation and accountability of all, the principles of equality and non-discrimination, and the conviction that no one should left behind.

NSF III is aligned to the 2016 United Nations Political Declaration on HIV and AIDS: 'On the Fast Track to Accelerating the Fight against HIV and to Ending the AIDS Epidemic by 2030' which outlines a blueprint for action to lay the foundation to end the AIDS epidemic as a public health threat. Under this declaration, Botswana commits to ensuring 90% of key populations report no discrimination; 75% of people living with, at risk or affected by HIV benefit from HIV sensitive social protection; 90% of young people are empowered with skills, knowledge and capability to protect themselves from HIV; 90% of women and men have access to HIV combination prevention and sexual and reproductive health (SRH) services; and 90% of women and girls live free from gender inequality and gender based violence. In addition, the country is committed to increasing the proportion of people aged 15 and older sustained on ART to at least 81% by 2020; reducing TB related deaths among persons living with HIV by at least 75% by 2020 and reaching 90% of people who need TB treatment.

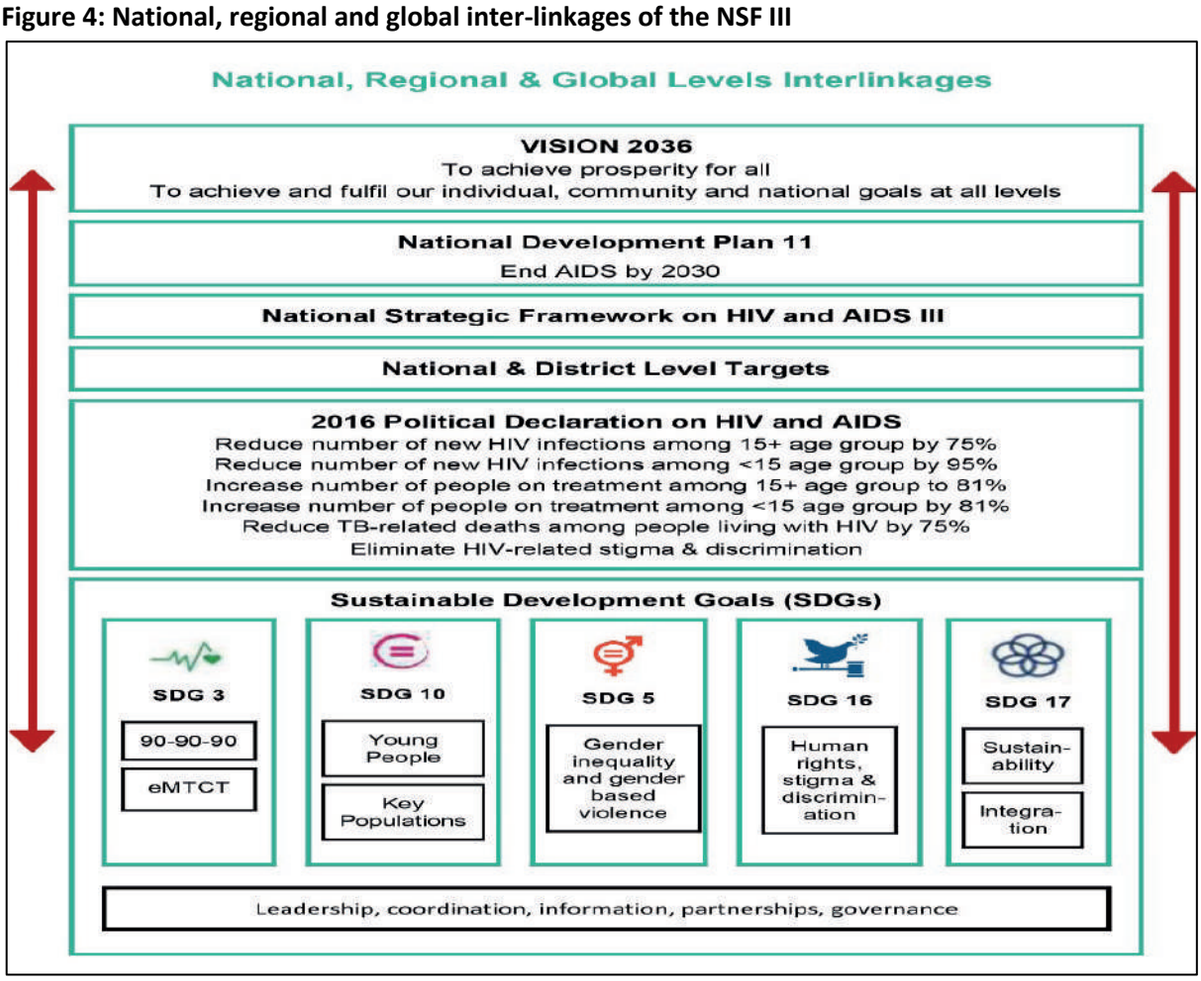
Other frameworks informing NSF III include the Global Strategy for Women's, Children's and Adolescents' Health (2016-2030); the African Union Agenda 2063: Aspiration 3 on Africa, which envisages a universal culture of good governance, democratic values, gender equality, respect for human rights, justice and the rule of law; and the World Health Organisation's technical guidance on HIV treatment, care and support, elimination of HIV MTCT, voluntary medical male circumcision, and HIV pre-exposure prophylaxis among others.

[17] Revised list of sustainable development indicators, March 2017

At regional level, NSF III is informed by various Southern Africa Development Community Declarations and policy frameworks including: the Declaration on HIV and AIDS, which promotes a multi-sectoral approach to national HIV responses; the Regional Indicative Strategic Development Plan which outlines strategies for harmonising HIV prevention, treatment, care, support and socio-economic impact mitigation approaches in the region; the Declaration on Gender and Development, which addresses vulnerability of girls and women to HIV; and the Youth Employment Promotion Policy Framework for scaling up of economic empowerment for young people to reduce their vulnerability to HIV.

NSF III falls within the overarching scope of Botswana's Vision 2036, which outlines a master plan for a transformational agenda for the country's future, including transitioning from an upper middle-income country to a high-income country. This economic vision is linked to the National Development Plan 11, which emphasises reducing new HIV infections, alongside the vision of the NSF III that is focused on ending AIDS as a public health threat by 2030. Making good on these HIV-related commitments will accelerate progress towards achieving the national development goals for health and economic development articulated in the National Development Plan 11 and in Vision 2036. Other national strategic plans linked to the NSF III include those addressing: Reproductive, Maternal Neonatal, Child and Adolescents Health; Voluntary Medical Male Circumcision; HIV Testing Services, and; TB and non-communicable diseases, gender inequalities, poverty, Gender Based Violence and Drug Abuse. Figure 4 illustrates how NSF III links with these other development frameworks at all levels.

Figure 4: National, regional and global inter-linkages of the NSF III



SECTION 4:
STRATEGIC SHIFTS OF THE NSF III

" Over the period of NSF III, the HIV response in Botswana will be implemented in an environment of differentiated HIV incidence among different populations and locations and increasingly stretched capacity of the public health system to provide HIV services. "

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SECTION 4: STRATEGIC SHIFTS OF THE NSF III

Over the period of NSF III, the HIV response in Botswana will be implemented in an environment of differentiated HIV incidence among different populations and locations and increasingly stretched capacity of the public health system to provide HIV services. NSF III aims to sustain the important HIV-related gains made to date and to achieve ambitious targets to ensure that the country is on track to end AIDS. To ensure an effective and efficient response, NSF III outlines a number of important strategic shifts.

Shifting from a national approach to priority geographic locations and populations based on evidence

The shift from a standardised national approach to one that enables locally tailored approaches in the most affected districts and most at risk and vulnerable populations will be guided by epidemiological and other evidence and will ensure that the AIDS response addresses the greatest needs and generates the greatest return on HIV-related investments. As Table 2 indicates, the country's districts have been prioritised for primary HIV prevention based on HIV incidence and prevalence data; and ranked into high, medium and low priority. This ranking will guide the level of investment in HIV prevention programmes at district level.

Table 2: Prioritisation of districts for primary HIV prevention

Ranking	District	New HIV Infections (Spectrum 2018)	HIV Prevalence 15-49 years (BAIS IV)	Priority level
1	Kweneng East	2034	26.8	High Priority
2	Francistown	933	29.9	
3	Mahalapye	833	33.4	
4	Kgatleng	618	24.6	
5	Selebi Phikwe	542	30.8	
6	Gaborone	1671	20.3	
7	Serowe/Palapye	1236	20.7	
8	Tutume	882	28.7	
9	Bobirwa	517	29.7	
10	North East	335	30.8	
11	Goodhope	328	27.3	
12	Boteti	517	25.3	
13	Southern	544	18.2	Medium priority
14	Ngamiland	534	17.3	
15	SouthEast	480	23.3	
16	Okavango	343	20.3	
17	Lobatse	335	22.3	
18	Jwaneng	85	15.9	
19	Chobe	201	22.3	
20	Kgalagadi	158	27.3	
21	Mabutsane	68	25.6	
22	Gantsi	225	19.6	Low Priority
23	Kweneng West	207	20.0	
24	Hukuntsi	123	13.3	

Priority populations for NSF III are as follows:

- **Adolescent girls and young women aged 10-24:** Estimates show that young people aged 15-24 years account for a third of new HIV infections (34%), of which 69% occur among girls and young women. HIV vulnerabilities of girls and young women include low knowledge of HIV, risky sexual behaviour and gender-based violence. In 2016, 18.8% of girls aged 12-19 had never had sex and 13.4% of girls who had previously had sex reported having ever being pregnant. Almost 70% (69.9%) of sexually active girls reported using a condom during their last sexual episode, although 21.2% reported not using any contraceptive method.[18] Around one in eleven sexually active girls (8.9%) reported having exchanged sex for money, drugs or gifts. Providing adolescent girls and young women with the tools, interventions and support they need to reduce their vulnerability to HIV is a key priority in NSF III.
- **Adolescent boys (10-19) and men (20 – 24 years, and 25 years and older):** Boys, young and adult men have poorer health seeking behaviours than girls or young and adult women. This results in a lower uptake of HIV prevention, treatment and care services among males. Among boys and men aged 15 years and older who are living with HIV, 74% know their HIV status, 72% are on treatment and 70% are virally supressed; by comparison, 94% of girls and women living with HIV in the same age category know their HIV status, 94% are receiving ART and 91% are virally suppressed.[19] Men are less likely than women to test for HIV annually (39% vs 61%)[20] and more men aged 35 years and older were estimated to have died of AIDS related illnesses compared to women in 2017 (1,400 vs 1,000), due in large measure to late ART initiation.[21] In addition, only 4% of men report having perpetrated violence against women[22]. Adolescent boys and men are prioritised in NSF III to improve their HIV service uptake and enhance their role in addressing harmful gender norms and practices.
- **Women 25-49 years including pregnant women:** Among people 25-49 years, 210,887 women (57%) are living with HIV compared to 158,289 (43%) men[23]. Non-married women aged 25 years and older account for about 9.2% of people newly infected by HIV[24]. As women continue to be more vulnerable to HIV infection than men, both physiologically and as a result of social and economic disadvantage – they are prioritised in the NSF III.
- **Infants and children 0-14 years:** Botswana is committed to eliminating new HIV infections among children. Early Infant Diagnosis (EID) and HIV treatment for children are critical for preventing deaths before age of 3 years among children living with HIV. Only 52.9% of infants born to HIV positive mothers are tested to reduce HIV within 2 months of birth, while 70% of children living with HIV are receiving ART treatment (a coverage lower than among adults living with HIV)[25]. NSF III prioritises efforts to improve EID and treatment of children living with HIV.
- **Key populations**: NSF III prioritises p FSWs and MSM due to their high HIV prevalence and incidence and low service coverage. HIV prevalence among FSWs has been found to be more than double that of adult female prevalence at 48.8%. In 2016, MSM and FSW, while representing only

[18] Ministry of Basic Education. (2016) Second Botswana Youth Risk Behavioural and Biological Surveillance Survey. Gaborone: MBE
[19] Botswana ART Programme data
[20] HTS programme data
[21] Botswana SPECTRUM data, 2018
[22] Gender Based Violence Study, 2012
[23] Botswana SPECTRUM data, 2018
[24] Botswana Incidence Patterns Modelling, 2016
[25] Botswana PMTCT Programme data

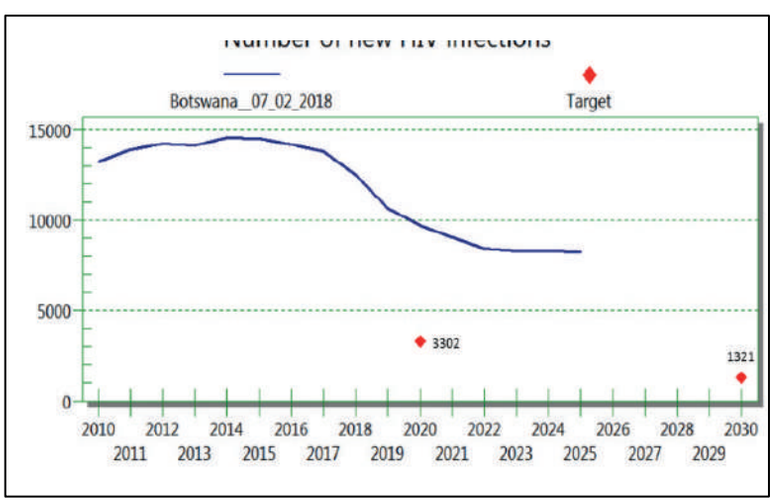
a small fraction of Botswana's national population, were estimated to accounted for 2.2% and 8.3% of people newly infected with HIV[26]. The 2017 survey found that 88.1% percent of FSW had ever had an HIV test compared to 95.8% in 2012 and 51.6% percent reported having been tested in the past 12 months compared to 54.1% in 2012[27]. Among MSM who tested positive at their most recent HIV test, 13.1% were enrolled in the national ART program.[28] Clients of FSW may serve as an epidemiological bridge for HIV to the broader national population. The survey highlighted critical issues for service provision for FSW and MSM, such as low knowledge of the risk of HIV acquisition through anal sex, relatively low rates of HIV testing in the past 12 months (particularly among FSW), low rates of consistent condom use, low access to lubricants, low ART coverage (especially for MSM), and barriers to accessing mainstream services because of fears of stigma and discrimination.

- **People Living with HIV:** Viral suppression improves the health, well-being and longevity of PLHIV and significantly reduces the likelihood of HIV transmission. The reduction of morbidity and mortality among this population also strengthens socioeconomic development in the country by sustaining PLHIV as active participants in the work force and supporting family integrity. NSF III prioritises achieving 95% ART coverage among PLHIV in Botswana.
- **Non-citizens:** The estimated 160,000 non-citizens, roughly 7% of Botswana's total population, are not adequately accessing HIV services. Among the roughly 30,000 non-citizens estimated to be living with HIV, only 27% are receiving ART – a coverage level that is roughly one-third the national average. This population has been prioritised with a view to increasing HIV service uptake, particularly HIV treatment, care and support, to ensure that no person in Botswana is left behind.

Revitalizing HIV combination prevention including HIV treatment

As has been noted, new HIV infections increased by an estimated 4% from 2010 to 2017. Continuation of current HIV programming is projected to reduce the annual number of new HIV infections from 13,000 in 2017 to 8,000 in 2023 – short of the NSF III target of 2,708 new infections by 2023. Prevention efforts in Botswana remain under-resourced. Between 2009 and 2016, only about 10% of the total HIV budget was allocated to prevention.

Figure 5: Estimated number of new HIV infections, 2010-2030



NSF III will revitalize and expand HIV prevention interventions by increasing investment in primary prevention from the current level of 5% to the globally recommended 25% target. With this increased allocation, Botswana will intensify

[26] HIV incidence Patterns Modelling, 2016

[27] 2018 Behavioral and Biological Surveillance Survey of HIV/STI among select High-Risk Sub-populations in Botswana

[28] Ministry of Health. (2013). 2012 Mapping, Size Estimation & Behavioral and Biological Surveillance Survey (BBSS) of HIV/STI Among Select High-Risk Sub-Populations in Botswana. Gaborone: MoH

and support high impact HIV prevention programmes, including condom and lubricant programming, voluntary medical male circumcision, and prevention programmes targeting priority populations. Botswana has enlisted as a member of the Global HIV Prevention Coalition and SADC prevention agenda, which offers platforms for accelerating HIV prevention.

Moving to 95-95-95 treatment targets

Having nearly achieved the 90-90-90 UNAIDS treatment cascade targets[29], Botswana must over the next five years build on these achievements. These achievements provide solid ground for the country to (i) prioritize populations being left being across the treatment cascade, primarily men, key populations, non-citizens and adolescents and young people; and (ii) accelerate HIV treatment to reach 95-95-95 targets by 2023.

Enhancing efficiency by delivering two sets of service packages

HIV service packages will be developed and tailored to the needs of the prioritised populations and delivered in priority locations. Service packages will be developed for adolescent girls and young women, FSW, MSM, adult men, non-citizens, children, pregnant women among others. The development of service packages for adolescent girls and young women and key populations is on-going, and NSF III will build on lessons from these processes to develop packages for other populations.

Accelerating, scaling up and standardizing implementation with quality across programmatic areas

NSF III seeks to galvanize the scale-up and accelerated implementation of programmes by setting ambitious targets at national, district and community levels. These targets will guide the development of action plans at national, district and community levels, and reviews of implementation of these plans will be undertaken regularly. These regular reviews will extend across all programmes, particularly HIV prevention and stigma reduction intervention. These reviews will inform development of innovative modalities to address programmatic gaps, bottlenecks and weaknesses. While standard packages of services will be tailored to each prioritised population to standardise implementation at all levels and across districts, adaptations will be made to adjust to variations in context as relevant. Quality assurance of services falls to the district level and is supported by data collated through the District Health Information System (DHIS).

Increasing investment for community systems strengthening through social contracting

Community systems will play a key role in increasing coverage, efficiency and sustainability of HIV service delivery over the next five years. Efficiency in HIV service delivery will be increased through building the capacity of community system actors to deliver integrated HIV services, extending HIV services from health facilities to communities and strengthening facility-community linkages through harmonisation and improved coordination of Community Health Workers groups.

Botswana will establish a mechanism for social contracting to ensure sustainable and adequate funding for civil society including community-based organisations. NSF III aims to ensure that 30% of HIV investments are directed towards community systems by 2023 through coordination of government, bilateral and multilateral funding streams. Consultations will be held between civil society organisations, government and stakeholders to establish resource and support needs and to improve coordination.

[29] Miles to GO, Closing gaps, breaking barriers and righting injustices, UNAIDS, 2018

Harmonising and reinvigorating strategic information for the HIV response

NSF III emphasizes robust monitoring and evaluation systems to provide comprehensive national and granular strategic information to drive prioritisation and targeting of the HIV response. More granular data will enable programmes to disaggregate data by sex, age, district and other demographic and socio-economic indicators to improve programmatic targeting. Botswana will conduct priority surveys to update current baseline including biomedical and behavioural surveys, Stigma Index and Gender Indicators Surveys. Linkages among sectoral and programmatic information systems will be strengthened to improve reporting and data sharing. Technology will be utilized to allow for real time reporting and for improved data flow from communities and facilities to district and national level. Data dissemination systems that allow access and use of data at national and district level will be put in place.

Expanding integrated approaches to delivery of HIV services for efficiency

NSF III makes a strategic shift from vertical implementation to integrated HIV service delivery to increase efficiencies in utilisation of human and financial resources and to increase service coverage and improve health outcomes. HIV integration will be rolled out in a phased manner to learn and apply lessons in the course of implementation. Service delivery will integrate: 1) HIV and TB services, which is on-going; 2.) HIV and sexual and reproductive health and rights (SRHR) services to improve health outcomes for adolescent girls and young women including pregnant women, and; 3.) HIV and non-communicable disease (NCD) management to address the vulnerability of people living with HIV to NCDs and to leverage HIV strategies to serve as a spring board for combating NCDs.

Making coordination and accountability fit for purpose

The coordination framework for the HIV response will be reconfigured to drive the strategic shifts in NSF III, within the context of on-going re-positioning of coordinating entities and mechanisms. Focus will be on streamlining coordination at district level to enable implementers to use granular data to continuously review the prioritisation and targeting of HIV programmes and improve service delivery; clarifying the coordination between Government Ministries, civil society, development partners, and private sector at national level; and strengthening information flow and technical support between national and district level coordination structures. Other critical issues to be addressed in reconfiguring coordination of the HIV response include establishment of accountability mechanisms at district and national levels, and among government, civil society and private sectors; and establishment of processes for effective translation of NSF III into action plans across sectors and at all levels.

SECTION 5:

STRATEGIC VISION AND IMPACT OF NSF III

" The impact targets for NSF III are aligned to the global Fast-Track targets to which the country has subscribed. Impact indicators are primarily drawn from the Global AIDS Monitoring system and monitoring of the Sustainable Development Goals. NSF III establishes baselines for 2010 for some indicators, in line with Fast-Track targets baseline year, and defined targets for the midterm (2020) and at end-term (2023) of the NSF. "

SECTION 5: STRATEGIC VISION AND IMPACT OF NSF III

5.1. Vision, mission and goals

The vision, mission and goals of the NSF III are as follows:

Vision: Ending the AIDS epidemic in Botswana by 2030

Mission: To accelerate implementation and enhance efficiencies towards HIV epidemic control by 2020 and beyond 2023

Goals: Zero new HIV infections, Zero AIDS-related deaths and Zero discrimination by 2030

5.2. Impact targets

The impact targets for NSF III are aligned to the global Fast-Track targets to which the country has subscribed. Impact indicators are primarily drawn from the Global AIDS Monitoring system and monitoring of the Sustainable Development Goals. NSF III establishes baselines for 2010 for some indicators, in line with Fast-Track targets baseline year, and defined targets for the midterm (2020) and at end-term (2023) of the NSF.

Table 3: Impact indicators for NSF III

Impact Indicators	Reference	Baseline			Targets	
		Value	Year	Data source	2020	2023
Number of people newly infected by HIV (15+ years)	GAM 3.1[1]					
All		13,208	2010	Spectrum 2018	3,302	2,708
Male		6,047	2010	Spectrum 2018	1,512	1,240
Female		7,160	2010	Spectrum 2018	1,790	1.468
Number of people newly infected by HIV (15-24 yeas)	GAM 3.1					
All		5,079	2010	Spectrum 2018	1,270	1,042
Male		1,639	2010	Spectrum 2018	410	336
Female		3,440	2010	Spectrum 2018	860	705
Number of people newly infected by HIV (10-19 years)	GAM 3.1					
All		2,117	2010	Spectrum 2018	529	436
Male		463	2010	Spectrum 2018	116	95
Female		1,653	2010	Spectrum 2018	413	339
Number of people newly infected by HIV (0-14 years)	GAM 3.1	827	2010	Spectrum 2018	41	41
% of children newly infected with HIV from mother-to-child transmission among women living with HIV delivering in the past 12 months	GAM 2.2	<1%	2017	PMTCT Programme Data	<1%	<1%
Number of people who have died from AIDS-related causes	GAM 1.7	5,878	2010	Spectrum 2018	3,000	2,027
Incidence Prevalence Ratio		0.04		Spectrum 2018	0.03	0.03

[30] GAM refers to the Global AIDS Monitoring Indicators

Impact Indicators	Reference	Baseline			Targets	
		Value	Year	Data source	2020	2023
Mortality among HIV-positive new and relapse TB patients	WHO Indicators for TB/HIV Indicator	4,279	2017	Programme data	1,070	428
% of women and men aged 15-49 who report discrim-inatory attitudes towards people living with HIV	GAM 4.1	13.2%	2013	BAIS IV	2%	<1%
% of ever-married or partnered women aged 15-49 who experienced physical or sexual violence from a male intimate partner in the past 12 months	GAM 4.3	3.1%	2013	BAIS IV	<1%	<1%

SECTION 6:

PROGRAMMATIC STRATEGIES

6

" NSF III prioritises high-impact programmes based on their projected impact on reducing new infections and AIDS-related mortality. "

SECTION 6: PROGRAMMATIC STRATEGIES

6.1. HIV combination prevention

NSF III prioritises high-impact programmes based on their projected impact on reducing new infections and AIDS-related mortality. The selected programmes are tailored to prioritised populations based on evidence. The programmes will be implemented as a package to provide targeted populations with options for HIV prevention and to maximise programmatic synergies. The programmes will be implemented as a combination approach that synergizes behavioural, biomedical and structural interventions to address the risks and underlying causes of vulnerability to HIV infection among targeted populations.

6.1.1. Specific programmes for adolescent girls and young women

Programme objective: Reach 90% of adolescent girls and young women with a standardised package of HIV services by 2023

Target population: Adolescent girls 10-19 years and young women 20-24 years

Situational analysis

The UN defines AGYW as females between the ages 10-24. Globally, almost 60% of new HIV infections among 15-24 year olds were contracted by AGYW. In 2015, 380,000 new HIV infections occurred among AGYW. Among adults newly infected in east and southern Africa, 25% were young women (aged 15-24), and the average prevalence in young women was double compared to young men. The UN Political Declaration on Ending AIDS adopted in June 2016 sets the target to reduce new HIV infections among AGYW aged 15-24 years to fewer than 100,000 by 2020. Globally, there is increased recognition that Adolescent Girls and Young Women (AGYW) are particularly vulnerable. They are more likely than their male peers to drop out of school, to marry at an early age and become victims of many social ills that threaten their human rights and livelihoods. There are gender norms and structural barriers that further limit girls to access important social capital and financial assets. It is in light of the aforesaid that bring the urgency of targeted interventions for this group.

In Botswana, AGYW have not adequately programmed for as interventions presumed a blanket coverage approach for all young people. Due to the ever increasing evidence that include HIV incidence among the cohort, the government of Botswana has decided to make HIV prevention among AGYW in and out of school a top priority. This new sense of urgency also responds to the epidemiological evidence, which shows that teenage pregnancy is at 13.4%, forced sex at first time of sexual intercourse 22.2%; transactional sex 13.4%; drugs excluding injecting drugs 39.2% and alcohol 35.6% among both sexes. Additionally, Spectrum 2017 estimates that 3300 new infections occurred among young people aged 15-24 out of which two thirds were young women. The high incidence of new infections signals a need for a significant focus on improving integrated and comprehensive HIV/TB and sexual & reproductive health services for AGYW.

Therefore, it is critical that a standard package of interventions is comprehensive enough to address the biomedical, behavioural and structural determinants while it also promotes economic empowerment. Success of these interventions will only be realized through delivering interventions for AGYW as a primary target and secondary targets such as male partners of AGYW, service providers and the community at large. These interventions will be critical in reinforcing and catalysing those meant for the primary target. To be effective, HIV interventions should be part of a comprehensive,

integrated package of accessible and high quality health services delivered where AGYW can access them and this includes health settings, schools and communities. Interventions should take into consideration the range of power relations that impact on the lives of AGYW from the family to the community level. With existing interventions for AGYW, gaps still exist calling for reinvigorated efforts to ensure that programming adequately addresses their issues.

Gaps and challenges

- *Inadequate planning and programming for adolescent girls and young women interventions:* Programming has been all inclusive for Adolescents and Young People (AYP) with no specific targeting of AGYW and thus leading to inadequate AGYW services and lack of implementing a minimum package of services, poor use of evidence for programming, inadequate integration of services and inadequate focus on structural challenges. Weaknesses also include an emphasis on vertical approaches that are not adequately disaggregated to address variations in vulnerability. Poor targeting and fragmented interventions among implementing partners limit possible synergies.
- *Implementation and service delivery challenges:* Most interventions are implemented at low scale, often as pilot programmes, and implementation capacity is inadequate. Best practices are not adequately resourced or scaled-up.
- *Issues of coordination and management of HIV response for adolescent girls and young women:* No single harmonized structure exists to coordinate programmes designed for AGYW. Coordination is fragmented among several implementing partners, leading to weak accountability, competition and duplication of services among implementers.
- *Inadequate involvement of adolescent girls and young women in coordination, planning and implementation of interventions intended to benefit them:* The voice of adolescents and young people is missing in the conceptualization, implementation and monitoring of programmes that are meant for them. There are inadequate strategic partnerships with organisations led by adolescents and young people.
- *Limited adolescent girls and young women specific data*: Since programming has been all encompassing of AYP, there is partial data on AGYW which is mostly not disaggregated by key indicators

Strategies

- *Implement well-defined integrated high-impact, age-appropriate and gender-sensitive interventions at scale:* Botswana has developed the National Programming Framework for Adolescents and Young People 2019-2022. The framework includes an AGYW specific service package which comprises of biomedical, behavioural and structural interventions. Key components include social and behaviour change communication, access to information on condoms and on commodities, both male and female condoms, pre-exposure prophylaxis, access to sexual and reproductive health and rights, HIV testing services, and HIV treatment, care and support. NSF III will support the implementation of this framework and the standardized HIV programming package for AGYW.
- *Improve targeting of adolescent girls and young women:* Profiling of adolescent girls and young women will be undertaken, with granular data used to identify and develop improved programmatic responses for sub-categories of adolescent girls and young women.

- *Scale up innovative and best practice service delivery approaches for adolescent girls and young women:* Innovative approaches will include use of both traditional (radio, TV and print media) and non-traditional media (applications, mobisites and social media) in order to reach adolescents and young people in their preferred spaces; and strengthening competencies of health care workers and the entire health sector to be responsive to AGYW needs through provision of quality youth friendly health services. Implementation of Comprehensive Sexuality Education will be intensified for in-school and out-of-school youth. Mechanisms for involving AGYW in the HIV response will be identified and implemented, including involvement of youth serving organisations.
- *Empower adolescent girls and young women to reduce vulnerability to HIV infection:* Botswana will focus on social and economic empowerment of adolescent girls and young women out of school to secure access to livelihoods. Linkages will be created with existing social protection grants, entrepreneurship and other economic empowerment programmes to enable vulnerable girls and young women to access these opportunities. In addition, a cash transfer initiative will be piloted to inform a decision on future programming.
- *Strengthen planning and programming for AGYW:* The monitoring and evaluation system will be strengthened to inform programming through the collection of disaggregated data and the generation of evidence on adolescents and young people to inform programming. Implementers will plan for and develop joint programmes and conduct joint reviews to minimize duplication, increase programme synergies and ensure effective targeting.
- *Strengthen coordination including involvement of AGYW in programming:* A coordination mechanism for programmes for AGYW will be established to bring together the diverse implementers across all sectors to harmonize their interventions, to review progress, to identify bottlenecks and to assess progress towards achievement of set targets. National level coordination will focus on strategic and policy issues while coordination at district level will focus on implementation aspects.

6.1.2 Specific programmes for adolescent boys and young men (10-24) and men 25 years and older

Programme objective: Reach 90% of adolescent boys and young men (10-24) and men aged 25 years and older with a defined integrated service package of HIV prevention, treatment, care and support interventions in order to reduce HIV infections by 2023

Target population: Boys and men aged 10-64 years

Situational analysis

Men aged 25 years and older constituted 22% (502,847) of the Botswana's national population in 2017. This proportion will increase to 24% (589,517) by 2023. Boys and young men 10-24 years represent 14% of the total population – a share that is projected to remain stable through 2023. HIV Incidence Patterns Modelling[31] estimates that unions involving a man and a woman contribute to 27.7% of new HIV infections, while single men 25 years and older account for 14.1% of new HIV infections.

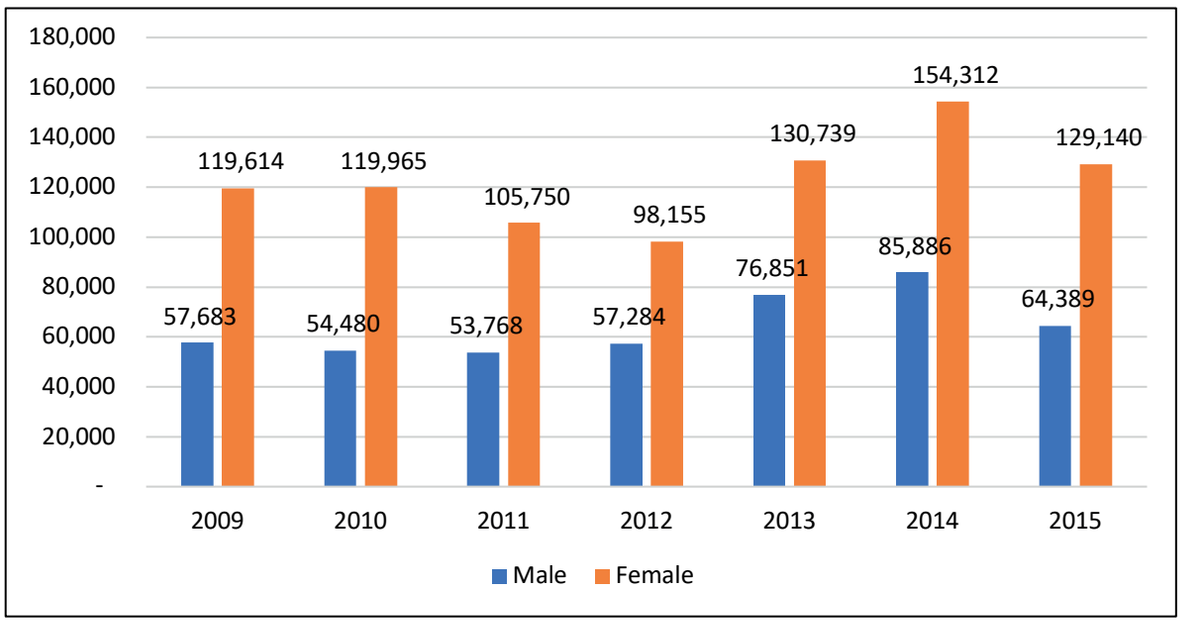
Salaried men in Botswana are vulnerable to HIV. This includes men who are herders, parking guides, mineworkers, truck drivers, construction workers, shop assistants, corporate sector employees, tourism sector employees, and members of the uniformed services, among others. Mobility- including

[31] HIV Incidence Patterns Modelling, 2016

labour migration between countries, and having additional residences such as cattle posts, further exacerbates vulnerability to HIV.

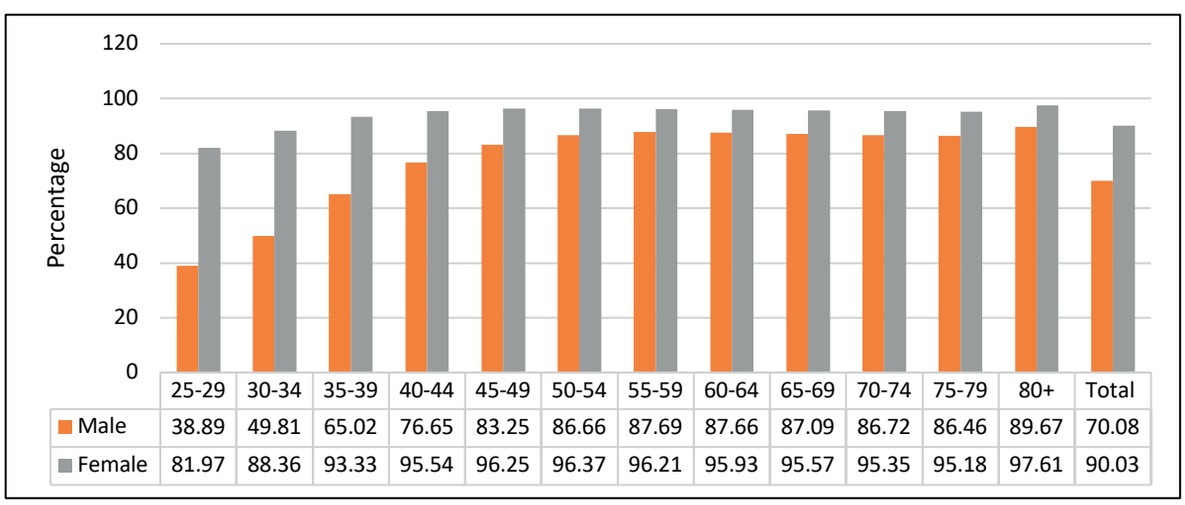
Programme data demonstrates a lower uptake of HIV testing among men, with women being twice as likely on average to have tested for HIV in comparison to men (Figure 6). Men are often perceived as perpetrators of gender based violence, with 67% of women reported to have been violated in their lifetime according to Botswana Gender Based Violence Indicators Study of 2012.

Figure 6: Number of males and females tested for HIV by sex from 2009 to 2015



The coverage of ART is lower among males aged 25 years and older in comparison to women (Figure 7).

Figure 7: ART coverage by age and sex, 2017



	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	Total
Male	38.89	49.81	65.02	76.65	83.25	86.66	87.69	87.66	87.09	86.72	86.46	89.67	70.08
Female	81.97	88.36	93.33	95.54	96.25	96.37	96.21	95.93	95.57	95.35	95.18	97.61	90.03

The lower coverage of ART, coupled with lower coverage of voluntary medical male circumcision (estimated at 25.6% in 2013), expose men to risks of HIV infection. Furthermore, HIV positive men who are not sustained on ART are more likely to transmit HIV.

Gaps and challenges

- Inadequate programmes focusing on adult men
- Lack of a comprehensive package of services for adult men
- Inadequate social and behaviour change communications (SBCC) interventions addressing adult men
- Limited programmes focusing on the boy child
- Inadequate differentiated data on men at risk of HIV, or in need of treatment
- Lack of mapping of priority geographies for reaching HIV vulnerable men
- Under-resourced men specific programmes
- Limited networking, collaboration and linkages among male focused organisations
- Low health seeking behaviour among men

Strategies

- *Develop and implement a national costed strategy for boys and men:* This strategy will provide a long-term roadmap for HIV programming for boys and men, identifying priority interventions and targets to be achieved. This will include giving attention to adolescent boys and young men.
- *Develop and deliver at scale, a standard package of integrated HIV prevention services for different sub-groups of boys and men:* The package will address all aspects of HIV prevention, treatment care and support.
- *Scale up innovative approaches tailored to different segments of men disaggregated by geography, age, economic status and occupation.*
- *Increase the involvement of fathers in antenatal services:* HIV testing uptake of male partners of pregnant women will be increased through partner notification services
- *Improve the capacity of health services and community systems to address the needs of adolescent boys, young men and men:* including strengthening referral systems.
- *Strengthen the coordination of adolescent boys, young men and men HIV programmes.*

6.1.3 Key populations

Programme objective: Achieve over 90% HIV prevention, treatment, care and support service coverage targets among key populations by 2023

Target populations: FSWs and their partners, and MSM

Situational analysis

The 2016 Modes of Transmission Study estimated that HIV incidence rate by exposure category per 100,000 was highest amongst FSW and their clients, MSM and people who inject drugs. FSWs were found to have a much higher mean incidence (5.3%) compared to single women over the age of (0.63%)[32]. Similarly, MSM have a higher mean incidence (1.48%) than single men over the age of 25

[32] Botswana Investment Case Report, UNAIDS, 2016 NACA, UNAIDS

(0.93%).[33] These estimates are consistent with previous studies, which have also highlighted concerns such as inadequate knowledge of the risk of HIV acquisition through anal sex, relatively low rates of HIV testing in the past 12 months (particularly among FSWs), limited use of lubricants, low ART coverage, and barriers to accessing mainstream services because of fears of stigma and discrimination.[34]

According to the 2nd Biological and Behavioural Surveillance Study (BBSS) of 2018, reported condom use during last sex among FSWs was 75.7%, and 77.5% for MSM at last anal sex. Access to services among FSW is high at 95.8%, with ART coverage at 87.6%. ART coverage for MSM was 73.5%.

The legal environment has been found to not be conducive enough, exposing these key populations to harassment and prosecution by law enforcement, as well as reinforcing stigma and discrimination.[35]

There is limited data on other potentially high-risk populations such as prisoners, transgender persons, and people who inject drugs.[36] Adequate data is necessary to determine whether to include these populations within the key population response framework.

Gaps and challenges

National Response

- Lack of a standardized package of services for delivering comprehensive services for key populations, resulting in a fragmented response with limited coverage
- Limited co-ordination and harmonisation of key population programmes
- Dearth of data on prisoners, transgender persons, people who inject drugs and other vulnerable groups limits potential to determine inclusion within key population strategies
- Inadequate monitoring data on key populations and limited evaluation of interventions to inform strategies and programming.
- Limited involvement of key population representatives in programme design, implementation and monitoring.

HIV Service Provision

- Inadequate provision of comprehensive high-impact HIV interventions for key populations including HIV prevention, treatment, care and support, and lack of guidelines to guide delivery of services
- Limited access to commodities to aid preventive sexual acts (condoms and lubricants)

Structural Barriers

- Legal barriers to sex work and same sex intercourse
- Stigma and discrimination against FSW and MSM

Strategies

National Response

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[33] Incidence Patterns Model, Pilot Implementation in Botswana. 2016

[34] 2012 Mapping, Size Estimation, Behavioral and Biological Surveillance Study of HIV/STI among select high-risk sub-populations in Botswana

[35] Botswana Joint Global Fund/PEPFAR Key Population HIV Cascade Assessment

[36] 2018 Behavioral and Biological Surveillance Survey of HIV/STI among select High-Risk Sub-populations in Botswana

- *Develop and implement a standardized package of services and integrate key population issues in existing national guidelines:* The standardised service package will include a combination of behavioural, biomedical and structural interventions by population.
- *Address geographic prioritisation of key population programmes to support targeted HIV response:* Hotspots or locations for each category of key populations will be identified, based on evidence, and used to guide programmatic targeting.
- *Strengthen coordination of key population programming at national level:* The National Technical Working Group for key populations will be strengthened, focusing on harmonising programming among all implementers, standardised implementation of the service packages for key populations, clarifying resource needs, and monitoring and undertaking regular reviews of the programme.
- *Strengthen the capacity of implementers providing services to key populations.*
- *Improving monitoring and evaluation of the response for key populations:* An integrated and harmonised monitoring and evaluation system will be developed. Data will be gathered on other potential key populations such as prisoners, transgender persons, persons who inject drugs, mobile populations (truck drivers, construction workers), people living with disabilities and other vulnerable populations to inform potential inclusion in key population programming.

Service Provision

- *Scale up targeted comprehensive combination prevention services for KPs:* This will be tailored for FSW, MSM and Transgender.
- *Increase coverage of testing, care and treatment services for key populations:* This will include reaching both urban and rural populations.
- *Ensure service provision for key populations that is free of stigma and discrimination*: Guidelines will be developed and training provided to healthcare workers. Referral networks will be identified, and redress mechanisms for instances of stigma and discrimination will be put in place.

Structural Barriers

- *Improve the policy and legal environment for wider access to health services by key populations:* This will include advocacy and training of service providers. Stigma and discrimination occurring at social level will also be addressed.
- *Improve economic empowerment of key populations*: Programmes that improve economic and social conditions of key populations (regarding HIV-related vulnerabilities, will be identified and implemented.

6.1.4 Condom programming

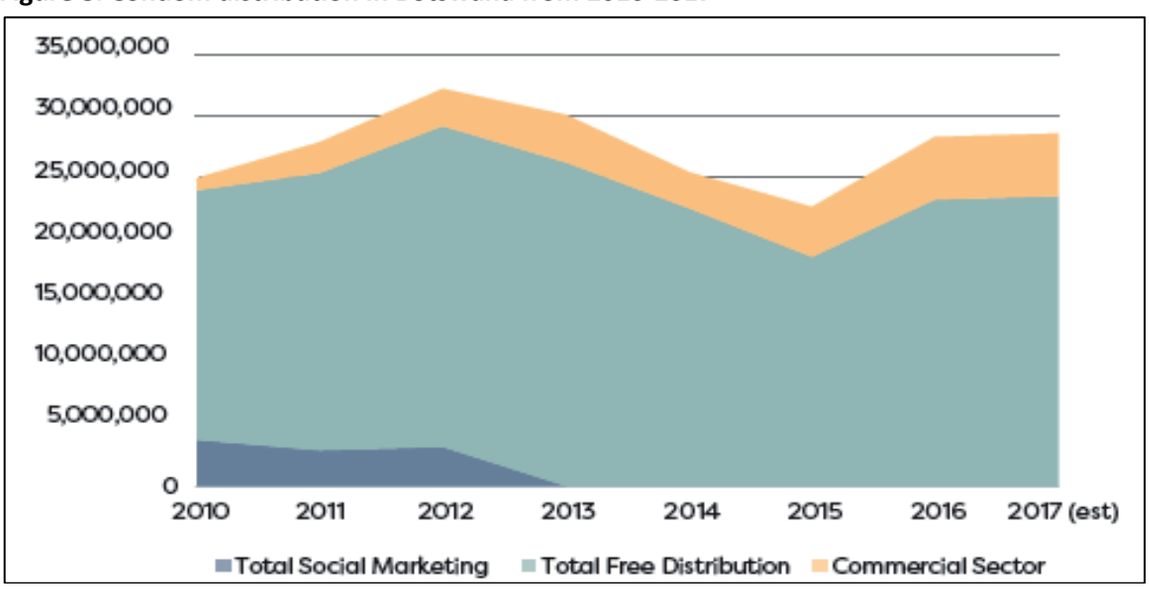
Programme objective: Increase condom use at last sex to 90% among high-risk males and females by 2023

Target populations: All sexually active people, including adolescent boys and young men, adolescent girls and young women, adult men and women, FSW, MSM, couples and pregnant women among others

Situational analysis

An estimated 28.4-million male condoms were distributed through the public and commercial sectors in Botswana in 2017. This represents an increase in distribution over the previous year, after three years of decline attributed to the exit of the social marketing programme in 2013. Public sector distribution has remained constant, delivering 82% of male condoms used in the country since 2010. Condom distribution meets 70% of the total condom need translating to additional 12 million condoms required annually to address the gap[37]. Figure 8 shows condom distribution by sector from 2010 to 2017.

Figure 8: Condom distribution in Botswana from 2010-2017



The Ministry of Health and Wellness leads the procurement and supply of male and female condoms through the Central Medical Stores. District Health Management Teams oversee the distribution of condoms to health facilities. Condoms are also supplied to other Government ministries, parastatals and organisations. Condom distribution reaches public facilities, hard-to-reach areas, and non-traditional outlets such as bars, hotels and shebeens, among others. The commercial sector plays a key role in distributing condoms through retail outlets in urban areas. The bulk of condoms are distributed through the public sector, with a limited share taken by commercial sector. Currently the social marketing sector is not active.

Female condoms are distributed only through the public sector. Female condom distribution has been limited, with only 391,800 female condoms distributed in 2016. Lubricants are not provided through the public sector, but are made available through donor programmes with distribution being supported through non-governmental organisations.

Gaps and challenges

Coordination

- Insufficient operationalization of national condom strategy

Distribution and marketing

[37] Botswana Condom Programming Case Study, 2015

- Insufficient analytic data on distribution and marketing of condoms (including a lack of information on commercial sector distribution) to inform optimal access and uptake.
- Limited access of female condoms including distribution and promotion
- Inadequate synergies among forecasting, storage and distribution resulting in stock-outs
- Limited data on distribution to hard-to-reach areas

Strategies

- *Strengthen coordination and condom stewardship*: Coordination mechanisms will be established at national and district level to ensure that quantification and forecasting, supply, storage and demand are adequately addressed.
- *Expanding condoms markets beyond the public sector*: Botswana will support social marketing and commercial markets to expand access to condoms by various population segments.
- *Identify and address funding and resource gaps*: Potential expansion of outreach and community-based distribution systems will be assessed, and funding and other resources will be provided to support the same.
- *Implement SBCC to reinforce demand and expand user*: SBCC will engage adolescents and young people, men, women and key populations through relevant channels, with an emphasis on consistent condom use, especially when there is uncertainty of the HIV status of either partner, as well as for discordant couples. Male and female condoms and lubricants will be promoted, as well as contraceptive benefits of condoms as barrier methods including triple protection (Prevention of HIV, STIs and pregnancy).
- *Innovative distribution to hard-to reach-areas*: Apart from existing non-traditional outlets, distribution partnerships will be undertaken to expand distribution in hard-to reach-populations (with possible partnerships with the Ministry of Agriculture, Kgalagadi Breweries; and community mobilisers through the CATCH model, Ipelegeng, Crime Prevention).
- *Ensure adequate monitoring and evaluation*: This will include monitoring of distribution of male and female condoms and lubricants in conjunction with periodic studies on consumer preferences.

6.1.5 Voluntary Medical Male Circumcision

Programme objective: Increase male circumcision coverage among 10-29-year-old males to 90% by 2021 and sustain this level of coverage through 2023

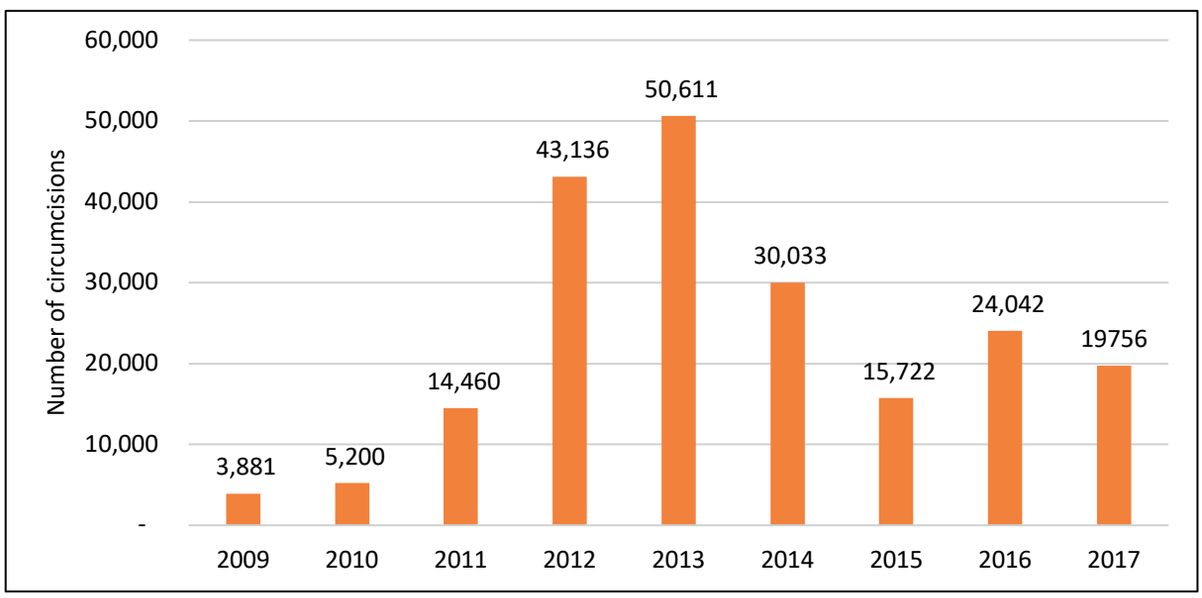
Target populations: Sexually active male population prioritizing those aged 10-29 years

Situational analysis

In 2007, the World Health Organization (WHO) and the Joint United National Programme on HIV/AIDS (UNAIDS) recommended voluntary medical male circumcision (VMCC) as an additional method of HIV prevention and urged countries with low male circumcision prevalence and generalized HIV epidemics to rapidly scale up VMMC programmes. WHO and UNAIDS recommended that countries to attain 80% male circumcision coverage by 2016. Acting on these recommendations, Botswana introduced the VMMC programme in 2009 and adopted the ambitious target of reaching 80% circumcision coverage among 10-49 years old HIV negative males by 2016.

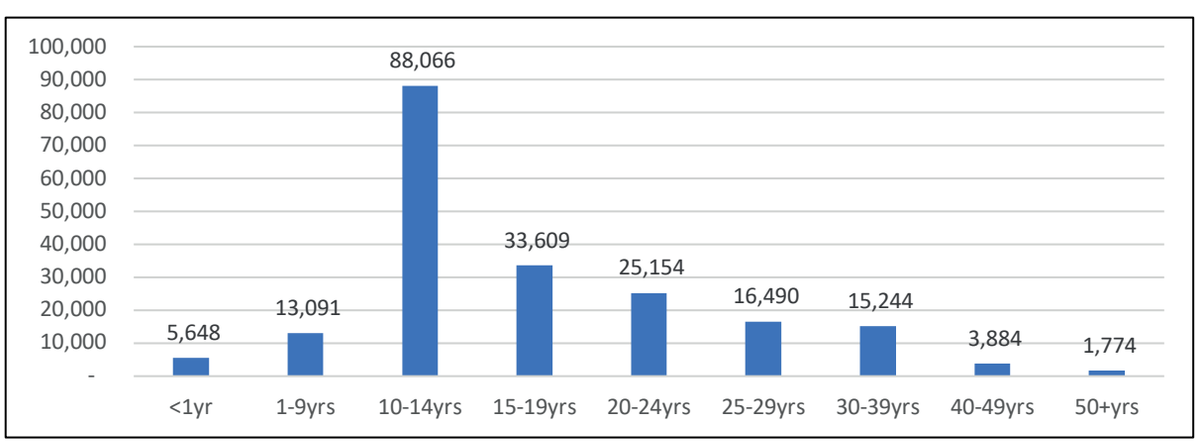
An initial target of 385,000 HIV-negative males aged 13-49 years was set to attain 80% coverage. Medical teams were specially trained in surgical procedures and deployed throughout the country. However, implementation and demand were slow, and targets were refined to achieve an overall male circumcision coverage of 61% by 2016, with males aged 10-29 years being prioritized for 80% coverage, along with the launch of a focus on neonatal circumcision in 2015. By 2017, 206,841 males had been circumcised, with higher numbers being attained through the Rapid Results Initiative, a Model for Optimizing Volume and Efficiency, and the introduction of outreach activities in 2013. Figure 9 illustrates programme data over the 2009-2017 period.

Figure 9: Number of males circumcised 2009-2017



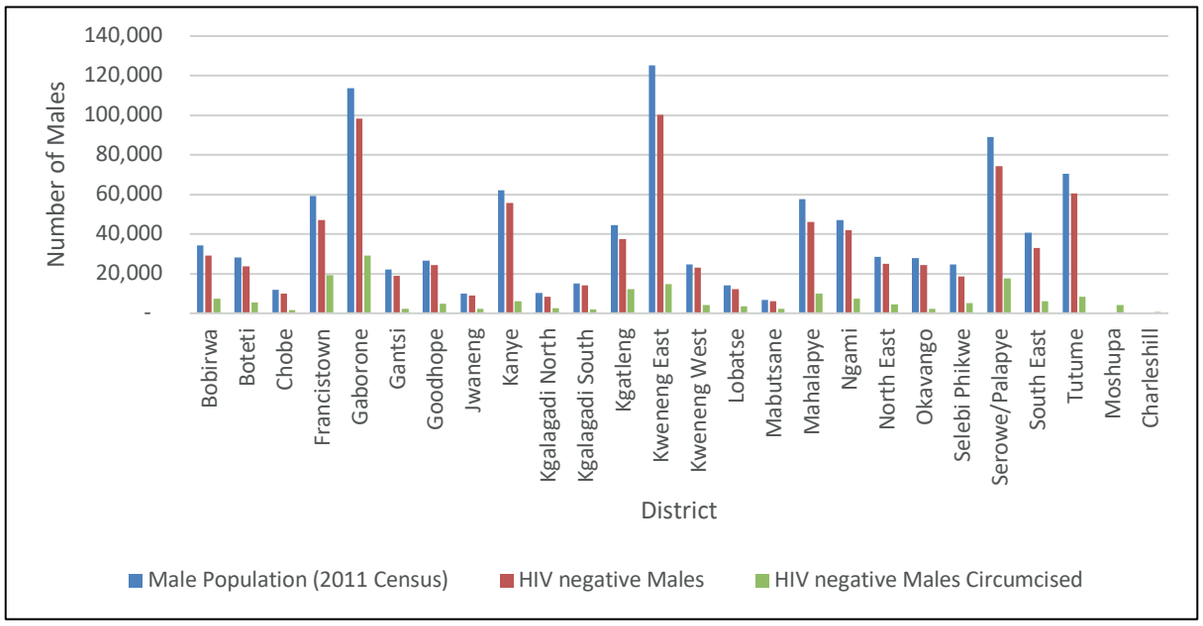
Between 2010 and 2017, 43% of males circumcised were 10-14 years old, followed by 15-19 year olds (16%) and 20-24 year olds (12%). According to WHO/UNAIDS guidelines, HIV-negative males 15-29 years should be prioritised to achieve immediate impact. Of those circumcised since programme inception, 36% were in this age group.

Figure 10: Cumulative number of males circumcised by age (2010-2017)



There are wide variations in number of males circumcised by district. When presented as a percentage of the district male population, Mabutsane achieved the highest (33.0%) coverage of males circumcised per district as a percentage of the total district male population followed by Francistown (32.5%) and Kgatleng with 27.5%.

Figure 11: Cumulative number of males circumcised (2009-2017)



Data source: Ministry of Health and Wellness (2016). SMC Performance Report

To improve uptake, the non-surgical PrePex device was introduced in 2013. In 2015 the Ministry of Health and Wellness involved nurses in carrying out circumcisions. Early Infant Male Circumcision was introduced in 2014 to broaden the target groups and sustain this intervention. A monitoring and evaluation system is in place for the VMMC programme, providing data on the programme performance.

Gaps and challenges

- Generally low coverage of VMMC is attributed to sociocultural issues such as the role of women in VMMC decision making, cultural practices and attitudes concerning male circumcision, poor knowledge of VMMC among males (leading to fear of pain and complications and concerns regarding the impact on overall male sexual health) and weak retention of interpersonal communication mobilisers and client mobility[38].
- Some clients encounter logistical challenges: long distance to facilities, long waiting time at public health facilities and fees charged in private health facilities and thus hindering uptake
- Limitations of demand creation strategies in yielding desired uptake
- Inefficient supply chain management systems resulting in shortage of equipment
- Human resources gaps at national and district level affecting delivery
- Inadequate funding
- Inability of the health systems to address men's preferences for gender, age and professionalism of service providers and services

[38] National Safe Male Circumcision Strategy, 2017

Strategies

- *VMMC will serve as an entry point to addressing broader men's health needs:* In accordance with the "Framework for Voluntary Medical Male Circumcision, 2021"[39], VMMC will be integrated and delivered as a core component of boys' and men's health through diverse platforms in order to achieve 90% coverage of male circumcision.
- *Scale-up focused VMMC:* Males 15-29 years will be the primary focal audience for VMMC promotion and delivery, with 10-14 year olds and males 30 years and older also being addressed. Adolescents aged 10-19 will be targeted during school holidays, with winter initiation schools targeted to reach 20-29 year olds and out-of-school adolescents aged 15-19. Focused promotion and delivery will extend to corporate, industrial, trucking and mining sectors as well as the public sector and uniformed services. Private-public partnerships will be established where appropriate.
- *Strengthen policies and services for greatest impact of VMMC:* Early infant safe male circumcision will be provided in all maternal nutrition and child health facilities and clinics by 2022. Efficiency will be improved through enhanced coordination, resource mobilisation, demand creation and service delivery, including increasing the number of health service providers trained to support VMMC programming.
- *Scale up integrated VMMC service delivery:* Service integration will be expanded by providing an age-specific health package for adolescents and men to address their health needs. A minimum age-specific package will be developed for those 10-14 years, 15-19 years, 20-29 years and men at higher risk of HIV infection.
- *Develop and implement innovations to accelerate VMMC uptake:* New and targeted approaches for high-risk populations will be implemented. Partnerships and coalitions for VMMC service delivery will include work with traditional leaders during initiation activities. The supply chain management system will be strengthened, including investing in re-usable kits and autoclave machines.
- *Improve accountability for quality service and results*: This will include: 1) Integrated monitoring, evaluation and reporting will include VMMC data within the District Health Information System (DHIS), strengthening the DHIS human resource, training and mentorship and intensifying support and follow up visits.; 2) Establishing VMMC Continuous Quality Improvement structures through adopting Quality Assurance (QA) and Quality Improvement (QI) materials and establishing and training QA/QI teams; 3) Conducting operational research on effectiveness and efficiencies in reaching coverage targets and addressing bottlenecks identified.

6.1.6 Pre-exposure Prophylaxis

Programme objective: Accelerate the provision of Pre Exposure Prophylaxis (PrEP) to 88% of people assessed to be at substantial risk of HIV infection by 2023

Target population: HIV-negative FSW, MSM and adolescent girls and young women

Situational analysis

Botswana is committed to scaling up combination prevention packages to populations at high risk of HIV acquisition to support achievement of epidemic control by 2020. PrEP is one of the components

[39] WHO/UNAIDS policy brief, A Framework for Voluntary Medical Male Circumcision: Effective HIV prevention and gateway to improved adolescent boys' and men's health in East and Southern Africa by 2021.

of combination HIV prevention. In June 2016, the Clinical Care guidelines committee recommended PrEP.

Evidence demonstrates that PrEP is an acceptable intervention for high HIV risk populations. The Ministry of Health and Wellness, together with non-governmental organisations, has initiated a phased roll out of PrEP, starting with FSW and MSM, followed by adolescent girls and young women, and eventually to the general population. It is necessary for PrEP to be initiated by an experienced healthcare provider who has been trained to recognize physical signs and symptoms of early HIV infection and STIs. Health care providers initiating PrEP need to provide comprehensive counselling and education to clients regarding strict adherence to PrEP to prevent HIV transmission. Currently, PrEP services are being piloted in two public health facilities and it is also offered through the private sector. PrEP will be scaled up to all districts in the next five years.

Gaps and challenges

- Limited public awareness on the importance and benefits of PrEP
- Inadequate baseline knowledge and understanding of PrEP among service providers
- Limited access to PrEP due to delayed rolled out of the programme
- Limited human resources capacity of healthcare facilities to provide PrEP safely and monitor clients
- Limited use of non-governmental organisations and the private health sector to provide PrEP
- Lack of detailed costing of PrEP to inform planning and resource allocation
- Monitoring tools have not yet incorporated capturing and reporting of PrEP use.

Strategies

- *Increase awareness of PrEP among target populations:* Demand creation will be conducted strategically to reach priority audiences.
- *Roll out PrEP services in all districts:* PrEP will be rolled out through the public health system, private health sector and non-governmental organisations. Healthcare workers will be trained on the provision of PrEP services. These efforts will build on the draft implementation plan that has been developed and requires endorsement by government.
- *Improve targeting of adolescent girls and young women for PrEP services:* Granular data will be used to profile different categories of adolescent girls and identify those that need pre-exposure prophylaxis services.
- *Develop a national policy for provision of PrEP services:* This policy will provide guidance on the priority populations and recommended drugs to be used for PrEP among other issues.
- *Establish a safe market for PrEP drugs:* Availability of generic drug formulations will be pursued to ensure access to low-cost PrEP as needed.
- *Integrate PrEP data into the health information system:* Monitoring systems will include capture of data on PrEP services.

6.2 HIV Testing and treatment

The HIV testing, treatment, care and support programme aims to achieve and exceed the global Fast-Track targets: 90% of PLHIV know their HIV status, 90% of people with diagnosed HIV infection are on ART and 90% of those on ART achieve viral suppression within the timeframe of NSF III.

All people who test positive for HIV are provided with immediate access to ART, with ongoing care and support. Table 4 outlines baselines, projections and targets for 90-90-90.

Table 4: 90-90-90 baseline, projections and targets for the NSF III

Category	2017	2020	2023
Number of people living with HIV	377,871	393,634	401,634
Number of adults receiving antiretroviral therapy	323,385	368,914	377,355
Number of children receiving antiretroviral therapy	6,122	6,140	5,138
First 90: Percentage of people living with HIV who know their HIV status	86%	95%	95%
Second 90: Percentage of people living with HIV on antiretroviral therapy	84%	95%	95%
Third 90: Percentage of PLHIV on antiretroviral therapy who are virally suppressed	81%	95%	95%

6.2.1 HIV testing services

Programme Objective: Over 95% of people living with HIV know their HIV status by 2023

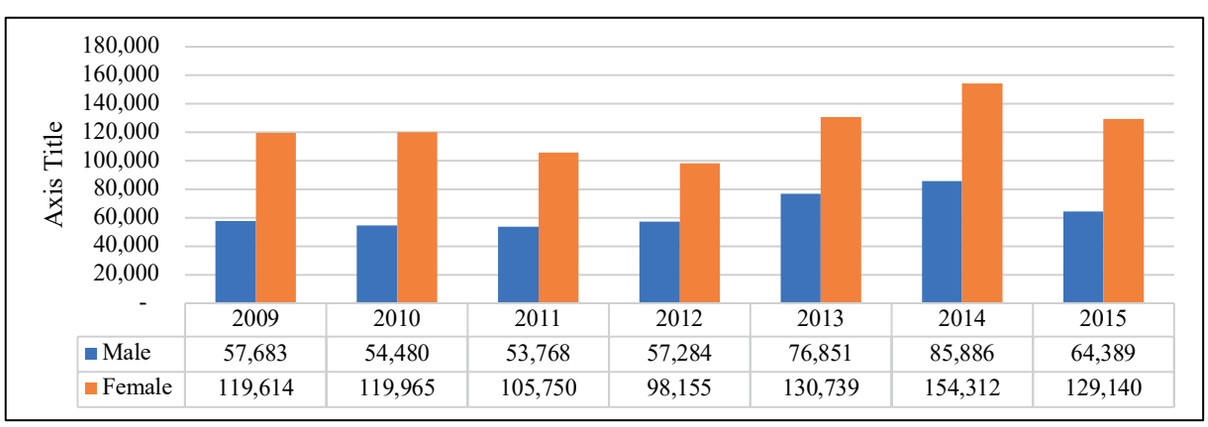
Target population: All sexually active people, prioritizing adolescents and young people, couples, men aged 25+ years and children aged 0-14 years

Situational analysis

HIV testing is a key entry point for HIV prevention, treatment, care and support. All people testing HIV positive are linked to treatment and care through Botswana's 'treat all' strategy while those testing negative are linked to prevention services, including condom use, risk reduction education, voluntary medical male circumcision and pre-exposure prophylaxis.

Between 2009 and 2015, 1,308,016 individuals were tested for HIV – 450,341 males (34%) and 875,675 females (66%) * Figure 12 below displays testing utilization by gender during these years.[40]

Figure 12: Number of individuals who received HIV testing and counselling from 2009 to 2015



	2009	2010	2011	2012	2013	2014	2015
Male	57,683	54,480	53,768	57,284	76,851	85,886	64,389
Female	119,614	119,965	105,750	98,155	130,739	154,312	129,140

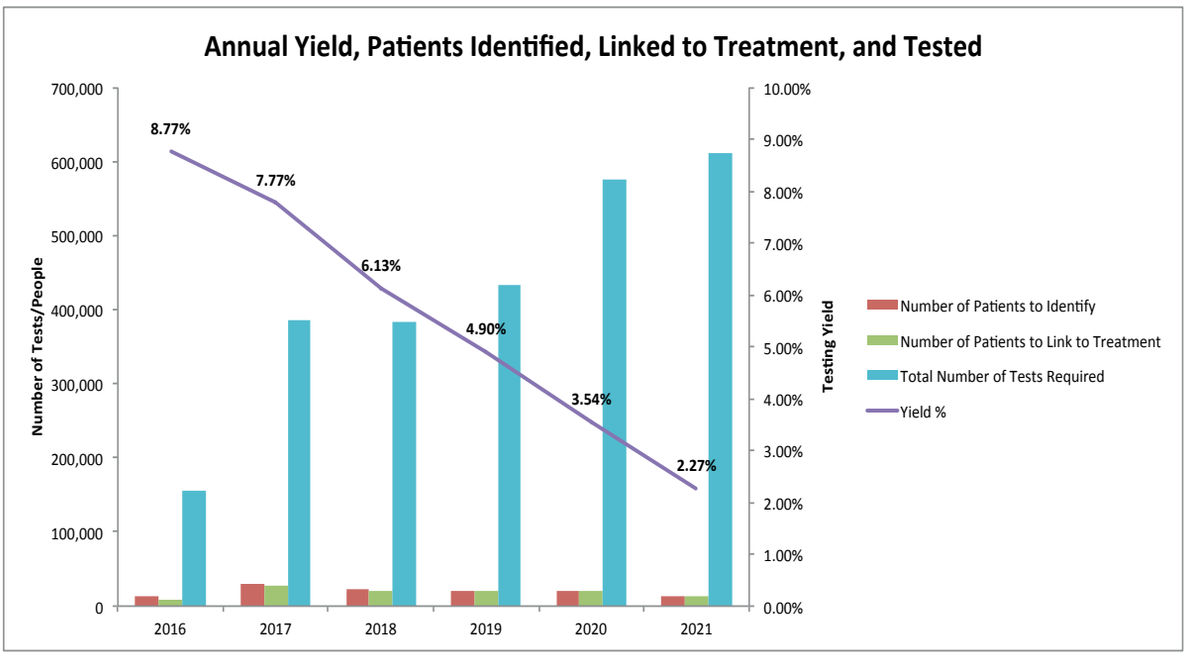
[40] National HTC programme evaluation report, 2016

Data source: Botswana national HTC evaluation report, 2016

HIV testing services (HTS) are offered through health facility (rapid HIV testing and voluntary counselling and testing) and community-based approaches. Facility-based approaches include routine HIV Testing (RHT) offered in outpatient, inpatient, antenatal care, STI and TB service points and Voluntary Counselling and Testing (Client Initiated Counselling and Testing). Community-based HIV testing is provided through targeted outreach, static voluntary counselling and testing centres, workplace, mobile clinics and drop-in centres for key populations among others. An index case testing strategy has also been introduced and is optimizing diagnostic yield of HTS. However, despite this wide range of testing approaches, uptake has been low among adolescents and young people and men 25 years and older[41].

As more people are tested, the yield of people testing positive falls. Figure 13 shows the estimated number of HIV tests that will need to be conducted to achieve national treatment targets.

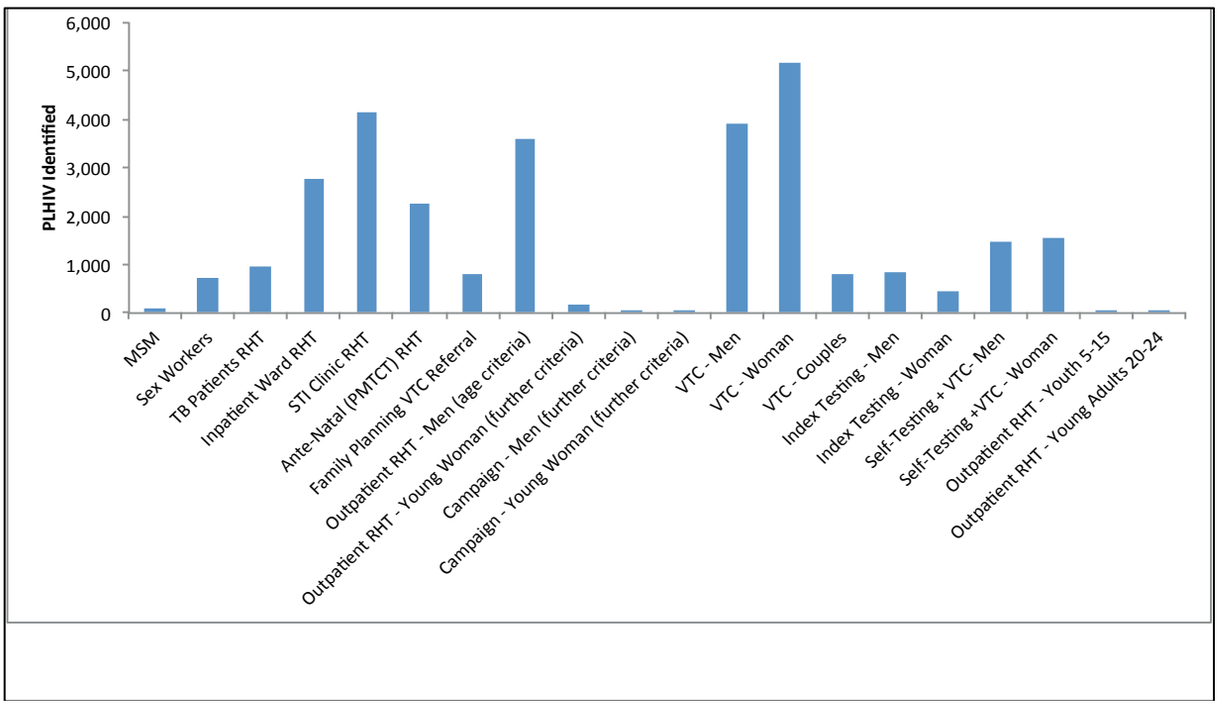
Figure 13: HTS targets and projected annual yield



Declining HIV testing yields pose challenges for cost-efficiency. An analysis of the cost efficiency of HTS approaches conducted in 2017 is illustrated in Figure 14, which shows numbers reached through each HIV testing approach.

[41] HTS programmes evaluation report, 2015

Figure 14: Number of PLHIV identified by testing category, 2017



Source: Programme data

Gaps and challenges

- Inconsistent documentation and reporting of HTS data by all sites
- Sub-optimal uptake of HTS among certain groups including adolescents and young people, men 25 years and older and people with disability
- Implementation challenges including sub-optimal support supervision
- Inconsistency in the supply chain management of rapid test kits and other testing consumables

Strategies

- *Scale up innovative approaches to reach populations with low HTS uptake:* Innovative approaches will include HIV self-testing, index case testing, partner notification, targeted testing through mobile, home and institutional based HTS, integration of HIV testing into services including contraceptives and STI services, testing of TB presumptive cases, testing at drop-in centres for key populations, implementing male-friendly and youth-friendly approaches at health facilities, providing HIV testing through workplace programmes, and engaging with social networks.
- *Strengthen facility-based testing:* Capacity in providing HIV testing at health facilities will be strengthened by recruiting additional lay counsellors and intensifying support supervision and mentorship to ensure adherence to provider initiated testing and counselling protocols.
- *Strengthen HTS policy:* the HTS policy will be updated to provide guidance on HIV self-testing and access to testing services by youth-in-school among other aspects of HTS.
- *Strengthen coordination of the HTS programme:* Coordination will be strengthened through the establishment of an HTS Technical Advisory Committee at the national level to provide strategic direction, establish coordination mechanisms, establish targets, improve multi-sectoral delivery of HTS, and improve linkages to treatment

- *Improve supply chain management:* This will include improved stock reporting and control, improved quantification, forecasting and procurement, and training to ensure HTS targets are met without stock-out challenges
- *Strengthen monitoring and evaluation of the HTS programme:* A monitoring and evaluation plan and standardized tools will be developed and disseminated.
- *Continuous quality improvement of HTS:* Continuous quality assurance and quality improvement will be undertaken through proficiency testing and client satisfaction surveys, and capacity of healthcare workers will be strengthened to address identified bottlenecks.

6.2.2 HIV treatment

Programme Objectives: Over 90% of People Living with HIV on ART by 2023

Target populations: All people living with HIV with prioritisation of children, adolescents and young people and men 25 years and older

Situational analysis

The Government of Botswana provides HIV treatment and care through the public health system, including mobile outreach, health posts, clinics, primary hospitals, district hospitals and national referral hospitals. Public sector services are complemented by HIV care financed through private medical aid (which reached an estimated 20,000 PLHIV in 2016),[42] and support provided through civil society organisations and donor programmes.

The introduction of the 'treat all' strategy in June 2016 has accelerated uptake of ART. By December 2017, 84.1% (323,385) of PLHIV were on ART including 84.5% of those 15 years and older and 70.4% of children 0-14 years. Table 5 summarises these achievements.

Table 5: Number and percentage of people living with HIV on ART, December 2017

	PLHIV in need of ART	PLHIV on ART	% of PLHIV on ART
Total number of PLHIV	377,871	323,385	84.1%
Total number of PLHIV 15+ years	369,175	311,823	84.5%
Male	158,289	114,602	72.4%
Female	210,887	197,221	93.5%
Children (0-14)	8,695	6,122	70.4%

Data source: Programme data and spectrum, 2018

A survey conducted in 2016 among persons aged 16-64 found that in comparison to adults aged 30-64 years, young people aged 16-29 years living with HIV were less likely to know their HIV status (74% vs. >90%); less likely to be on ART if they knew their HIV status (80% vs. >90%); and less likely to be virologically suppressed if on ART if aged 16-19 (70% vs. >90%).[43]

There are wide variations in ART coverage across districts. Table 6 shows the district estimates for people living with HIV aged 15 years and older who were on ART in 2017. Two urban districts, Francistown and Gaborone, have higher uptake of ART than prevalence estimates for the district due to an influx of persons living with HIV seeking treatment in these areas. Nine districts have an ART uptake of 95% or more, and nine others have an uptake ranging from 74% to 94%. Four districts –

[42] National Response Issues Paper, 2017
[43] Botswana Combination Prevention Project

Tutume, South East, Kweneng East and Mabutsane have estimated ART coverage below 70%. Implications of the various levels are indicated in the table below.

Table 6: PLHIV 15 years and older on ART per district, 2017

District	Need for ART	On ART	% coverage	Programming implications
All	369,175	311,823	84%	
Jwaneng	2,281	6,411	281%	Intensify case-based surveillance
Francistown	24,975	37,015	148%	
Gaborone	44,705	53,193	119%	
Ngamiland	14,300	16,942	118%	
Okavango	9,173	8,606	94%	Scale up population focused approaches tailored to those not on ART
Boteti	13,838	12,476	90%	
Kgalagadi	4,231	3,807	90%	
Lobatse	8,951	8,032	90%	
Bobirwa	13,840	12,328	89%	
Kweneng West	5,534	4,923	89%	
Hukuntsi	3,283	2,900	88%	
Southern	14,551	12,776	88%	
Serowe/Palpaye	33,061	28,725	87%	
Selebi-Phikwe	14,491	11,925	82%	
Mahalapye	23,630	19,089	81%	
Chobe	5,375	4,309	80%	
Kgatleng	16,532	12,953	78%	
NorthEast	8,971	6,550	73%	
GoodHope	8,766	6,215	71%	
Ghanzi	6,021	4,120	68%	Rapid expansion of access to treatment for all populations
Tutume	23,586	14,451	61%	
SouthEast	12,850	5,167	40%	
Kweneng East	54,422	18,911	35%	
Mabutsane	1,808	-	0%	

Data source: Programme data and spectrum 2018

Table 7 below highlights variations in ART coverage among children living with HIV aged 0-14 years older in 2017. Four districts have an antiretroviral therapy uptake of 95% or more, seven have an uptake ranging from 70% to 89%, and 13 districts have estimates of uptake that are below 70%.

Table 7: Children (0-14 years) living with HIV on ART per district, 2017

District	Need for ART 0-14 (HIV+)	On ART	%	Programming implications
All	9,018	6,122	68%	
Okavango	177	173	98%	Intensify case based surveillance
Serowe/Palpaye	1,385	1,320	95%	
Boteti	250	238	95%	
Mahalapye	1,337	1,268	95%	
Francistown	565	505	89%	Adopt approaches tailored to finding missed cases
GoodHope	159	128	81%	
Kweneng West	100	80	80%	
Southern	263	210	80%	
Jwaneng	130	104	79%	
Bobirwa	250	184	73%	
Tutume	412	289	70%	
Ghanzi	108	68	63%	Rapid expansion of services
Hukuntsi	59	36	61%	
Chobe	97	58	60%	
Lobatse	162	96	59%	
Kgalagadi	77	44	58%	
NorthEast	162	92	57%	
Gaborone	809	449	56%	
Kgatleng	299	159	53%	
Ngamiland	391	185	47%	
Selebi-Phikwe	262	106	40%	
SouthEast	233	90	39%	
Kweneng East	985	239	24%	
Mabutsane	343	0	0%	

Testing and treatment programmes have made good progress in reaching key populations. For example, in 2017, 76% of FSW reached through HIV prevention programming received HTS, 13% of FSW testing positive. Among FSW testing HIV-positive, 91% were linked to care and 82% initiated treatment. Activities reaching MSM have been less successful, with 73% of those reached through HIV prevention programming testing for HIV and 50% being linked to care – all of whom initiated treatment.[44] Approaches for providing ART to key populations include one-stop shops, engagement

[44] Preliminary findings. https://data.pepfar.net/quarterlyData/

of linkages to care officers in communities, and partnerships between public health facilities and community groups.

Gaps and challenges

- Low ART coverage among children 0-14 years, adolescents and young people and men 25 years and older
- Variations in ART coverage across districts
- Limited linkage to care in some instances
- Limited options for treatment regimens and formulations for infants
- Lack of guidelines for community health workers
- Limited engagement with youth organisations and networks
- Insufficient engagement and involvement of PLHIV organisations and networks and civil society organisations in support to ART programming
- Inadequate integration of HIV services

Strategies

Scale up ART coverage for prioritised populations through tailored approaches:

- *Children 0-14 years*
  - Improve tracking of mothers and infants to increase ART uptake among children including use of mentor mothers and cohort monitoring
  - Expand paediatric cluster clinics to increase access to specialized care among children living with HIV
  - Intensify counselling of family members and caregivers to increase uptake of HTS as an entry point for ART among children
  - Improve or adopt efficacious treatment regimens and formulations for infants
- *Adolescents and young people 15-24 years*
  - Scale up youth-friendly services through training of healthcare providers and define a package of services for adolescents and young people
  - Use social and other electronic media to support ART uptake and adherence
  - Engage with and support youth peer networks and youth-led organisations to increase HTS and linkage to care
  - Engage parents, teachers and others to increase HTS and linkage to care
- *Men 25 years and older*
  - Engage men through traditional and social platforms to promote HTS and linkage to care
  - Provide same-day ART initiation through HTS and ART service integration
  - Adopt innovative referral and linkage systems such as male expert clients, peer counselling and peer accompaniment/escort referral systems
  - Integrate HTS and linkage to care into services such as VMMC
- *Key populations (FSW, MSM)*
  - Mainstream provision of key population-friendly services into ART service delivery
  - Resource and support civil society organisations and peer outreach workers providing HIV treatment and care services to key populations

- Scale up community-based ART services offered through mobile clinics and drop-in centres
- Provide same-day ART initiation through HTS and ART service integration

- *Non-citizens*
  - Advocate for and update HIV treatment policy to increase access to free HIV treatment by non-citizens
  - Establish protocols for provision of ART to non-citizens to facilitate continued care from the countries of origin into Botswana
  - Establish a unique identifier for non-citizens on ART to support their access to services given their mobility within the country and between countries

- *Scale up cross cutting strategies to provide ART services to all populations*
  - Enhance same-day ART initiation at facilities through implementation of ART starter packs at all testing sites (community and as needed facility), including development and implementation of policy guidance on the use of the ART starter packs
  - Adjust service hours to accommodate users
  - Scale-up differentiated care models including community ART
  - Engage and support civil society organisations involved in HTS and ART service delivery
  - Strengthen data collection and analysis to improve service delivery
  - Roll out community ART to improve uptake of ART services: Public facility-based healthcare workers will play a key role in rolling out Community Art; mobile stops which are extensions of facility based ART and Tebelopele ART programmes will form part of the approaches for implementing Community ART in addition to development of new community ART programmes. The role of government facility-based healthcare workers (in providing oversight, monitoring, quality assurance and referrals) will need to be explicit in the new programmes to ensure the linkages and sustainability.

- *Scale-up geographically differentiated ART provision strategies*
  - Districts with >90% treatment coverage – Intensify case surveillance approach with active linkage to treatment for every HIV-positive individual identified
  - Districts with 75-90% treatment coverage - Using data, target populations that are not accessing treatment and tailor approaches for service delivery to reach the populations
  - Districts with <75% treatment coverage - Rapidly expand access to treatment to all populations; expand number of ART initiation days; roll out ART services to additional clinics; and develop data-driven approach to expand services to hard to reach populations

- *Strengthen referral systems to care and treatment:* Use expert clients and case management approaches to facilitate linkage to care and treatment.

- *Assess and roll out new drug regimens:* Review the benefits of new drugs and new point-of-care technologies and adopt them as they come to the market to increase the quality of HIV treatment and care.

- *Intensify communication to support attainment of the second 90% target in the treatment cascade:* Focus communication on the health and other benefits of early initiation on antiretroviral therapy, with emphasis on broad-based social mobilization and leaving no person behind.

6.2.3 Viral load suppression

Programme Objectives: Over 86% of PLHIV are virally suppressed by 2023

Target populations: All people living with HIV with prioritisation of mothers and infants, children, adolescents and young people, and men 25 years and older

Situational analysis

A person living with HIV is defined as having HIV viral suppression if their HIV viral load is HIV-1 RNA <400 copies per ml or below. A study undertaken by the Botswana Combination Prevention Project study in 2016 found that of the 96.5% of PLHIV who knew their status and were on ART, 70.2% were virally suppressed. UNAIDS estimates viral suppression among PLHIV at 78%.[45] The Botswana Combination Prevention Project study found that PLHIV who were male, of younger age, were single or never married, spent time outside the community, and had higher education were significantly less likely to know their HIV status, or had low ART uptake and low rates of viral suppression.

Retention in care, adherence to ART and absence of drug resistance among PLHIV are the strongest predictors of viral suppression. Although data on retention rates on PLHIV on ART at 12, 24, and 36 months after initiation is not available, a review of attrition of PLHIV on antiretroviral therapy in Botswana between 2002 and 2013 found that contextual factors inside and outside the health service delivery system accounted for loss to follow -up and mortality.[46] Factors included constrained access in districts where patients had to travel long distances to services; a shortage of health professionals as well as inequitable staff distribution across health districts; limited resources such as trained personnel, diagnostics and therapeutic equipment, medication and intensive care services; and poor patient data management[47].

Women initiating ART during pregnancy or breastfeeding have an increased risk of loss to follow up.[48] HIV-exposed and HIV-infected children account for 52% of infant mortality at 24 months and below.[49] On average, people who start ART at primary health care facilities are more likely to be retained in care than those who start at higher levels of care.[50]

Improved access to ART and higher levels of viral suppression have helped reduce AIDS-related deaths, although high levels of mortality remain (trends in declining mortality are shown in Figure 15). While ART considerably improves physical health and life expectancy, the risks of AIDS-related illness and mortality persist. Patients developing AIDS and AIDS-related illnesses in Botswana are provided with palliative care.[51]

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45 UNAIDS data, 2017

46 Farahani, M., Price, N., El-Halabi, S., Mlaudzi, N., Keapoletswe, K., Lebelonyane, R., ... & Gabaake, K. (2016). Variation in attrition at subnational level: review of the Botswana National HIV/AIDS Treatment (Masa) programme data (2002–2013). *Tropical Medicine & International Health*, *21*(1), 18-27.

47 Variation in attrition at sub-national level: review of the Botswana National HIV/AIDS Treatment (MASA) programme data (2002-2013)

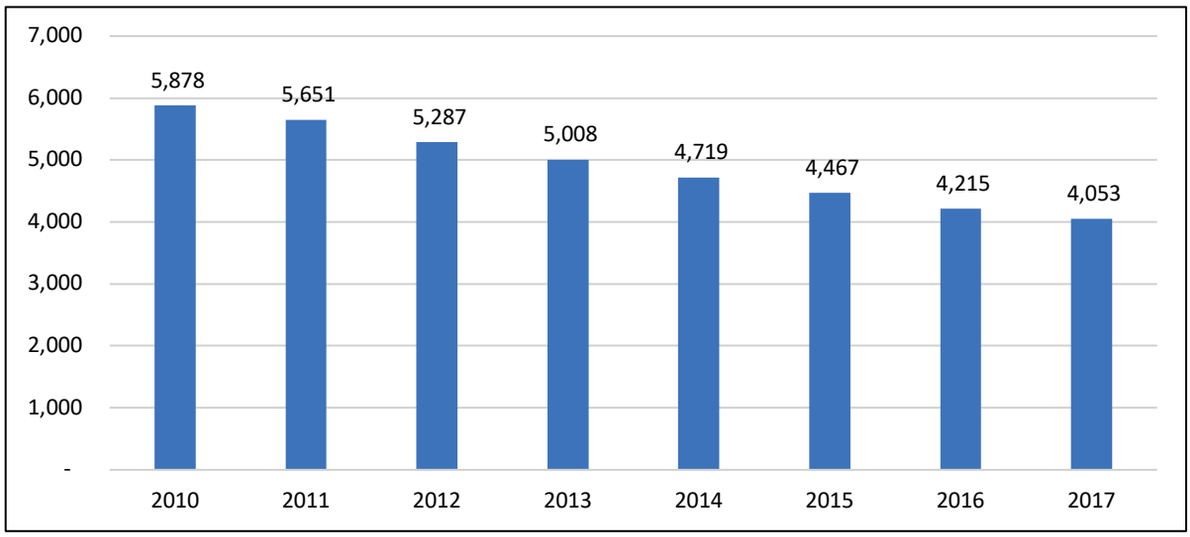
48 Myer, L., Iyun, V., Zerbe, A., Phillips, T. K., Brittain, K., Mukonda, E., ... & Abrams, E. J. (2017). Differentiated models of care for postpartum women on antiretroviral therapy in Cape Town, South Africa: a cohort study. *Journal of the International AIDS Society*, *20*(S4).

49 Zash, R., Souda, S., Leidner, J., Ribaudo, H., Binda, K., Moyo, S.& Essex, M. (2016). HIV-exposed children account for more than half of 24-month mortality in Botswana. *BMC pediatrics*, *16*(1), 103.

50 A"buddy system" which provided psychosocial support, support for treatment literacy and adherence through community groups, was noted to be effective in Botswana, but has not been sustained.[50]

51 Merlin, J., Pahuja, M., Selwyn, P. A., & Bloom, A. (2017). Palliative care: Issues in HIV/AIDS in adults. www.uptodate.com

Figure 15: Number of AIDS deaths from 2010-2017, Spectrum 2018

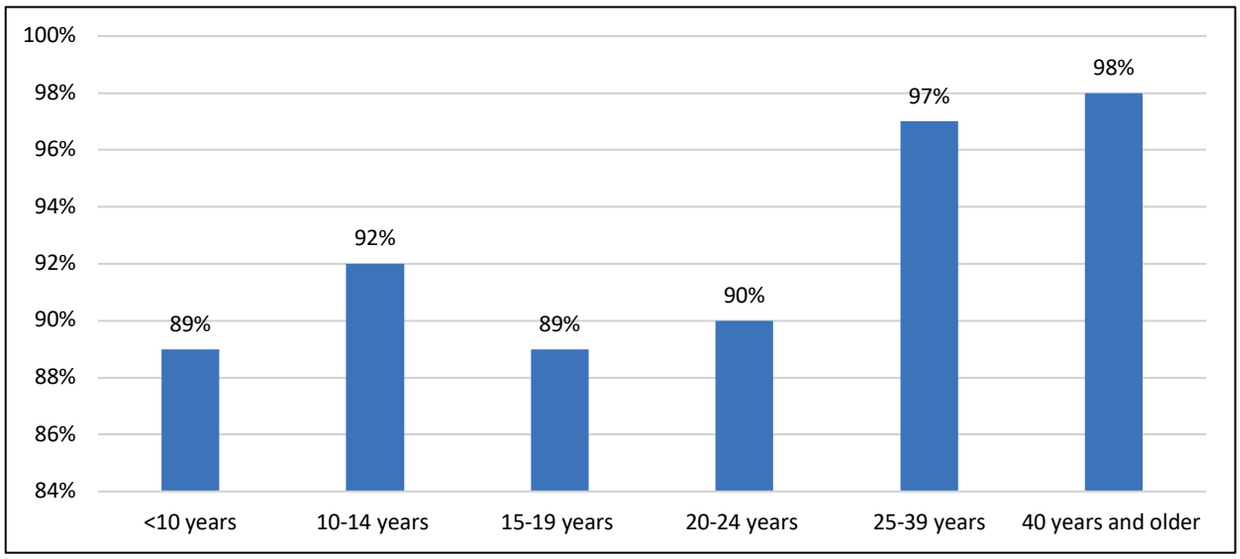


Interventions to retain PLHIV on ART and ensure treatment adherence include comprehensive and quality HIV treatment and care, psychosocial support, nutritional assessment, counselling and support, viral load monitoring and monitoring HIV drug resistance. Nutritional support to PLHIV in Botswana is limited, and some patients on ART are supported through the destitute programme. Psychosocial support to PLHIV is provided by healthcare workers, lay counsellors and peer outreach workers. However, a 'buddy system' that had been providing such support in conjunction with treatment literacy was discontinued. Facility and community-based HIV differentiated care models have also not been initiated.

WHO recommends viral load testing at six months, twelve months and then annually to monitor viral load levels and detect treatment failure. The capacity to provide viral load testing is being expanded in Botswana. Reagent supply is reported to have improved from 56% to 73% in 2015, reducing disruptions in viral load testing. The use of unique patient identifiers has enabled laboratories and clinicians to link results to patients, improving the utilisation of viral load results for care management. Data from the ART data warehouse covering 157,507 clients as at January 2018 shows an average of 81% viral load suppression.[52] Figure 16 shows viral load suppression by age group in Botswana.[53]

[52] Programme data
[53] Programme data

Figure 16: Viral Load Suppression by age group in 2017



Drug resistance monitoring is necessary to support viral suppression and improve health outcomes of PLHIV on ART. However, such data is not readily available.

Gaps and challenges

- Low viral suppression rates among children, adolescents and young people and men
- Lack of differentiated care models for facility and community level
- Inadequate nutritional assessment, counselling and support
- High mobility of key populations, particularly FSW, hindering treatment adherence
- Low coverage of viral load monitoring of PLHIV on ART including lack of recent viral load results in patient files
- Lack of integration of surveillance of drug resistance and toxicity into the national monitoring and evaluation system
- Disruption of viral load testing due to equipment downtime and stock-outs and inadequate equipment throughput
- Inadequate specimen tracking and management system
- Lack of a systematic method for management of loss to follow-up across all districts, including registers not being used consistently and occasional shortage of registers

Strategies

- *Roll-out differentiated care models at facility and community levels:* Differentiated care models will be developed and rolled-out using a phased approach, based on models developed for various users and scenarios.
- *Strengthen tracking of loss-to-follow-up patients:* Strategies will include use of SMS on mobile phones, reinvigorating the buddy system and partnering with CSOs to improve tracking of individuals who have been lost to follow up.
- *Scale-up psychosocial support and treatment literacy for PLHIV:* Psychosocial support is currently offered at health facilities and by peer outreach workers targeting key populations. Links will be

established with the reinvigorated 'buddy system', and efforts will be made to strengthen and expand PLHIV clubs, empower PLHIV networks and support groups and better use civil society actors. Priority populations include key populations, caregivers of children, adolescents and young people. The needs of adolescents prenatally infected PLHIV will be addressed.

- *Expand the PLHIV nutritional assessment, counselling and support programme:* Adequate resources will be provided to meet the nutritional requirements of PLHIV. Health facilities will provide malnourished patients with food for prescription, while nutrition education for PLHIV will be integrated into treatment literacy programmes.
- *Improve capacity for facility and community based palliative care:* Palliative care provision will be strengthened through training, support supervision and mentorship. Civil society organisations and PLHIV groups will be trained and supported to provide home-based palliative care.
- *Scale-up viral load testing:* Viral load testing will be scaled-up, and steps will be taken to ensure uninterrupted supply of laboratory reagents. Results utilisation will include a specimen tracking register, roll-out of Integrated Patient Management Systems to all sites, commodity management and use of SMS on mobile phones to alert patients of availability of their results.
- *Implement viral load optimization strategies:* Strategies will include improving the turn-around of viral load results and ensuring that results are available to the healthcare worker and the patient in a timely manner to improve the use of these results.
- *Strengthen systems for drug resistance monitoring:* Monitoring of early warning indicators will be followed at all clinics. Drug resistance monitoring and surveillance will be integrated into the national health information system.

6.2.4 Elimination of Mother to Child Transmission

Programme objective: Reduce mother to child transmission rate to less than 1% by 2023

Priority populations: All pregnant women and HIV exposed infants

Situational analysis

Botswana's programme for prevention of mother-to-child HIV transmission (PMTCT) has four major components: 1) prevention of HIV among women of child bearing age; 2) prevention of unwanted pregnancy among HIV-positive women; 3) prevention of HIV transmission from woman living with HIV to her infant; and, 4) appropriate treatment, care and support for mothers living with HIV, their infants and families. Botswana is focused on meeting the targets for pre-elimination of mother-to-child transmission of HIV by 2020 and the targets for elimination of mother-to-child transmission of HIV by 2023.

PMTCT services are integrated into routine sexual and reproductive health (SRH) services in Botswana. All pregnant women are routinely offered HTS at their initial antenatal care visit, and are re-tested at three-month intervals and during delivery. In 2017, 99% of pregnant women were tested for HIV by the end of their pregnancies, and 96% received ART to reduce the risk of HIV transmission to their infants. Around half of HIV exposed infants (56%) were tested for HIV and received their results within the first two months after birth (early infant diagnosis) with treatment provided following confirmatory testing.[54]

[54] Programme data, 2017

HIV-exposed infants who are breastfed are re-tested following cessation of breastfeeding. All babies who previously tested HIV-negative are re-tested at 18 months of age. All infants who test HIV-positive are initiated on ART immediately after diagnosis. The number of HIV-positive women opting to breastfeed increased from 5% in 2010 to 34% in 2017[55].

Current policy provides that male partners of pregnant women are to be routinely tested. However, only 17% were tested in 2017. The programme confronts major challenges in reaching partners for testing.[56]

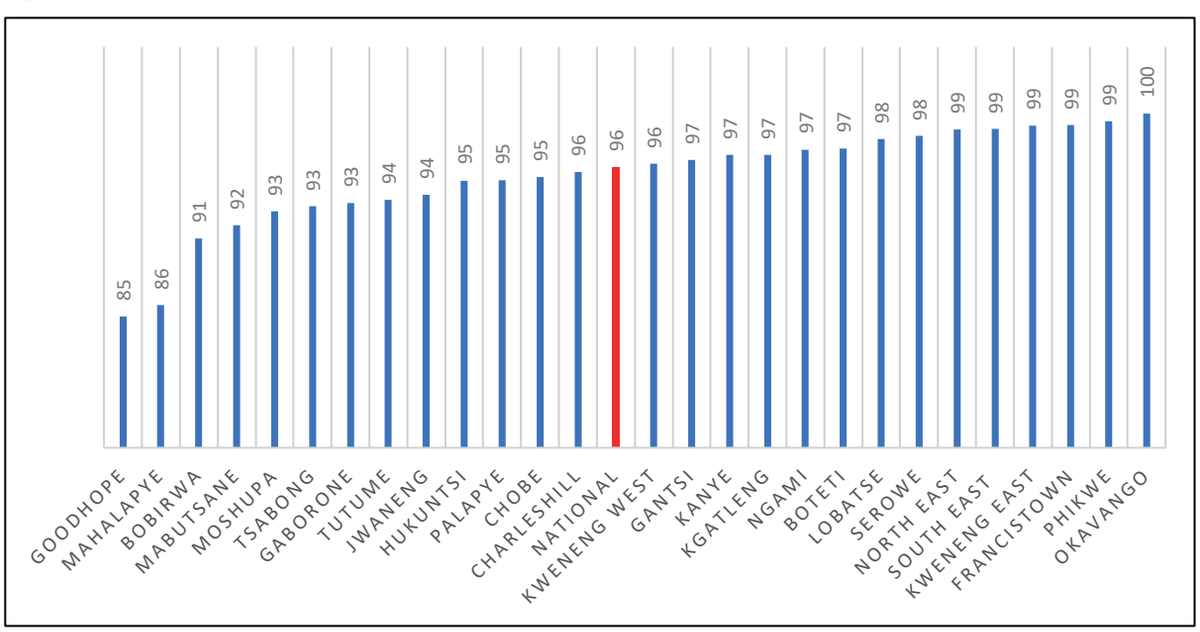
Between 2011 and 2017, the proportion of HIV-positive pregnant women receiving ART ranged from 89.8% and 96.2% (Spectrum estimates). Spectrum estimates (Table 8) shows a decline in the percentage of pregnant women on ART. On the other hand, programme data shows an increase in treatment uptake among pregnant women.

Table 8: Proportion of pregnant women receiving antiretroviral treatment

Year	2010	2011	2012	2013	2014	2015	2016	2017
Mothers needing PMTCT (Spectrum estimates)	12,994	13,749	13,571	13,431	13,174	12,875	12,554	12,210
Mothers receiving PMTCT (Spectrum estimates)	13,755	12,941	12,629	12,918	11,845	11,899	11,295	10,958
% of mothers receiving ARVs to reduce the risk of mother-to-child transmission of HIV (PMTCT Programme data)		93	92	95	95	95	94	96

Data source: Programme data and spectrum estimates

Figure 17: PMTCT services uptake by district



Data source: PMTCT Programme Data

[55] Programme data, 2017
[56] Reference

PMTCT coverage illustrated in Figure 17 shows that almost all districts except Goodhope and Mahalpye attained more than 90% coverage.

The overall rate of mother-to-child transmission of HIV at six weeks following birth decreased from 4.1% in 2011 to 1.4% in 2017. The final transmission rate at the end of the breastfeeding period was estimated at 4.97% in 2017. Table 9 illustrates trends in the mother-to-child transmission rate.

Table 9: Trend in mother to child transmission of HIV

Year	2011	2012	2013	2014	2015	2016	2017
MTCT rate (Programme data)	4.1	3.3	2.1	2.0	1.6	1.4	1.4
Final transmission rate including breast-feeding period (Spectrum estimates)	7.49	6.09	4.77	5.62	4.99	4.99	4.97
Number of new child infections due to mother-to-child transmission (Spectrum estimates)	1,030	827	641	740	643	626	607

Gaps and challenges

HIV testing of pregnant women, male partners and HIV exposed infants

- Inadequate uptake of HIV retesting during pregnancy and delivery
- Inadequate uptake of early infant diagnosis at 6-8 weeks (including long turnaround time of results and reporting)
- Inadequate uptake of retesting at 18 months and post weaning
- Low rates of HIV testing among partners of pregnant women
- Inadequate syphilis screening, mainly due to interrupted supply of syphilis test reagents

Community involvement

- Inadequate involvement of civil society organizations and communities in PMTCT programming

Human resources capacity

- Limited supportive supervision due to limited human resources
- Inadequate integration of services
- Low uptake of post-natal care, including early infant diagnosis

Monitoring and Evaluation

- Fragmented monitoring systems, including limited linkage with civil society initiatives
- Inadequate data quality auditing or verifications
- Inadequate research and evaluation to inform improvements in PMTCT programming.

Strategies

- *Develop and scale up approaches to attain over 95% PMTCT coverage across all districts*
  - In districts with over 95% PMTCT coverage – Implement intensified case surveillance (including retesting) for both mothers and infants during pregnancy, labour and postpartum period
  - In districts PMTCT coverage of 85% to 94%: Conduct targeted PMTCT service delivery to address critical bottlenecks in the PMTCT cascade

- In districts with less than 84% coverage: Conduct in-depth bottleneck analysis and rapidly expand PMTCT coverage to all mothers and infants

- *Increase PMTCT uptake among pregnant women, their partners and HIV exposed infants*
  - Leverage existing civil society organisation structures (e.g. community health workers) to scale up mother-infant tracing for early infant diagnosis and partner testing (e.g. referral cards, self-testing especially for partners) as well as safe infant feeding
  - Strengthen community-based follow-up of pregnant women and mothers (e.g. SMS contact, community health workers follow-up)

- *Expand human resources to support PMTCT*
  - Improve flow of financial resources to local organisations to support PMTCT
  - Partner with civil society organisations to deliver PMTCT services
  - Improve integration of PMTCT into related services

- Strengthen monitoring and evaluation of PMTCT
  - Integrate private sector reporting
  - Conduct routine data audits annually at national level and quarterly at district level
  - Integrate data collection on syphilis
  - Engage in partnerships for research and evaluation

6.3 Stigma and discrimination, gender vulnerability and human rights

6.3.1 Reduce HIV-related stigma and discrimination

Programme objective: Reduce HIV related stigma and discrimination from 13.2% in 2013 to less than 5% by 2023

Target population: People living with HIV, key populations and communities

Situational analysis

There is insufficient data on the extent to which stigma hinders disclosure and HIV testing. Similarly, there is insufficient data available to determine the degree to which stigma results in new infections or AIDS-related deaths through delayed initiation on ART.

A survey conducted in 2013[57] found that stigma was prevalent in two forms: self-stigma and stigma by community members towards PLHIV, including FSW, MSM, people living with disability and lesbian, gay, transgender and intersex persons. Nearly a quarter of PLHIV (24%) harboured feelings of blame and 18% felt guilty about their HIV positive status. About a third (29%) made decisions not to have children because of their HIV-positive status, and 9% avoided having sex. Over 10% had been exposed to external stigma such as gossip and insults, while about 5% experienced exclusion from social gatherings.

Gaps and challenges

- Lack of recent data on stigma and discrimination directed towards PLHIV, FSW, MSM, people living with disability and lesbian, gay, transgender and intersex persons and related impact on HIV service uptake and psychosocial wellbeing

- Lack of recent data on self-stigma and impact on HIV service uptake and psychosocial wellbeing

[57] Botswana Stigma Index Survey

Strategies

- Undertake a national survey on stigma and discrimination, inclusive of marginalised populations, and determine the impact on HIV service uptake and psychosocial wellbeing
- Undertake complementary qualitative research to inform strategies for mitigating stigma and discrimination, including assessing rationale and behaviours of perpetrators
- Undertake research in healthcare settings to determine the extent of stigma and discrimination, including inadvertent stigma and discrimination brought about by systems for managing PLHIV, and implement strategies for mitigation
- Sensitize healthcare workers on stigma and discrimination in healthcare settings to enable them to improve quality of services provided to key populations, adolescents and young people, men, and people living with disabilities among others.
- Assess the influence of legal provisions on stigma and discrimination in relation to HIV and undertake advocacy and legal reform initiatives to address concerns
- Introduce monitoring systems and complaints mechanisms to ensure that instances of stigma and discrimination in HIV service settings are identified and addressed.
- Undertake a stigma index survey using the current recommended protocol and tools to provide data to support HIV reprogramming.

6.3.2 Reduction of gendered vulnerabilities influencing HIV prevention and treatment

Programme objective: Reduce gendered vulnerabilities among girls and women impacting on HIV prevention and treatment

Target population: All men and women prioritising adolescent girls and young women and women living with HIV

Situational analysis

HIV prevalence and incidence among females is higher than among males. These patterns are a product of a range of physiological factors in combination with gendered vulnerabilities. While there is an absence of robust research on gendered vulnerabilities of girls and young women, a number of risk factors increase the likelihood of infection and require attention.

Although fewer sexually active girls than boys aged 12-19 reported sexual debut before the age of 13 (22.1% vs 41.4%), physiological factors markedly heighten the likelihood of HIV acquisition for girls.[58] Furthermore, this heightened susceptibility persists throughout the early teenage years.[59]

Girls are more susceptible to bacterial infections and other STIs which also increase the likelihood of HIV transmission.[60] Human papilloma virus (HPV) increases HIV acquisition risk, and long-term risks of developing cervical cancer. Botswana launched a nationwide HPV vaccination programme for girls aged 9-13 in 2013.

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58 YRBBS survey, 2016

59 Yi, T., Shannon, B., Prodger, J., McKinnon, L., & Kaul, R. (2013). Genital immunology and HIV susceptibility in young women. American Journal of Reproductive Immunology, 69(S1),74-9

60 Van de Wijgert, J., Morrison, C., Brown, J., Kwok, C., Van Der Pol, B., Chipato, T., Byamugisha, J., Padian, N. & Salata, R. (2009). Disentangling contributions of reproductive tract infections to HIV acquisition in African Women. Sexually Transmitted Diseases, 36(6),357-364.

Sex with a girl or boy under the age of 18 is illegal in Botswana, and constitutes the criminal offence of defilement or statutory rape.[61] However, such occurrences seldom reported and hence rarely lead to prosecution.

Sexually active girls aged 12-19 are more likely to report having used a condom at last sex than boys (69.9% vs. 63.2%), but a quarter of girls (24.9%) report not using contraceptives, and 13.4% reported having been pregnant. Teenage motherhood, particularly single-motherhood, contributes to longer-term vulnerabilities to HIV infection.[62] This includes dropping out of school, contributing negatively to potential economic independence.

While exposure to transactional sex and having sex with an age-disparate partner (both of which potentially constrain decision-making related to safer sex) are reported at similar levels by girls and boys in Botswana, the vulnerability of girls to HIV is exacerbated by the above-noted physiological factors.

Gender-based violence, sexual violence, intimate partner violence and forced sex all contribute to vulnerability to HIV infection, and may also inhibit HIV testing and treatment. While girls and boys in Botswana report forced first sex at similar levels (5.4% vs. 4.2%), levels of forced sex in the past 12 months among sexually active adolescents aged 12-19 is higher among girls than boys (29.6% vs. 16.5%).[63]

Although there is no recent data on experiences of sexual violence among adult women, previous studies report that 29.0% of adult women experienced gender-based violence in the past year, 13.3% experienced intimate partner physical violence, and 2.0% experienced non-intimate partner rape. Experiences of childhood sexual abuse were reported by 19.6% of women.[64]

There is no recent data in Botswana on gender-based violence emanating from disclosure of positive HIV status to one's partner. Similarly, no evidence available regarding the risk of violence in situations of HIV discordancy or concordancy among couples, or regarding the influence of threats of gender-based violence to non-disclosure. However, concerns have been raised by researchers in the region.[65]

Gender equality and equity are embodied in the Constitution of Botswana and in Vision 2036. Promoting gender equality contributes to the reduction of Gender Based Violence. To this end, the Government has adopted the National Policy on Gender and Development, which prioritises economic development, prosperity and poverty reduction, social protection and social services, political power, democratic governance and decision making, access to justice and protection of human rights and freedom from violence, and special measures targeting vulnerable groups of women, men, girls and boys.

Gaps and challenges

- Limited emphasis on the significant physiological risks of HIV acquisition resulting from early sex among young girls
- Inadequate emphasis on the risks to girls and young women resulting from inter-generational and transactional sexual relationships

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61 SAT Regional. (2017). Age of consent: Legal review. Botswana country report. Johannesburg: SAT

62 Parker, W. & Borwankar, R. (2012). HIV prevention among adult women in Namibia: Opportunities for Social and Behavior Change Communication. Washington DC: FHI360

63 YRBBSS Survey, 2016

64 Genderlinks. (2012). The gender-based violence indicators study: Botswana. Johannesburg: Genderlinks.

65 Shamu, S., Zarowsky, C., Shefer, T., Temmerman, M., & Abrahams, N. (2014). Intimate partner violence after disclosure of HIV test results among pregnant women in Harare, Zimbabwe. *PLoS One*, *9*(10), e109447.

- Lack of recent data on experiences of gender-based violence, intimate partner violence, and sexual violence among girls and young women
- Limited programming on gender-based violence addressing girls, boys, women and men
- Insufficient evidence to support to establish the relationship between HIV disclosure and gender-based violence.
- Inadequate gender mainstreaming within HIV and AIDS policies and programmes, and fragmentation of programmes for gender-based violence
- Lack of research on the impact of gender-based violence on the risks of HIV acquisition, or on access to HIV testing, treatment and adherence, and a lack of indicators and monitoring approaches relevant to tracking the relationship between gender-based violence and HIV
- Inadequate coordination of interventions to prevent gender-based violence
- Limited male participation in programmes to prevent gender-based violence
- Inadequate programmes to support rehabilitation and reintegration of perpetrators

Strategies

- *Strengthen policy and legal environment to address gendered vulnerabilities, including in relation to higher risks of HIV acquisition, and their impact on HIV testing, disclosure, treatment and adherence:* Understanding of gender-based violence including HIV related concerns, legal provisions and support systems will be integrated into school-based life skills programmes, and into HIV testing, treatment and adherence programming (including giving attention to HIV disclosure).
- *Increase awareness of legal provisions regarding defilement and statutory rape, and actively prosecute occurrence:* This includes encouraging reporting, providing relevant support to victims, and prosecuting perpetrators. It should be noted that both girls and boys are victimised.
- *Increase awareness on gender and women rights among communities:* Increase awareness of gender issues to help prevent gender-based violence, increase reporting rates and encourage greater support for survivors of violence. The Government will partner with CSOs to conduct awareness dialogues and other activities to sensitise communities.
- *Integrate responsiveness to gender-based violence, intimate partner violence, sexual violence, defilement and statutory rape in HIV prevention, HIV testing, HIV treatment and adherence programming:* This includes developing appropriate guidelines, providing training, engaging with vulnerable couples and providing legal and psychosocial referral.
- *Strengthen gender-responsive HIV and AIDS programming through effective gender mainstreaming, gender budgeting and sex-disaggregated data:* Botswana will draw on gender-based violence prevention champions and advocates, including men and women, to highlight concerns and channels for resolution. This will include guidance through the establishment of a gender-based violence and HIV focused technical working group, multi-sectoral leadership and SBCC programming.
- *Provide effective training and capacity building to young women and boys on gender relations and power dynamics* to instil positive attitudes and behaviours in sexual relations, cultural and social interactions.

- *Strengthen the capacity of duty bearers to fulfil their obligations in protecting vulnerable women and men, girls and boys*
- *Facilitate mainstreaming of gender into the Customary Justice System with the aim of addressing the negative cultural aspects that perpetuate gender inequality*
- *Strengthen capacity of the Legislature, Judiciary, Customary Courts and law enforcement systems, to promote effective social and legal protection of women and men*
- *Conduct research and implement monitoring of gender-based violence in relation to HIV:* Research will include identification of best practices, monitoring will include reporting to clarify targets and progress, and evaluation will be conducted to inform and nuance ongoing programmes. The last Gender Based Violence Indicator Survey was done in 2012 and a follow up survey will be carried out to provide data to inform programming.

6.3.3 Promotion and Protection of Human Rights of People Affected and Living with HIV

Programme objective: Increase access to HIV services by all people in need

Target populations: All people prioritizing PLHIV, vulnerable populations and key populations

Situation analysis

Botswana has a broad policy and legal framework guiding the implementation of the HIV response. A comprehensive assessment of the policy and legal framework for HIV carried out in 2017 found that the Botswana Constitution protects the fundamental rights and freedoms of every person in the country, regardless of place of origin, race, political opinion, colour, sex and creed, subject to respect for the rights and freedoms of others and for the public interest. The Constitution includes several provisions on rights that are relevant to HIV and TB, including the right to life, privacy, personal liberty and security of person, protection from inhumane treatment, secure protection under the law and protection from discrimination. Botswana has also ratified a number of treaties that offer protection to PLHIV and TB patients and that address vulnerabilities to HIV among priority and key populations. These include the African Charter on Human and Welfare and People's Rights, Convention on the Rights of the Child, Convention on Elimination of All Forms of Discrimination Against Women and Convention Concerning Discrimination in Respect of Employment and Occupation among others.

Botswana also has laws in place that protect the rights of PLHIV and those vulnerable to HIV and TB, with the right to non-discrimination and to facilitate access to justice in case of violations. These include the Public Health Act, Domestic Violence Act, the Children's Act, the Labour Act and the protective penal code provisions. The country does not have laws that promote HIV-specific restrictions on entry, stay or residence. The Public Health ACT (2013) supports access to HIV testing for everyone 16 years and above (Section 104(1) (a)); prohibits HIV testing in relation to employment (Section 104(2)); requires prior informed consent for HIV testing (Section 105(a)); requires provision of pre-test information and counselling (Section 110); and provides for regulation and quality of services and testing commodities.

An HIV policy is place and provides a regulatory framework for the provision of HIV services and the coordination of the national multi-sectoral response. This policy creates an environment for provision of adequate and equitable care and support to those infected and affected by HIV and AIDS, advocates for reduction of HIV stigma and discrimination and provides a platform that recognises the impact of HIV on individual and community rights.

Gaps and challenges

- Some barriers identified impede access or fail to facilitate access to health services for people with disabilities include: (i) lack of legislation targeting people with disabilities; (ii) the revised Policy on Disability is not yet approved; (iii) lack of strategy to address the needs of people with disabilities and; (iv) inadequate data on people with disabilities and health needs and gaps.
- Botswana citizens are provided with HIV-related health services free of charge, while non-citizens access services at subsidised rates.
- Botswana has not yet introduced legal reforms that address consensual same-sex relations and acts associated with sex work in line with contemporary developments and trends around the world.
- Inadequate communication regarding human rights and human rights concerns relevant to HIV prevention, treatment and care.

Strategies

- *Advocate for strengthening of legal and policy provisions to ensure adequate protection of PLHIV, vulnerable and key populations,* prisoners, migrants and some provisions being advocated for to include consideration for extending HIV services free of charge to non-citizens.
- *Strengthen access to justice and enforcement of the existing laws:* Steps will be taken to sensitise targeted populations on provisions of laws affecting them, human rights and gender equality; provide education and training for key populations; train healthcare providers on rights-based approaches to service delivery, strength legal support services and improve mechanisms for enforcing related human rights violations; train judicial officers (civil and customary) and incorporate human rights education in training curricula for law enforcement officers.
- *Advocate for legal reviews and build institutional capacity for implementation of laws related to gender equality, rights of children, adolescents and young people*: Steps will be taken to consider revision of laws on marital rape, giving effect to legislation protecting gender equality and discrimination, and review of existing consent law to align it with international and regional guidelines. In addition, communities, civil society organisations, networks of PLHIV and youth will be sensitized on gender equality and laws and policies hindering children, adolescents and young people access to health services.
- *Strengthen reporting, case management and surveillance of human rights violations:* Systems will be established for reporting human rights violations, including using SMS platform to routinely monitor possible discrimination within health facilities; providing reporting channels for PLHIV, vulnerable groups and key population; and establishing a referral of survivors of human rights violations across relevant institutions (health, law enforcement and justice system).
- *Strengthen a monitoring and evaluation system for human rights violations:* Monitoring systems will be strengthened to ensure that data on these aspects is comprehensive and complete and is available to inform programming. Given that several institutions are involved in managing these cases, a comprehensive data repository for human rights violations, and stigma and discrimination will be housed in the lead institution.

SECTION 7:
PROGRAMMES AND STRATEGIES FOR GENERAL POPULATION

" This section outlines the programmes for the general population to address risks of HIV infection occurring beyond the identified priority sub-populations. "

SECTION 7: PROGRAMMES AND STRATEGIES FOR GENERAL POPULATION

7.1. General Population Programmes

This section outlines the programmes for the general population to address risks of HIV infection occurring beyond the identified priority sub-populations.

7.1.1 Post-exposure Prophylaxis

Programme objective: Ensure all persons exposed to HIV infection have access to post exposure prophylaxis

Target populations: All persons exposed to HIV infection

Situational analysis

WHO recommends short-term ART to reduce the likelihood of HIV infection after potential occupational or sexual exposure. This includes healthcare workers exposed to the risk of HIV infection at the workplace as part of the overall universal precautions package.

Botswana will continue providing post-exposure prophylaxis (PEP) to people who have been potentially exposed to HIV. PEP will be used only in emergency situations and must be started within 72 hours after the possible HIV exposure. All healthcare providers and persons in other occupations, if exposed to infectious material or blood, will be offered PEP medication. Furthermore, victims of child sexual abuse, defilement, statutory rape, rape and sodomy who present for care within 72 hours of the incident will also be offered PEP.

Gaps and challenges

- Low awareness on the use of PEP among the general populations
- Reluctance to report or present early in cases of child sexual abuse, defilement, statutory rape, rape and sodomy
- Limited data on PEP service uptake

Strategies

- *Increase demand creation for PEP:* Steps will be taken to integrate awareness raising and demand generation for PEP into other HIV prevention services, including HTS, condom promotion, VMMC, and risk reduction education; and gender-based violence and women rights programmes.
- *Improve protocols and processes for managing PEP for child sexual abuse, defilement, statutory rape, rape and sodomy:* This includes ensuring that PEP is available to both male and female victims, establishing protocols and systems for legal referral and support, and establishing protocols and systems for psycho-social support and counselling including referral.
- *Improve monitoring and reporting on PEP service uptake:* Botswana will update data collection and reporting tools for PEP, disseminate and train health care workers on data collection and reporting and integrate reporting within the Health Management Information System. The coordination and period progress review of PEP service uptake will be integrated into HIV, gender-based violence and sexual and reproductive health programmes.

7.1.2 Safe Blood Services

Programme objectives: Reduce the prevalence of HIV to 1%, HBV to 0.5%, HCV to 0.5% and syphilis to less than 1% in donated blood by 2023

Target populations: General population, prioritising blood donors

Situational analysis

The National Blood Service, under the Ministry of Health and Wellness, is the sole authority responsible for the provision of safe, adequate and accessible blood supply and safe blood products in Botswana. The National Blood Service recruits blood donors and undertakes blood donation drives or campaigns periodically. It also ensures quality blood screening and storage and makes blood products available to transfusion centres in the country.

Occasional shortages of blood occur. For instance, in 2016, only 25,824 bottles or units were collected against a requirement of 40,000 units due to low donor turnout. This is largely attributed to misinformation and misunderstanding of the donation process among the general public, including unfounded fears of contracting diseases in the process of donation. Blood donation is also threatened by high HIV prevalence, although HIV prevalence among blood donors has decreased over time and was 1.7% in 2015. It can be anticipated that HIV prevalence among blood donors will decline further as more people become aware of their HIV status.

All donor blood in Botswana is routinely screened for HIV among other diseases.

Gaps and challenges

- Low donor turnout or recruitment to meet the national safe blood demand
- Misinformation about the blood donation process

Strategies

- Increase demand creation for blood donation
- Address misinformation about the blood donation process

SECTION 8:
TAKING HIV AND AIDS OUT OF ISOLATION

"Over the period of NSF III, HIV services will be integrated with other health services to improve health outcomes and contribute to the achievement of universal health coverage."

SECTION 8: TAKING HIV AND AIDS OUT OF ISOLATION

8.1 From Vertical Programmes to Integration

HIV programming has been delivered through a vertically-oriented approach, with insufficient integration between HIV services and related aspects of health service delivery. Over the period of NSF III, HIV services will be integrated with other health services to improve health outcomes and contribute to the achievement of universal health coverage. NSF III will strengthen on-going HIV/TB integration and scale up the integration of HIV and Reproductive Maternal, Neonatal, Child and Adolescents Health (RMNCAH), as well as HIV and Non-Communicable Diseases (NCDs).

8.1.1 TB/HIV Co-infection

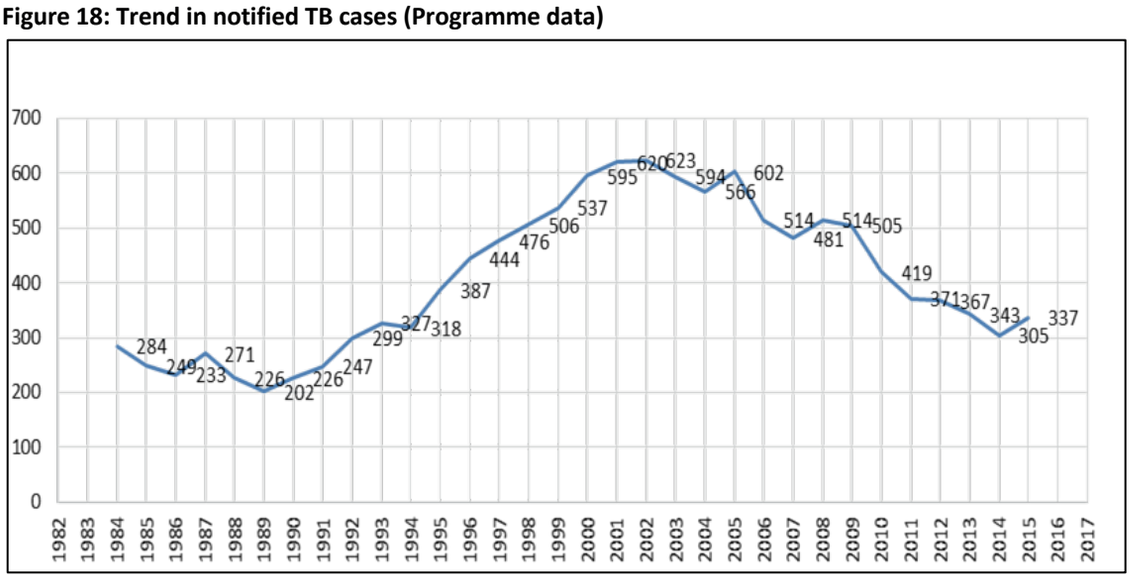
Programme objective: Reduce TB-related deaths among people living with HIV by 75% by 2023

Target population: People living with HIV and TB patients

Situational analysis

While TB incidence increased over the 1990s as a result of increasing HIV prevalence, the number of infections has declined over the past decade (Figure 18). The decline is a function of increasing coverage of effective TB control services as well as the reduction of TB incidence among PLHIV stemming from scaled-up ART.

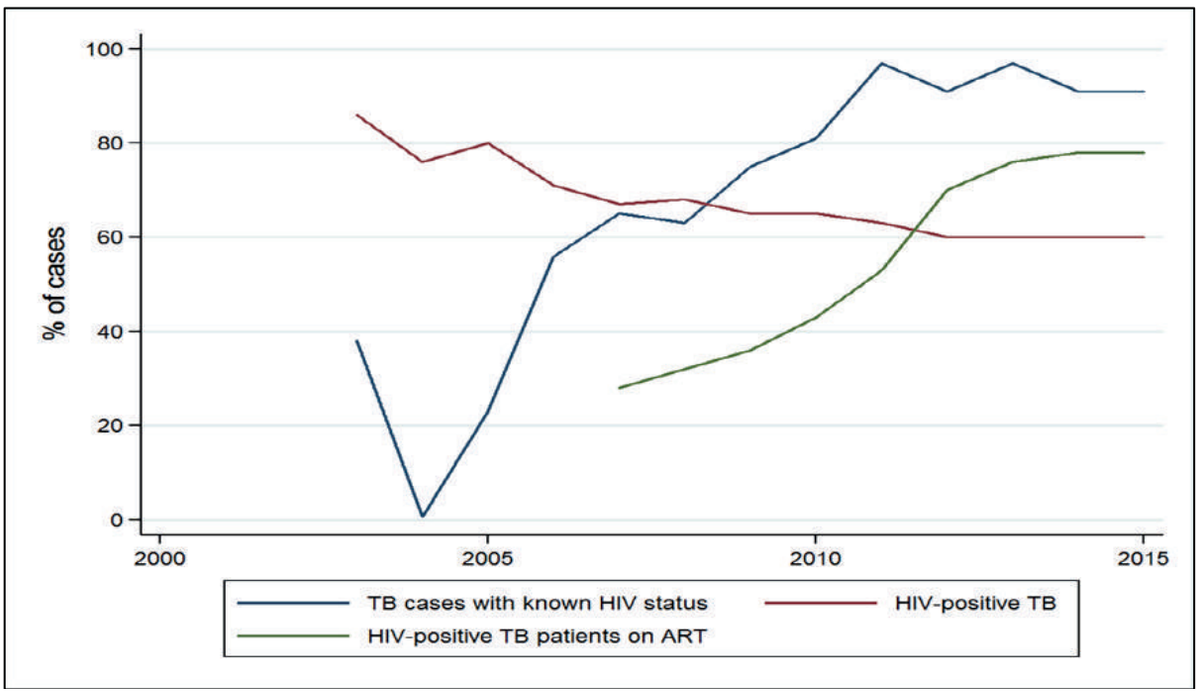
Figure 18: Trend in notified TB cases (Programme data)



TB notification and incidence rates in Botswana are higher than regional and global averages, and TB/HIV co-infection rates remain high. Drug resistant TB is also an on-going concern.

The proportion of TB patients tested for HIV increased from 81% in 2010 to 92% in 2016. The TB-HIV co-infection rate has declined slightly from 63% in 2012 to 60% in 2016. A high proportion of HIV-positive TB patients are on ART (81%) and Cotrimoxazole Preventive Therapy (96%). While the TB-HIV co-infection rate has decreased over time, the proportion of TB patients with known HIV status has steadily increased as shown in Figure 19.

Figure 19: Trend in key TB/HIV indicators (programme data)



The groundwork for integration of TB and HIV services was established earlier in the epidemic through guidance from WHO on TB/HIV collaborative activities. Botswana was the first country to run an Isoniazid Preventive Therapy (IPT) programme for PLHIV. Since then, collaborative services have been mainstreamed, especially on the TB side. The TB/HIV programme review (2017), observed that:

- TB/HIV integration is working well, and TB/HIV collaborative activities are being implemented within the HIV service arena, especially for new HIV clients who are routinely screened for TB
- TB/HIV is integrated in current training curricula of healthcare workers
- TB Preventive Therapy is provided for child TB contacts who are less than 5 years of age
- Successful integration of HIV/TB, NCDs and Sexual and Reproductive Health (SRH) was also noted in the majority of facilities. In some cases, this includes STI and cervical cancer screening. More integration is taking place in clinics than in hospitals
- In a few districts, HIV/STI/TB and family planning integration has been successfully implemented by Community Health Workers.

Gaps and challenges

- High TB notification versus incidence gap, suggesting missed TB cases
- Inadequate HIV testing in TB Presumptive Cases
- Challenges of coordination of TB/HIV structures at national and district levels
- Inadequate quality assurance of TB/HIV services in the private sector
- Inconsistent facility compliance with current national diagnostic policy for new TB cases
- Delayed adoption of TB preventive treatment in adult populations as per WHO recommendations for preventive treatment among certain adult patients

- Stock-outs of critical laboratory commodities, especially Xpert cartridges, replacement modules, and reagents for microscopy and DST
- Inconsistent use of childhood TB diagnostic algorithm to guide diagnosis, especially in reproductive, maternal, new-born, child and adolescent health settings
- Insufficient TB infection prevention and control focal persons, plans or committees; non-compliance in some facilities with infection control measures therefore contributing to poor infection control; lack of routine TB screening and fit testing for TB N95 masks in some settings.
- Delayed initiation of ART for HIV positive TB patients
- Community HIV systems have limitations exacerbated by lack of transport for provision of outreach services.
- Lack of use of GeneXpert as multi-disease diagnostic platforms for HIV viral load testing and Early Infant Diagnosis/HIV QUAL testing
- Challenges in achieving full integration of TB and HIV services
- Inadequate pharmacovigilance surveillance

Strategies

- Generate evidence through timely execution of a planned joint TB and HIV prevalence survey according to international guidelines in order to establish the best estimate of TB burden in the country and inform the true notification vs. incidence gap to inform planning
- Increase TB preventive treatment coverage through adopting and rolling out the latest WHO recommendations across all facilities
- Ensure uninterrupted drug and commodity supplies through undertaking joint TB/HIV drug forecasting
- Reinforce reporting of existing integrated pharmacovigilance system at all levels
- Improve TB/HIV capacity through documenting and strengthening the skills of health workers at each facility
- Expand provision of fully integrated TB/HIV services (one-stop-service-centres) in hospitals
- Scale up community TB services through improving case TB case finding using integration of community health workers services and intensifying treatment support to increase treatment completion
- Improve TB diagnostics by strengthening early infant HIV diagnosis and HIV viral load testing using the GeneXpert platform; and adopting and implementing GeneXpert Ultra and strengthening TB diagnosis using lateral flow urine lipoarabinomannan assay.
- Improve TB infection control in both HIV and TB sites through regular screening of health care workers, including community health workers, for TB
- Improve strategic information on TB and HIV and its reporting
- Strengthen HIV/TB coordination by activating the National and District TB/HIV coordination structures

8.1.2 HIV and Sexual and Reproductive Health and Rights Integration

Programme objective: Increase the proportion of women living with HIV provided with family planning services to over 90% by 2023

Target population: All women of reproductive age prioritizing women living with HIV

Situational analysis

Botswana is committed to promoting the survival of mothers, new-borns, children and adolescents. Vision 2036 reiterates that 'long and healthy lives' are a basic right and a necessary condition for development. The Integrated Health Service Plan 2010-2020 prioritizes maternal, new-born, child and adolescent health, HIV and nutrition. Elimination of mother-to-child transmission of HIV is a high priority programme within reproductive, maternal, new-born, child and adolescent health, with strong political commitment. Botswana has also committed to support the Global Strategy for Women's Children's and Adolescents' Health 2016-2030, including achieving key targets on reduction of maternal, neonatal and under five mortality; scaling up of emergency obstetric care, high-impact HIV interventions for women, children and adolescents and increasing resources dedicated to reproductive, maternal, new-born, child and adolescent health interventions, among others. The country has developed an integrated Reproductive, Maternal, New-born, Child and Adolescent Health Strategy 2018-2022, which focuses on integration with HIV among other services.

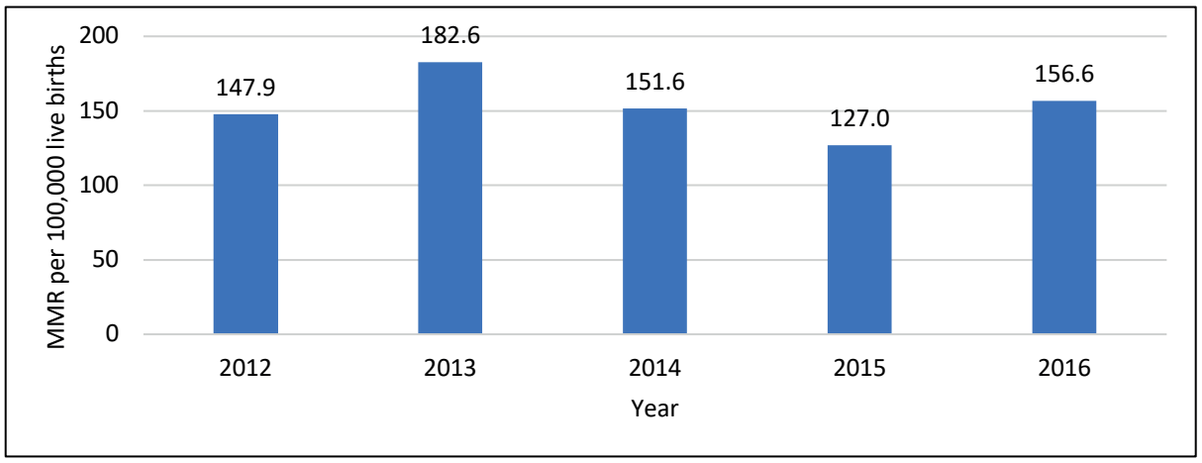
Botswana has made progress in the coverage of maternal, neonatal, child and adolescent health, but challenges persist – in particular, low contraceptive coverage among women 15-49 years (estimated at 52.8 (BFHS 2007)) and unwanted pregnancies (estimated at 51% (2011 ANC Sentinel Surveillance)), with HIV-positive women experiencing a high rate of unwanted pregnancies (56%) than their counterparts.[66]

The vast majority of pregnant women (95%) attend at least one antenatal visit, while 73% attend at least four times. High antenatal clinic attendance is a key entry point for maternal care and PMTCT, among other services. Nearly all pregnant women (95%) are attended by a skilled health worker, and 61% attend post-natal care.

Maternal mortality-- 156.6 deaths per 100,000 live births in 2016 (See Figure 20) -- is not yet under control, and Botswana did not attain the Millennium Development Goal target of 82 deaths per 100,000 live births. The country is currently striving towards achieving the set Sustainable Development Goal target of 54 deaths per 100,000 live births by 2030[67].

[66] 2011 Sentinel Surveillance
[67] MMR reports 2007-2011 and 2012-2014

Figure 20: Botswana Maternal Mortality Ratio 2012-2016



Almost all maternal deaths occur at health facilities, and HIV is estimated to have contributed to about 6% of these deaths. Other causes include abortive outcome (24%), obstetric haemorrhage (20%), hypertensive disease (20%), unanticipated complications (12%) and infections (8%). Substandard care is a major contributing factor in 79% of maternal deaths, with inappropriate management, delayed intervention, and delayed referral identified as the main health worker related factors[68].

Neonatal mortality has decreased from 34 per 1,000 live births in 2009[69] to 25 per 1,000 live births in 2016[70]. Infant mortality is estimated at 17 per 1,000 live births and under-five mortality at 28 per 1,000 live births[71].

NSF III advocates for HIV-SRHR integration to improve both HIV and reproductive, maternal, new-born, child and adolescent health service delivery and for appropriate indicators for tracking the health of women, neonates, children and adolescents. The SRH-HIV integration project was implemented in three districts from 2011-2015 and an integration model was developed for each level of care, including guidelines and training manuals for health providers. Feedback from the project noted improved uptake of services. For example, among HIV-positive women, 80% were using dual contraceptive methods and 49% had been tested for HIV. This demonstrates that integration is possible and results in positive health outcomes. HIV services such as HIV testing, PrEP, PEP, PMTCT and behaviour change education will be integrated into reproductive, maternal, new-born, child and adolescent health platforms while these services will also be integrated into the HIV programme.

Gaps and challenges

Leadership and governance

- Inadequate inter-sectoral collaboration, coordination and integration of services within reproductive, maternal, new-born, child and adolescent health programs.
- Vertical planning and budgeting within HIV and reproductive, maternal, new-born, child and adolescent health programs
- Inadequate use of available data for planning and decision making such as census and population projections

[68] RMNCAH programme 2007-2011 programme review
[69] National Health Service Situation Analysis Report, 2009
[70] World Bank Estimate, 2016
[71] Botswana Population Census Report, 2011

Health Workforce

- High maternal mortality due to substandard care (poor skills in surgical procedures and poor adherence to service protocols)
- Shortages of health care workers for provision of services
- Lack of understanding of issues and needs of key populations

Health service delivery

- Insufficient integration between HIV and SRH Services
- Limited institutionalization of continuum of care approach to service delivery
- Insufficient partnerships with CSO
- Transport shortage limiting outreach services for the hard-to-reach and domiciliary nursing
- Lack of neonatal morbidity and mortality monitoring system and comprehensive program plan
- Lack of defined minimum package for male involvement and male friendly services
- Weak referral links between facilities and within service delivery points for HIV, SRH, TB, and non-communicable diseases
- Weak procurement and supply chain management system, resulting in frequent stock-outs of essential drugs and commodities including family planning contraceptives
- Lack of sub-accounts for reproductive, maternal, new-born, child and adolescent health which limits programme funding
- Inadequate community education and engagement, resulting in poor health seeking behaviours including low service demand
- Weak Health Information Management System resulting in limited program data to inform decision making; lack of disaggregated data; and multiple paper based data collection tools which affects data quality and vertical reporting

Strategies

- *Strengthen leadership and coordination of integrated* reproductive, maternal, new-born, child and adolescent health *(RMNCAH) services:* Coordination will be strengthened through establishment of a functional, integrated reproductive, maternal, new-born, child and adolescent health /HIV technical working group at national and district levels, building the capacity of reproductive, maternal, new-born, child and adolescent health and HIV managers at national, district and facility levels, building the capacity of district health management teams to undertake integrated support supervision and operational research on integrated service delivery.
- *Institutionalize the delivery of integrated HIV and RMNCAH services:* To effectively provide integrated HIV/RMNCAH services, the RMNCAH guidelines will be reviewed and updated to integrate HIV services, skills and competencies of healthcare workers will be strengthened through pre- and in-service training and intensified support supervision and mentorship. The supply chain system will be improved to ensure ready access to essential drugs, commodities, equipment and supplies and a functional emergency referral system across all levels of healthcare.

- *Scale up use of technology to provide integrated HIV/*RMNCAH *services:* This will include use of available and new technologies to improve health services, adoption of mHealth for maternal and new-born care, use of drone technology for collection and delivery of medical products, blood, commodities (test kits, contraceptives and emergency drug supply), use of point-of-care diagnostics to reduce waiting time for lab results and increasing and broadening the use of Mobile phones to track cases and support referrals.
- *Strengthen partnership with civil society organisations:* These partnerships will facilitate reproductive, maternal, new-born, child and adolescent health and HIV integration at community level. Civil society organisations will be capacitated to provide integrated services.
- *Strengthen the information management system for the integrated reproductive, maternal, new-born, child and adolescent health programme:* Data tools will be reviewed and harmonized to ensure all data for indicators is collected. Advocacy will encourage changes in the health information system to systematically collect data and report on these indicators. Healthcare workers will be trained on the use of data at the service delivery point.

8.1.3 Reduction of Sexually Transmitted Infections

Programmatic objective: Minimize HIV transmission through reduction and control of STIs

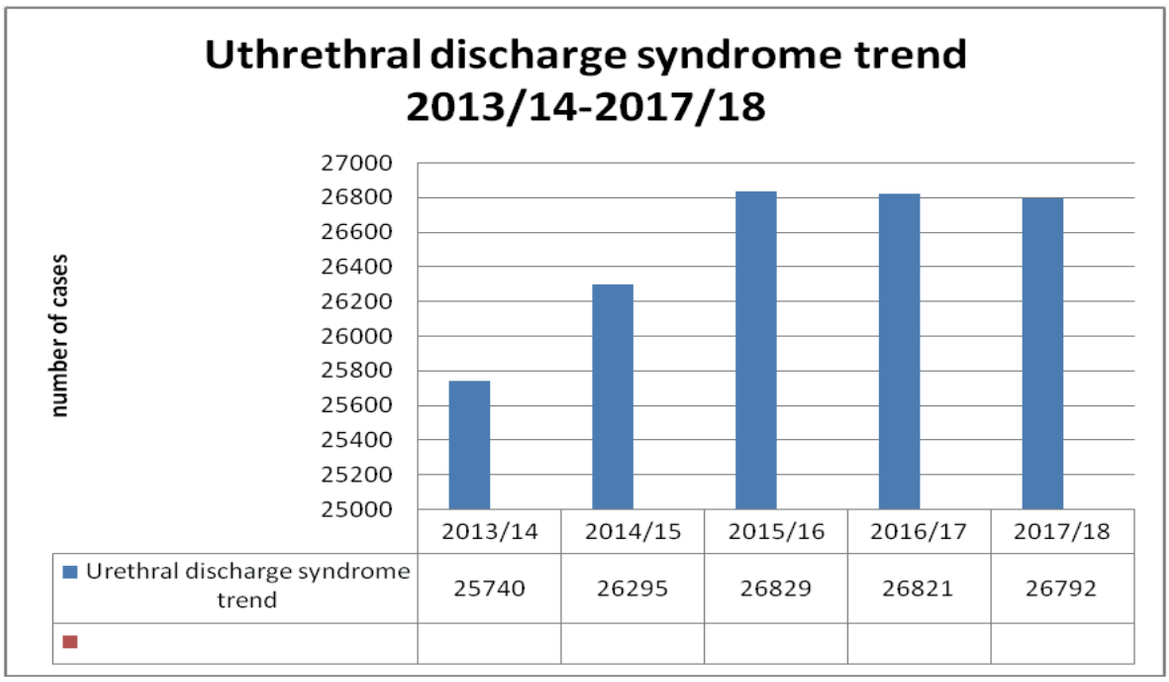
Target population: All populations at risk of STIs, prioritizing adolescents and young people, pregnant women and key populations.

Situation Analysis

The STI programme seeks to reduce HIV Incidence through STI control; coordinate STI program activities in the country; train clinicians and other health care workers on comprehensive STI Management and Control; conduct regular sentinel surveillance on STIs, and other STI operational research; produce and distribute appropriate STI - IEC materials for public education; and provide technical support to health sector partners on STI prevention, control and management. To date, Botswana has adopted the WHO syndromic management approach, and there is in place a national programme with a focal point that works in collaboration with all departments within MoHw with stake in STI (HIV and SRH). Standardized management guidelines and training materials have been developed; many healthcare workers have been trained; STI services have been integrated into the primary health care system, and syndromic STI management has been incorporated into the nursing curriculum. Coordination mechanisms have been established at national and district levels.

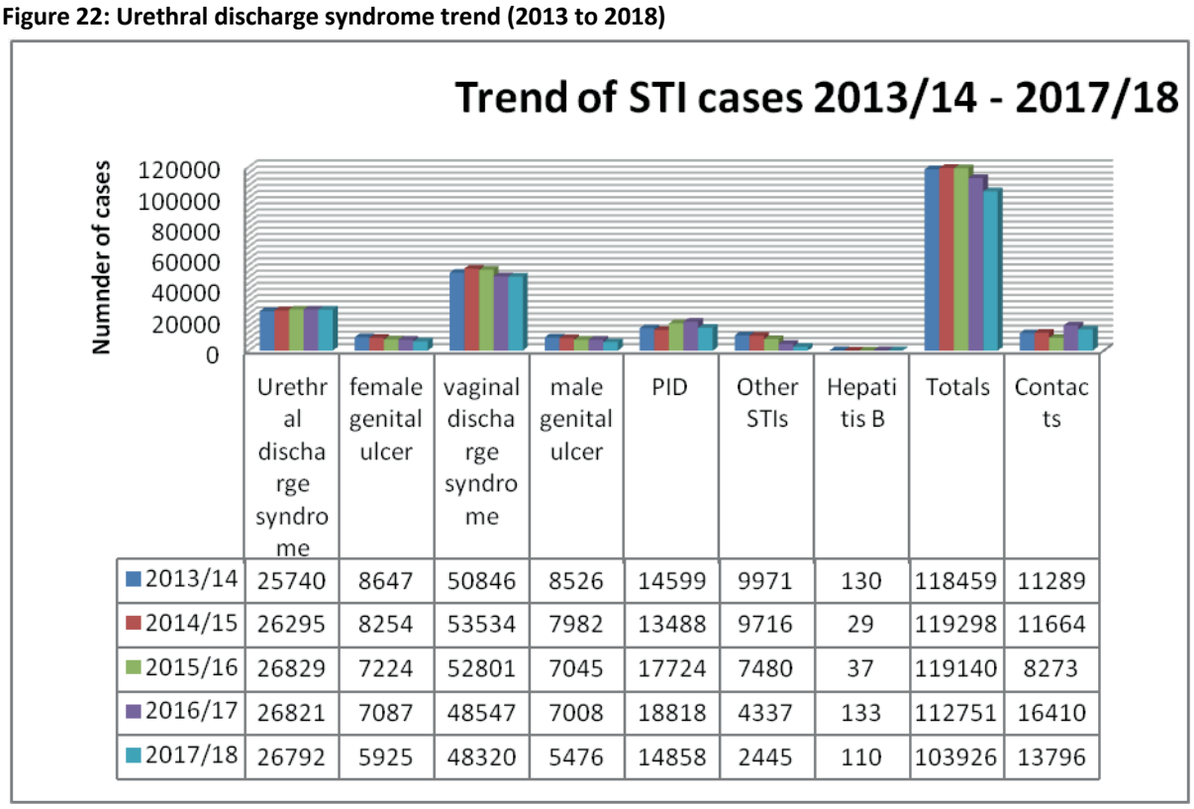
However, despite the progress made in STI management, there has been a notable increase in the number of Urethral Discharge Syndrome. Available information also indicates that there has been an increase in prevalence of HSV2 among Genital Ulcer Disease (GUD) cases (See Figures 21 and 22).

Figure 21: Urethral discharge syndrome trend (2013 to 2018)



Data source: Programme M&E data

Figure 22: Urethral discharge syndrome trend (2013 to 2018)



	Urethral discharge syndrome	female genital ulcer	vaginal discharge syndrome	male genital ulcer	PID	Other STIs	Hepatitis B	Totals	Contacts
2013/14	25740	8647	50846	8526	14599	9971	130	118459	11289
2014/15	26295	8254	53534	7982	13488	9716	29	119298	11664
2015/16	26829	7224	52801	7045	17724	7480	37	119140	8273
2016/17	26821	7087	48547	7008	18818	4337	133	112751	16410
2017/18	26792	5925	48320	5476	14858	2445	110	103926	13796

Data source: Programme M&E data

The figure above depicts the trend of new STI cases from 2013/14 to 2017/18.Total STI cases decreased from 112751 in 2016/17 to 103926 in 2017/18(7.8%) It shows that UDS decreased from 26821 in 2016/17 to 26792 in 2017/18(0.1%) and Female Genital Ulcer decreased from 7087 in

2016/17 to 5925 cases in 2017/18(16.4%). Vaginal Discharge Syndrome decreased from 48547 in 2016/17 to 48320 in 2017/18(0.5%). Male Genital Ulcer decreased from 7008 in 2016/17 to 5476 in 2017/18(21.9%). PID decreased from 18818 in 2016/17 to 14858 in 2017/18(21%). Other STIs decreased from 4337 in 2016/17 to 2445 in 2017/18(23.6%). Hepatitis B decreased from 133 cases in 2017/17 to 110(17.3%) in 2017/18.STI contacts partner traced decreased from 16410 in 2016/17 to 13796 in 2017/18(15.9%).

Gaps and challenges

- Unavailability of national STI strategy or plan to guide STI control; limited number of national targets for STIs; higher prevalence of syphilis in some districts notwithstanding roll-out of syndromic approach
- Lack of a strategy for preventing mother-to-child transmission of syphilis aimed at elimination of congenital syphilis
- High HIV prevalence among STI clients: 40.4% among males and 38.4% among females
- Limited skills among health workers to handle STI in key populations (MSM)
- Suboptimal communication and collaboration between programme, pharmacy and laboratory systems; predominantly passive partner tracing, leading to low tracing rates; and shortage of equipment for STI management such as cryotherapy for management of genital and anal warts.
- Incidences of prolonged stock-out of benzanthine penicillin and procaine penicillin; variable availability of Azithromycin; and stock outs for RPR test kits for syphilis testing.
- Challenges associated with the use of multiple data systems (IDSR-MH 1072, health statistics tool-MH 1049, DHIS2) for the collection of data on STI screening and diagnosis, and inability with current data systems to differentiate between pregnant women and other populations in the case of syphilis.

Strategies

- Strengthen HIV/STI integrated approaches and service delivery (especially among pregnant women, adolescents and young people and men)
- Build capacity in STI management, including conducting programme trainings on STI syndromic management and undertaking clinical mentoring as well as support visits to districts.
- Continuously develop STI Information Education and Communication (IEC) and training materials.
- Increase community awareness through campaigns and use of multimedia.
- Develop and implement a national public health research agenda for STIs (including syphilis) and an antimicrobial survey on STIs from the general population
- Implement a robust strategic information system for advocating, funding, strategically planning for and implementing effective STI interventions, for monitoring and improving them, and for providing evidence of their impact.

8.1.4 Non-Communicable Diseases and other Opportunistic Diseases

Programme objective: Over 90% of women and men living with HIV should have access to early diagnostics and treatment for cervical, breast and prostate cancers by 2023

Target population: Men and women living with HIV and the general population at risk of non-communicable diseases

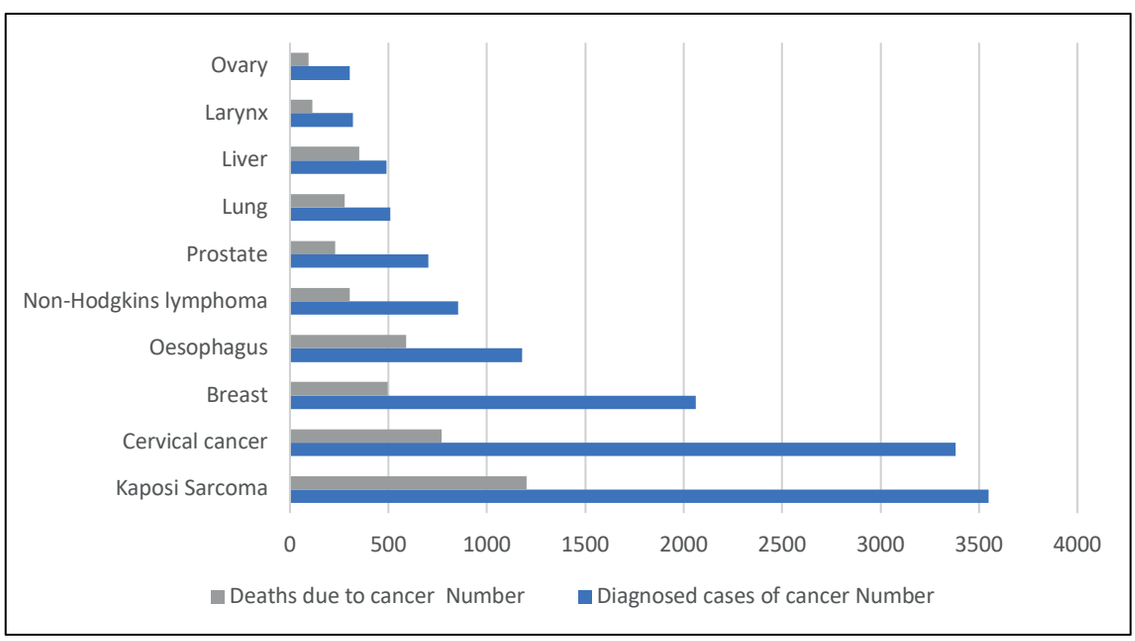
Situational analysis

The burden of non-communicable diseases (NCDs) and their risk factors in Botswana is high, and HIV compounds the situation by increasing the risk of NCDs and reducing the impact of some of the treatments. NCDs were responsible for 37% of deaths (5,920/16,000 deaths) in Botswana in 2014. Of the major NCDs, cardiovascular diseases caused 18% of deaths, cancers 5%, diabetes 4% and chronic respiratory diseases caused 2% of deaths.

As of June 2017, there were 23,544 diagnosed cancer patients (excluding pediatric cancers) (Botswana Cancer registry). About 1,400 cancers are diagnosed per year, with the vast majority (70%) diagnosed late when there is little chance for cure and when treatment becomes more expensive. Around a quarter of all cancers in women (27.4%; 3,380) are attributed to cervical cancer, 22% of which occurred before the age of 40 years (AFCON Report 2017).

Figure 23 below illustrates the morbidity and mortality of cancers in the general population from 2003 to 2017. Kaposi-Sarcoma, cervical and breast cancers were the top three cancers diagnosed in the population, and Kaposi-Sarcoma, cervical and oesophageal cancers were leading causes of cancer-related deaths.

Figure 23: Top ten cancers diagnosed and deaths between 2003 and 2017



Data source: Cancer registry data

NCD risk factors are common in Botswana. Nearly a third (30.6%) of people aged 15-69 years are obese or overweight, 26% consume alcohol, 18% use tobacco, 95% have unhealthy diet including insufficient fruits and vegetables, and 20% are physically iNAHPCtive.

Botswana is implementing several interventions to mitigate risk factors for NCDs, including the multi-sectoral strategy for prevention and control of NCDs (2018-2022) and the national cervical cancer prevention strategy 2017-2021 has also been developed. Other guidelines include a framework convention on tobacco control compliant legislation and control of alcohol and substance abuse legislation. These policies and plans provide an enabling environment for the integration of HIV and NCD management. Over the next five years, integration of HIV and NCDs will be strengthened to prevent, control and manage emerging diseases among PLHIV and also to apply the lessons learnt from the HIV response to scale up the response to NCDs.

The Pink Ribbon Red Ribbon initiative was implemented to address primary prevention for cervical cancer with the introduction of the HPV vaccines. Vaccine coverage is estimated at 90% for both first and second doses. The provision of this vaccine has been integrated into the national EPI programme

People living with HIV are at high risk of developing common opportunistic infections (OIs), including tuberculosis, Cryptococcal Meningitis, Pneumocystis Carinii Pneumonia, and hepatitis-B and C. Botswana will continue to screen and provide treatment for opportunistic infections among PLHIV in the next five years.

Gaps and challenges

Financing:

- Insufficient funding for effective national response to non-communicable diseases

Health Service delivery

- Limited coverage of screening and treatment services for screen-able cancers like breast, cervical and prostate.
- Partial integration of cancer screening and treatment into reproductive, maternal, new-born, child and adolescent health and HIV services
- Limited laboratory capacity to meet demand for cytology and histology
- Lack of standardization of NCD services, with many such services limited (centralized) to urban larger cities
- Heavy focus on curative centralized health services
- Non-rationalized (without existing guidelines) use of resources for expensive treatments such as for selected cancer drugs
- Untimely referral to other levels of care which lead to late detection of cancers
- Limited access to effective medications and technologies.

Health workforce

- Few healthcare workers who are familiar with NCD detection and management, and there are few specialists relevant to NCD management in the country
- Inappropriate deployment of trained staff, and significant staff attrition and turnover
- Lack of integration of non-communicable disease management into pre –service training

Access to supplies, equipment and commodities

- Shortage of equipment and supplies and long procurement processes

- Frequent breakdown of cryotherapy machines, and delayed maintenance of equipment
- Persistent stock-out of laboratory reagents, medications and nitrous oxide gas

Health Information system

- Limited human resource at district and national level for management of program data
- Low reporting rates at district level
- Multiple data collection tools leading to compromised data quality such as incompleteness
- Non-interoperability of existing data systems (such as IPMS, PIMS, DHIS2, CanReg5)
- Parallel programming, with programme data only available at programme level and not effectively shared
- Slow IPMS rollout: available in urban areas while most implementation sites are rural
- Infrastructure limitations including power, internet and cell phone coverage
- Limited skills for data management and utilization
- Lack of mechanisms to interact with data sources across sectors including private sector and research
- Lack of a data depository to manage NCD morbidity and health outcomes e.g. treatment received, toxicity of medicines, control of disease achieved, retention in care.

Health promotion and community engagement

- Limited mobile services for serving hard-to-reach areas
- Limited engagement of civil society organisations, champions and communities in non-communicable disease prevention
- Low demand and awareness creation for screenable cancers in the community
- Limited funds to intensify public awareness through various platform like radios, and television.

Strategies

- *Scale up screening of NCDs among PLHIV and the general population:* This includes screening for cancers such as cervical, breast and prostate. Other diseases such as diabetes, hypertension and mental illnesses also need to be screened. Human Papilloma Virus self-testing, a method with high clinical sensitivity, will be scaled up to increase screening coverage for cervical cancer.
- *Strengthen referral and linkage systems to facilitate integration:* Referral systems between HIV and NCD service sites will be strengthened to facilitate management of NCDs among PLHIV. Vertical referral from lower level of health care to a higher level will also be strengthened to ensure timely diagnosis and, management of non-communicable disease.
- *Scale up private-public-partnerships and non-communicable disease champions in community mobilization and participation:* This will promote prevention, early diagnosis and management both among PLHIV and the general population. Civil society organisations will raise awareness, increase demand for screening for screen-able non-communicable diseases and strengthen referral to health facilities.

- *Strengthen non-communicable disease monitoring and evaluation and surveillance among PLHIV and the general population:* This will involve strengthening disease registries for major NCDs to ensure up-to-date data collection and make data available for decision making. The system for data collection and reporting from for public and private sector will be strengthened by providing clear data management guidelines. Steps will be taken to regulate and standardize open data for public access of program and surveillance data, with personal identifying information removed, and data shared to promote effective use of data and encourage innovative research.
- *Ensure adequate funding for NCD programmes:* Given that NCDs do not have a global funding mechanism similar to HIV, there is an urgent need to engage more partners across relevant sectors to contribute to resourcing to address non-communicable diseases. This includes the employee wellness programmes in the public and private sectors.
- *Scale up on-going NCDs programme across all districts and facilities:* The see and treat initiative will be expanded to more districts (Kgatleng Southern, South East, North East, Goodhope, Jwaneng, Mabutsane), and the number of facilities offering see and treat services in high volume districts will be increased. Additional staff (doctors, nurses and laboratory personnel) will be recruited or deployed to offer this service.
- *Scale up screening and treatment of OIs.* This will include full implementation of reflex CrAg screening for CD4 <100 and appropriate clinical use of the results for treatment of disseminated disease and for preventive therapy; and implementation of use of the simple check-list to screen for headache/crypto meningitis symptoms prior to Fast Track ART initiation.
- *Strengthen and scale up the diagnosis and management of viral hepatitis:* Screening, diagnosis and management of viral hepatitis will be integrated into ART services to enable the country to accelerate progress towards elimination of viral hepatitis among PLHIV by 2030. The integration process will include training of healthcare workers, ensuring commodities are available, improving data tools to ensure reporting and establish appropriate internal referral mechanisms.
- *Scale up preventive services for OIs and co*-morbidities: This will be done through integrating awareness and education on OIs and other co-morbidities in treatment literacy for PLHIV.

SECTION 9:
SUSTAINABLE FINANCING

" The Government of Botswana's investment in health is outlined in the National Development Plan (NDP) 11. The country achieved the Abuja target of allocating at least 15% of government expenditure for health by the end of NDP 10 (March 2018). "

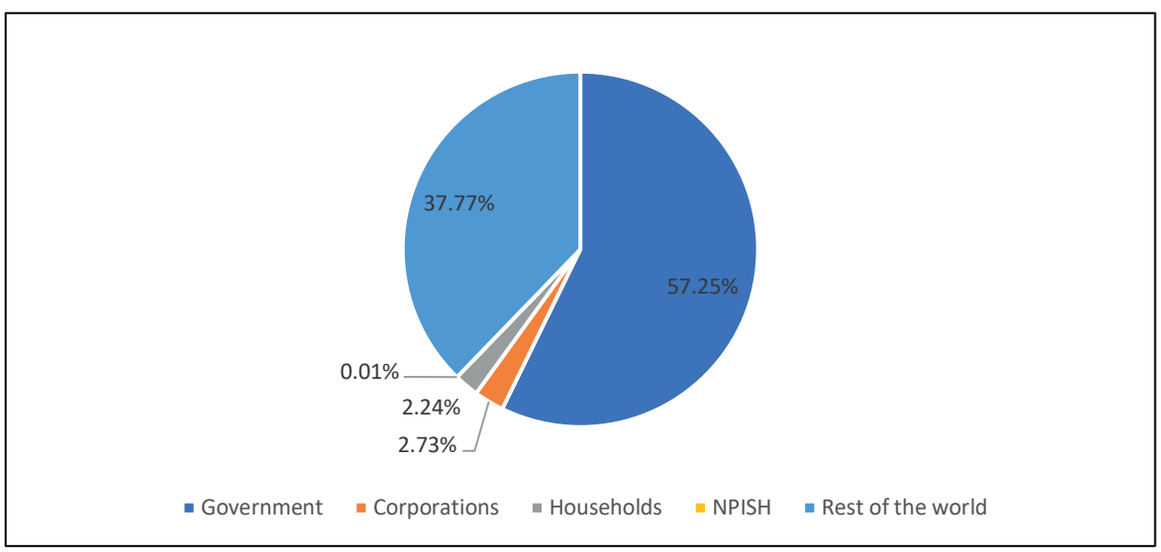
SECTION 9: SUSTAINABLE FINANCING

Programme objective: Mobilise adequate funding for the needs of the HIV response

Situational analysis

The Government of Botswana's investment in health is outlined in the National Development Plan (NDP) 11. The country achieved the Abuja target of allocating at least 15% of government expenditure for health by the end of NDP 10 (March 2018). The Government of Botswana (GoB) accounted for 75% of total health expenditure comprised of 75%, with the remaining 25% of funding from donors and other sources. (NDP 11). Of the total health expenditure, HIV accounted for 16% (National Health Accounts2013/14). A majority (57%) of the country's HIV spending was from the GoB, over one third from development partners and 5% from employers and household and less than 1% from civil society organisations.

Figure 24: HIV spending by funding source (National Health Account)



About 56% (BWP 4,217 Billion) of the HIV and AIDS funding was spent on curative care. The second largest share (39%) supported preventive care with a significant proportion spent on HIV surveillance and disease control programmes. The remaining amount was spent on governance, health systems strengthening and administration (9%) and ancillary services such as laboratory and patient transport (3%)[72].

The cost of combating the HIV epidemic is projected to increase due to the commitment to achieve universal access and the changing needs of services by PLHIV. On the other hand, donor support is expected to flat line or even decrease. The combination of these trends may present sustainability challenges in supporting the national response.

Botswana is projected to have a budget surplus over the next several years, and Gross Domestic Product growth of 4 % to 6% per year, giving the country space for increased expenditure on health care. However, after 2021, Gross Domestic Product growth is expected to decline substantially, and the budget is likely to enter into deficit. On the other hand, The Treat All Strategy, NSF III targets and Ending AIDS by 2030 call for an increase of resources to prevention efforts to reduce the future burden of the HIV epidemic.

[72] MoH (2016) Botswana 2013/14 Health Accounts Report

Gaps and challenges

- The need for massive initial investment in the Treat All approach, and long-term fiscal commitments for this approach, which will generate a long-term return on investment but exert pressure on the fiscal space in the short term.
- Declining donor funding, largely due to the country's upper middle income status
- Limited resources for primary prevention, with continued new HIV infections placing fiscal pressure on national resources, including co-morbidities which have negative implications for epidemiological and financial sustainability
- Inefficient allocation and use of resources for HIV
- Low absorption rates, especially for donor funding
- Limited synergies with universal health care coverage due to funding of HIV through a silo approach

Strategies

- *Improve coordination and resource allocation efficiency and transparency.* Mechanisms will be established for coordinating planning to reduce duplication and ensure resource allocation is in line with geographical, population and programmatic prioritisation.
- *Institutionalize resource tracking and efficiency analyses:* Botswana will undertake expenditure tracking, cost efficiency and effectiveness analyses, value for money analysis among other studies to improve technical efficiency of the response.
- *Take AIDS out of isolation through scale-up of integrated service delivery at facility and community levels:* Steps will be taken to scale up integration of HIV with TB, RMNCAH and NCDs at facility and community levels to reduce costs and reach more people.
- *Roll out differentiated HIV care models to maximise efficiencies:* Botswana will develop and implement care models for ART that improve efficiency and quality of services, promote sustainability of the ART programme long term, and reduce unnecessary clinical referrals by optimising service delivery at local levels.
- *Improve readiness for transition of funding of HIV programmes:* Botswana will develop and implement a plan for transition from donor funding in collaboration with development partners.
- *Operationalize social contracting to sustain financing of the community response:* Botswana will develop guidelines that clearly define the role of civil society in the HIV response and establish a government funding mechanism for civil society organisations, using social contracting mechanisms to scale up and sustain the community HIV response.
- *Optimise TRIPS flexibilities to achieve efficiencies in HIV commodity procurement:* Botswana will explore collaborating with Mauritius and Namibia (on ability to pay criteria) with technical support from WHO, UNICEF and UNFPA to implement TRIPS and undertake pooled procurement of HIV commodities.
- *Strengthen private sector funding of the HIV response:* Botswana will implement the public-private partnership model through consultations with government and the private sector. Under this framework, Botswana will establish the proposed private sector AIDS Fund.

- *Advocate for alternative funding mechanisms for HIV:* Botswana will develop a case for establishment of an HIV fund to support the HIV response for the long term. Such a fund could operate outside of government.
- *Increase the country's absorptive capacity especially for donor funds:* Botswana will strengthen the oversight system that tracks expenditure of donor funds and build the capacity of programme management to increase the expenditure rate for donor-funded programmes. Periodic reviews of programme implementation bottlenecks will be undertaken to identify factors accounting for slow expenditure of donor funds and provide solutions.
- *Ensure adequate resource allocation to HIV primary prevention:* Botswana will undertake a review on investment on HIV primary prevention and increase investment in HIV primary prevention incrementally to reach 25% by 2020.

SECTION 10:
COORDINATION AND ACCOUNTABILITY

" The coordination of the HIV response in Botswana is premised on the 'three ones' principles. "

10

SECTION 10: COORDINATION AND ACCOUNTABILITY

Programme objective: Ensure efficient and effective coordination of the HIV response across all sectors, programmes and at national and local levels

Situational analysis

The coordination of the HIV response in Botswana is premised on the 'three ones' principles. The National AIDS and Health Promotion Agency serves as the "one coordinating authority", the national HIV strategic framework guides all stakeholders and the "one monitoring and evaluation framework" for the HIV response provides the basis for unified reporting on the response. The HIV response coordination architecture comprises structures that coordinate a multi-sectoral response at the national, district and community levels.

The key structures coordinating the HIV response are as follows:

(i) The National AIDS and Health Promotion Council (NAHPC), established through a Presidential Directive CAB28/95, is the highest national-level coordinating body, with a mandate to oversee and advise government on policy matters relating to the multi-sectoral HIV response. NAHPC is chaired by the Vice President of the Republic of Botswana, and its membership consists of political and traditional leaders, accounting officers drawn from Government Ministries as well as representatives of civil society, private sector and development partners.

(ii) Joint Oversight Committee brings together key partners from all sectors at the national level to review progress in implementation of the HIV response, harmonise efforts of all stakeholders and address policy and strategic issues facing the HIV response.

(iii) The National AIDS and Health Promotion Agency (NAHPA) is the secretariat of NAHPC. Its mandate includes mapping and resource allocation and mainstreaming HIV activities across all ministries, ensuring an enabling policy environment for the response, HIV response information management and financial management. NAHPA facilitates the coordination of sectors implementing the national response through structures such as the Joint Oversight Committee and Technical Working Groups to ensure the HIV response is multi-sectoral.

(iv) District Multi-sectoral AIDS Committees (DMSACs) coordinate the HIV response at district level. DMSACs oversee the planning, implementation, monitoring and reporting of the HIV response in the district. The committee brings together stakeholders from all sectors to share information and lessons, review progress, promote joint planning and implementation and minimizes duplication.

(v) Village Multi-sectoral AIDS Committees (VMSACs) and Ward Multi-sectoral AIDS Committees (WMSACs) coordinate implementation of the HIV response at community level. These committees bring together implementers and community leaders to address the community's needs for HIV services.

(vi) Technical Working Groups (TWGs) coordinate the various HIV programmes. The groups bring together technical managers of the HIV programmes to review progress, identify challenges and solutions to improve the effectiveness of the response.

(vii) The public sector comprises all government ministries. Government ministries mainstream HIV activities internally to target employees and families, and undertake external mainstreaming of HIV activities in the programmes and services provided by the ministries. The Ministries have in place AIDS Coordination focal persons, with whom NAHPA works to coordinate the public sector response.

(viii) The Botswana National AIDS Service Organisations (BONASO) is the coordinating body for the civil society sector. The network ensures that civil society is represented in the coordination structures for the HIV response at all levels. Due to the need for alignment, integrated health approaches and enhanced community responses, there is need for better organised and enhanced civil society coordination that will close fragmentation and duplication gaps both at the National and district level

(ix) The Botswana Business Coalition on AIDS coordinates the HIV response among private sector firms and associations. The private sector plays a key role in providing HIV services to employees through workplace programmes and supporting HIV programmes through corporate social responsibility. The private health sector also complements the public sector health system in the provision of HIV prevention and treatment services.

(x) The Government collaborates with development partners to advance its HIV response agenda by focusing on: (i) accountability to national response structures; (ii) supporting information flow and exchange through participation in national coordinating structures; (iii) channelling assistance through a single entry point for HIV and AIDS in the country to avoid duplication and ensure sustainability of services; and (iv) participation in the development, review and implementation of joint operational plans and facilitate implementation.

Going forward, the coordination framework for the HIV response will be reconfigured to make it fit for purpose, in line with the strategic shifts outlined in NSF III. NAHPA will provide stewardship and high-level strategic leadership guided by the *Three Ones Principles.* Focus will be on strengthening district and community level coordination as the response shifts to prioritized geographical locations and populations; strengthening coordination of an integrated multi-sectoral response and improving coordination of strategic information to inform decision at levels among other new strategic directions. The revival of the Joint Oversight Committee and the various Technical Working Groups will enable a joint vision and close the coordination and duplication of efforts.

Gaps and challenges

- Coordination challenges of civil society organisations and overall community response
- Inadequate support for coordination as an enabler for programme delivery, ownership and accountability
- Lack of strong linkages between district and national level coordination structures and between sectors
- Inadequate functioning of programmatic coordination (Joint Technical Working Groups) structures
- Inadequate coordination of development partners
- Participation at high level coordination platforms delegated to junior representatives with no decision making authority
- Limited use of the NSF as a planning tool due to lack of familiarisation and parallel planning.
- Discontinuation of quarterly reporting to NAHPC, with a shift of focus from policy to operational matters.
- Less accountability of the HIV response to the local communities than to funding partners and government.

Strategies

- *Re-define the HIV coordination framework:* The coordination framework will be reviewed and re-defined to effectively coordinate the shift to new strategic directions outlined in NSF III. The coordination framework will remain multi-sectoral and provide mechanisms for coordinating integration of HIV with other health programmes and strengthen coordination and district and community levels.
- *Establish clear mechanisms for civil society, private sector and development partners' coordination:* Botswana will ensure a participatory approach for defining or establishing mechanisms for the coordination of these sectors in the HIV response at national, district and community levels. Structured dialogue with civil society, private sector and development partners will be conducted as a platform for coordination within and with other sectors.
- *Support the involvement of vulnerable populations in coordination:* Youth-led organisations and networks, key population networks and other networks of vulnerable populations will be supported to participate in coordination of their respective programmes.
- *Strengthen mechanisms for programmatic coordination:* The Technical Working Groups (TWG) will be strengthened to coordinate the implementation of the NSF. Programme coordination will be streamlined by establishing a combined prevention, care, treatment and support TWG to minimize leaks in the continuum and support a holistic approach to the client, whether HIV-positive or negative. Other TWGs will focus on Response Management and Strategic Information Management.
- *Strengthen NAHPA to provide overall leadership in the HIV response:* The organisational capacity of NAHPA will be strengthened accordingly to provide strategic and ensure the "three ones" principles continue being applicable in the coordination of the HIV response.
- *Build and strengthen the capacity of coordination structures at all levels, i.e. national, district and community levels to translate national strategies into local action plans:* NSF III will deliver HIV service packages relevant to prioritized populations in specific geographical areas. The district, ward and village level coordination structures will be trained on data use in planning, progress review and evaluation in order to micro-plan and target specific populations in their communities.

SECTION 11:
SYSTEMS STRENGTHENING

" This section outlines strategies for strengthening the community and health systems, with emphasis on the delivery of integrated HIV services. Areas with potential to maximize the achievement of positive HIV outcomes are prioritized. "

SECTION 11: SYSTEMS STRENGTHENING

11.1 Strengthening Community and Health Systems

This section outlines strategies for strengthening the community and health systems, with emphasis on the delivery of integrated HIV services. Areas with potential to maximize the achievement of positive HIV outcomes are prioritized.

11.1.1 Community Systems Strengthening

Programme objective: Refocus and enhance the effectiveness of community based HIV service delivery

Situational analysis

The Government of Botswana, the key player in the provision of health services in the country, is focusing on integration of services, disease prevention and wellness promotion, with the aim of effectuating a health sector transformation to increase sustainability and effectiveness. The community health system extends service delivery to the community level to improve access to health services and mitigate the capacity constraints that slow progress towards the achievement of universal healthcare coverage.

The key players in the community health system include the MoHW, CSOs including Non-Governmental Organisations (NGOs) and Community Based Organisations (CBOs); Faith Based Organisations (FBO), Traditional Healers, Community Governance Structures such as Village Health Committees and Village Development Committees, and communities themselves.

Community Health Workers (CHWs), linked to groups that are called by a variety of names, play a key role in the delivery of community health services. They extend healthcare to the community level, linking health facilities and communities and reaching populations that may otherwise not visit health facilities.

Commencing in the 1970s Family Welfare Educators were the main group undertaking community health care work. However, in the 1990s, to assist Botswana in the addressing issues related to the HIV epidemic, CSOs, supported by donor agencies and partners, began introducing additional Community Health Worker Groups (CHWGs) into Botswana's communities. Through the CHWGs, the CSOs (and CBOs) implement a wide spectrum of HIV interventions, including demand creation for HIV and TB services such as ART, VMMC, PMTCT, TB treatment adherence counselling and support, HIV testing services, provision of support to orphans and vulnerable children, palliative care, SBCC, condom and lubricants promotion and distribution, youth peer education, risk reduction education, STI screening and family planning services among others. CSOs reach populations that may otherwise not visit health facilities. There are specific CSOs targeting key populations (FSW and MSM) in identified hotspots. CSOs led by youth, women and other groups also mobilise communities to participate in HIV programmes and provide HIV prevention treatment and care services.

Weak inter-group linkages and coordination often hinder the great work that CHWGs perform and at times lead to service implementation overlaps. To address the lack of coordination, MoHW is implementing a Community Health Workers Groups Strategy and a strategy for the Harmonization of CHWGs. In addition, both strategies underscore the importance of the Village Health Committees (VHCs), Village AIDS Committees and Village Development Committees (VDCs) and the Community Health Workers (CHWs) in promoting the participation of communities in the HIV response as well as

in other health development programmes. They also underscore the importance of the Community Health Workers (CHWs) in linking communities to the health system.

The community systems structures (NGOs, VHCs, CBOs, CHWs) provide a critical link between the community and health sector HIV responses.[73]. However, the landscape for the HIV service delivery is changing and the community actors need to transit and refocus programmes accordingly. Key aspects of the changed landscape include the introduction of new technologies such as pre-exposure prophylaxis; the adoption of new strategies which include treat all strategy, differentiated service delivery models, targeted HIV case finding and integrated service delivery; and population focused approaches for reinvigorating HIV prevention. These changes require a re-tooling of technical competencies and capacities of community structures and systems.

Gaps and challenges[74]

- *Challenges of governance and accountability:* Absence of Comprehensive mapping of partners and lack of a Memorandum of Understanding (MOU) outlining rules of engagement and defining roles of community level actors; insufficient oversight of non-government health programmes and coordination between government and community structures, private sector and development partners.
- *Inadequate funding for civil society HIV programmes and community systems strengthening:* Heavy reliance on government and development partners funding which is often perceived as compromising advocacy for policy change.
- *Inequitable coverage of the community response*: This is due to resource constraints and the prioritization of selected high-impact areas for funding.
- *Human resources:* Unavailability of updated staffing estimates and contingency plans, inequalities in staffing of, facilities in urban compared to rural areas and lack of participation of community leadership in healthcare.
- *Challenges in the referral and follow up systems between community actors and other sectors especially the health sector*, including*:* This includes weak systems for community to facility referral of HIV clients, weak follow of HIV clients from the health facility to community level and inadequate facility-community collaboration in the provision of HIV services.
- *Lack of strong mechanisms for social mobilization and collaboration to identify and address community HIV and other health needs:* This is more pronounced in hard-to-reach areas and in reaching adolescents and young people, adult men and key populations
- *Inefficient service delivery:* This is as a result of vertical, insular health service delivery, top-down approaches in programming, inequitable service delivery, duplication in implementation of services, inefficient use of available resources and inadequate community participation in healthcare.
- *Inadequate uptake of high impact interventions including HIV services:* Poor uptake of HIV services due to inadequate ownership of health/HIV care by community leadership, weak systems for identifying gaps and challenges and feedback loop to provide information to communities
- Lack of synergies in monitoring systems between government and civil society organizations

[73] The structure and composition of DMSACs may have changed under the on-going restructuring of the overall HIV coordination structures

[74] Botswana Investment Case, 2016; Botswana Community Charter on five prevention pillars and getting to 90-90-90, HIV Stock Taking Reporting, 2016

- *Limited monitoring and evaluation of the outcomes of community response* with national programme reports rarely including activities and perspectives of civil society organisations

Strategies

- *Strengthen human resources for the community health/HIV response:* This will involve supporting CSOs to deploy adequate human resources, developing and operationalizing CHW institutionalisation plan, implementing the strategy for harmonization of CHWGs, and advocating for positions so that an adequate number of Community Health Workers can be hired and deployed to empower communities on healthcare management.
- *Establish mechanism for governance and accountability of the community HIV and health and HIV response:* This includes revitalising, empowering and building the capacity of existing community governance structures (VDC, VHC, VET, DDC and DC) to enable them make decisions and know their roles. Furthermore, a comprehensive mapping of partners (civil society, private sector and development partners) will be conducted and a MoU developed to outline rules of engagement and define each partner's role.
- *Strengthen community health information system:* The feedback loop will be strengthened to improve information flow in the communities through coordination of partners on accountability and management of health information, establishing a two-way referral system between CSOs and health facilities and define CSOs reporting system, and implement systems for identifying, tracking and giving feedback on community service delivery concerns.
- *Improve community level service delivery:* Priority actions will include developing and implementing a plan for institutionalisation of the Community Health Worker cadre, developing a need based integrated minimum health/HIV service package, promoting community participation in primary healthcare, rolling out robust best practices through community participation/outreach initiatives, providing client differentiated step-down care and implementing Peer Learning among districts.
- *Provide adequate funding for the community health/HIV response:* A community service improvement summit or forum will be held within communities to identify gaps, challenges and seek solutions for funding. Public private partnerships will be strengthened to support service delivery. Furthermore, social contracting between Government and CSOs in accordance with recently adopted guidelines on NGO support from the Ministry of Finance.
- *Ensure availability of essential medicines and technologies:* Efforts will be made to increase comprehensive community awareness on options for acute care, chronic care and rehabilitation including community responsibilities and ownership of healthcare provision, scale up communication and engagement to support leadership and social mobilisation including establishing a system for improve dialogue on health matters, and build the capacity of communities (and CSOs) on old and new technologies and medicines.
- *Establish mechanisms for community-led monitoring:* These mechanisms will provide feedback on the quality of HIV services and enable service providers improve services. Monitoring mechanisms will include community score-cards, client satisfaction surveys, and individual client reporting systems such as "I report" managed and implemented by civil society actors.
- *Enhance civil society capacity to undertaken advocacy:* Civil society organisations will be trained on advocacy and have access to inform advocacy initiatives aimed at improving service delivery at

community level, and addressing broader issues relevant to HIV such as stigma and discrimination, human rights, gender, sexual and reproductive health rights among others.

11.1.2 Human Resources for Health

Objective: Sustain the availability of an adequate number of skilled health care workers equitably distributed to support the provision of quality HIV services across all districts

Situational analysis

The Government of Botswana is the major employer of health workers. Prior to 2010, primary healthcare was managed by the Ministry of Local Government, but from April 2010, all the provision of all healthcare services was transferred to the Ministry of Health and Wellness. A shortage of skilled and qualified healthcare workers remains a major bottleneck towards the availability of accessible high quality healthcare in the country[75]. The table below shows the number of health staff by type and population ratios.

Table 10: Total number of human resources for Health (2010)

Cadre of staff	Number	Number per 10,000
Doctors	715	4
Nurses and midwifes	4,753	26
Pharmacists	333	2

Training of health workers is provided through a combination of in-country and out-of-country institutions, with heavy reliance of the latter. In-country training is done at eight institutions principally providing training in nursing, midwifery, health education, laboratory technology, radiography and dental technology. The University of Botswana trains a small number of nurses and health technologists. Due to limited output of nationally trained skilled professionals, the health sector employs expatriates to bridge the gap[76].

The density of health workers is highest in urban areas and lowest in rural districts. For instance, in 2012, Gaborone with 11% of the country's population had 250 (34%) doctors and 1113 (17%) nurses while Francis Town, with 5% of the population has 100 (13%) doctors and 530 (8%) nurses[77].

Table 11: Density of health workers (per 10,000 population) in Botswana per type of district

District type	Population	Doctor	Nurses and/or midwifes	Pharmacists	Dentists	Healthcare workers
Rural	98,816	3	26	1	0	45
Rural with urban villages	1,515,181	2	22	1	1	35
Urban	424,231	9	77	4	1	115
Total	2,038,228	4	42	2	1	65

Data source: Ministry of Health and Wellness, Department of Policy, Planning and Monitoring and Evaluation, 2012

75 Integrated Health Service Plan, 2010 - 2020
76 Ibid
77 Ministry of Health, Department of Policy, Planning and Monitoring and Evaluation , 2010

The doctor and nurse density in Botswana were found to be similar to Namibia and higher than most countries in the southern Africa region except South Africa 78. However, the number and distribution of staff still poses a challenge when the disease burden is considered. In order to meet health care needs including, there is a need for more health workers who are equitably distributed. As the HIV treatment and care service delivery starts utilizing community based models, more human resources capacity is needed at the clinics and community level.

According to the Botswana Human Resources for Health (HRH) Strategy of 2007, a standard approach was not taken in estimating staffing needs for ART sites. Planning long term at the beginning of the ART programme was also difficult and most variables such as mortality rates for PLHIV on ART were unknown and efficacious ARV drugs had not come to the market and their impact could not be estimated. Strategies such as treat all were also not envisaged at the time. The 2007 HRH plan underestimated patient enrolment for 2013 by 100,000; and projected a 23% increase in routine doctor visits, 29% increase in new patient doctor visits and 57% percent increase in nurse visits by 2016. The need for additional staff has been far greater than these estimates. Further mote, the HRH strategy of 2007 has not been updated to establish realistic projections human resources need.

Since 2010, the Government mandated a staff position decrease with a 10% cut for all staff positions across all ministries due to the global economic downturn. These cuts are expected to remain in place and even increase to about 25% in the near future. In addition, donor funding for staff positions has also been decreasing leaving major human resources gaps within the MOHW. About 300 donor-funded positions within the HIV programme have been withdrawn since 2010. These include pharmacists, doctors, M&E and IT staff.

One of the strategies to sustain service delivery in the context of staff shortages is task shifting. The country adopted nurse task shifting to improve delivery of ART in 2006. Since then over 600 nurses have been trained in ART prescription and dispensing. However, only a small proportion of nurses are prescribing ART in their facilities partly due to lack of a unified approach to their clinical deployment and utilization and continued lack of clarity regarding nurse's job descriptions and remuneration for the additional work load.

Gaps and challenges

- *Lack of an updated and realistic estimation of staffing levels* for provision of HIV services at different levels of the health system hierarchy and in the long term.
- *Inadequate number of skilled and qualified staff:* Increasing demand especially from the HIV and TB programmes has contributed to the burden facing the already overstretched workforce. New strategies such as treat all are being rolled out in the country with the same number of health care workers. Staff shortage are experienced especially in the areas of laboratory services contributing to long turn-around times for results, records management leading to incomplete data, pharmacy affecting consumption data management and poor patient counselling and service delivery resulting in long waiting times. Other areas affected are HIV provider initiated testing and counselling, contact tracing for TB patients and delivery of integrated HIV, TB, RMNCAH services among others.
- *Unclear policy on task shifting:* Especially with regard to remuneration, deployment and utilization of nurses for ART service delivery

[78] Nkomazana, O. et al. Human resources for health in Botswana: The results of in-country database and reports analysis, 2014

- *High staff turnover due to promotion of staff to other posts without succession plans:* Such staff leave with HIV service delivery experience and institutional and community knowledge resulting in disruption of services and necessitating continuous training as new staff are deployed.
- *Inequitable deployment of staff* across the country and failure to optimize existing skills mix
- *Reliance on development partners* to support community health workers for the implementation of patient centred services and community based support to PLHIV

Strategies

- Develop and implement strategies for maximizing the potential of existing staff mix to delivery services. Key approaches for maximising HR potential include task shifting and task sharing. To operationalize tack shifting and task sharing, policy, roles and responsibilities of various cadres of staff, training, support supervision and mentorship will be undertaken.
- Scale up the implementation of integrated community service delivery to ease the burden on health facilities
- Develop and implement a plan for absorbing community based workers currently supported by donor funded programmes to ensure continuity in service delivery
- Advocate for the review and updating of the human resources for health strategy for long term sustainability of the HIV, TB/HIV and sexual and reproductive health services
- Develop clear policies for task shifting of HIV service delivery to nurses and other lower cadre staff to promote sustainable service delivery

SECTION 12:

STRENGTHENING THE PROCUREMENT AND SUPPLY CHAIN OF HEALTH COMMODITIES

12

"NSF III aims to ensure adequate and uninterrupted supply of HIV medicines, medical supplies and equipment to support effective service delivery."

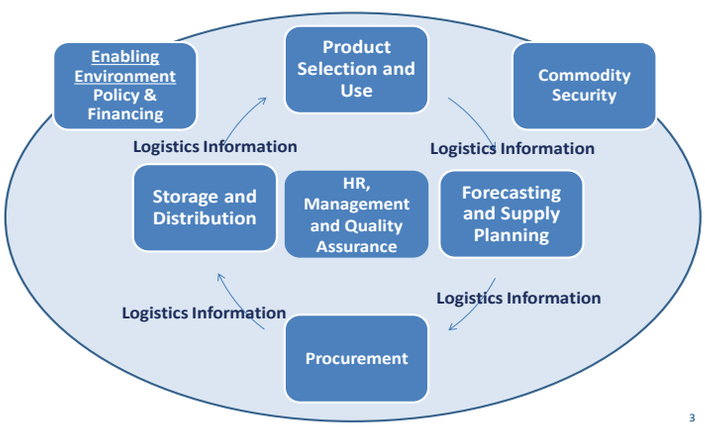
SECTION 12: STRENGTHENING THE PROCUREMENT AND SUPPLY CHAIN OF HEALTH COMMODITIES

Objective: Ensure adequate and uninterrupted supply of HIV medicines, medical supplies and equipment to support effective service delivery

Situational analysis

The supply chain system is "a network of connected and interdependent organizations mutually and co-operatively working together to control, manage and improve the flow of materials and information from suppliers to end-users" as shown in the supply chain framework[79].

Figure 25: Supply chain framework



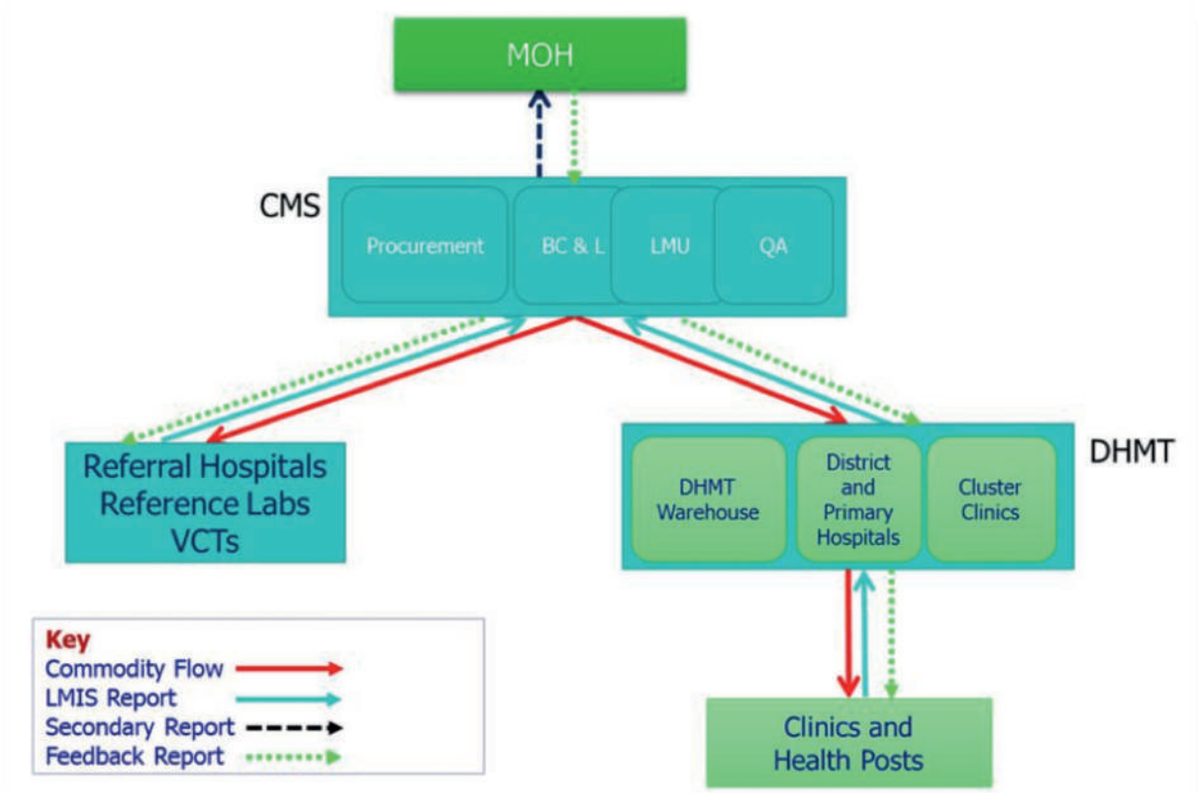
Central Medical Stores (CMS) is the organization mandated to supply medicines, medical supplies and other health commodities to all public-sector health facilities in Botswana. Its core functions include demand forecasting, procurement of commodities, quality assurance, warehousing and distribution of commodities to strategic delivery points. In discharging this responsibility, CMS works with several Government entities and other agencies including the Public Procurement and Asset Disposal Board, the Medicines Regulatory Authority (MRA) and development partners. The District Health Management Teams (DHMTs) are responsible for identifying district level commodity needs and redistribution of commodities from the strategic delivery points to downstream health facilities.

The DHMTs and national programmes such as the ART and TB programmes provide programme data, whereas facilities collect and submit consumption data to CMS to inform forecasting and procurement planning. Forecasting and logistics management capacity is being built with support from development partners to improve the supply chain system.

Figure 26 below shows the supply chain from CMS to service delivery points.

[79] Botswana National Supply Chain Strategy 2014-2019

Figure 26: Botswana Health Commodities Supply Chain



Key reforms have been undertaken to improve the supply chain management across the country. These include:

- Outsourcing of CMS warehousing and distribution of medicines and medical supplies,
- Dispensing of chronic medication through private pharmacies,
- Implementing 2 to 3-year framework contracts with suppliers
- Strengthening the Logistics Management Information System (LMIS).

Despite these reforms, challenges remain with respect to the supply chain management. Health facilities experience stock out of essential medicines as well as key HIV medicines and commodities such as HIV test kits, condoms, medicines for opportunistic infections and NCDs and laboratory reagents among others. Stock outs are largely attributed to the challenges listed below. To effectively implement the strategies outlined in NSF III, the procurement and supply chain need to be substantially improved to ensure adequate medicines and commodities are available up to the last mile service delivery points.

Gaps and challenges

- Shortage of skilled staff in quantification and forecasting and procurement planning. Although government has taken steps in recruiting qualified personnel, there are critical gaps in retaining them.
- Challenges of procurement and supply chain systems resulting in stock outs in some health facilities and excessive stocking in others. This is attributed to poor consumption and quantification information resulting in inappropriate procurement scheduling. Consumption data

from facilities is often incomplete and iNAHPCcurate. Furthermore, the warehouse management system at CMS does not interface with the facility level system, thus limiting data visibility and verification.

- Inadequate infrastructure at the DHMT (few warehouses, inadequate database capacity); inadequate policies on warehouse management; and storage facilities with limited space, insufficient maintenance, climate-controlled storage and communication (internet connection)
- Inadequate infrastructure at CMS (warehouse with limited space)
- Inadequate transportation for distribution of commodities from the CMS strategic distribution points to service delivery points (last mile) not covered by the outsourced distribution contract
- Logistical challenges in distribution of commodities to hard-to-reach areas
- Inadequate coordination of the national quality assurance systems and limited resources to support testing of products, post market surveillance, and pharmacovigilance processes
- Inadequate laboratory harmonization and standardization leading to proliferation of laboratory commodities
- Non-functioning drug therapeutic committees at most health facilities
- Multiple and parallel information management systems leading to inconsistent use of both manual and electronic systems at all levels.
- Limited technical capacity in contract management
- Lack of program level forecasting technical (TWG) working groups, except the ART TWG
- Lack of a national multi-sectoral commodity security TWG

Strategies

- *Strengthen logistics management information system (LMIS) of all medicines and medical supplies*: An electronic Logistics Information Management Systems (e-LMIS) pilot will be initiated in three district warehouses and three clinics in 2018 and will be rolled out to all districts by 2023 to improve supply management and consumption data that informs forecasting and procurement planning. Data collection at facility level will also be automated to ensure interface between CMS and facility level data. The data collection and reporting tools will also be harmonized to standardize data received from facilities.
- *Strengthen laboratory commodity supply chain:* The Laboratory Information Management System will be improved and linked to the LMIS to improve lab commodity forecasting and quantification as well as supply.
- *Establish a track and trace system for health commodities*: Global standards will be incorporated to improve traceability and minimize entry and use of counterfeit and falsified medicines
- *Improve skills and competencies in procurement and supply chain management*: CMS staff and healthcare workers at facility level will be trained in logistics management of health commodities logistics system, focusing on forecasting and quantification of commodities, capturing of consumption data, ordering, proper storage and handling and inventory management among other key areas. In addition, CMS staff will also be trained on forecasting and supply planning,

policy development, procurement and contract management. Supportive supervision and mentoring will be intensified to improve the supply chain management.

- *Improve warehousing capacity:* The capacity of district warehouses and facility level stores will be assessed and storage infrastructure improved based on the identified need. Some of the issues to be addressed include adequacy of equipment, security, space, communication and networking of warehouses.
- *Strengthen quality assurance systems for medicines and medical supplies:* This will include strengthening quality assurance coordination mechanism at national level, increasing resources for product testing, improving post market surveillance, and capacitating the therapeutic committees in all health facilities.
- *Harmonizing and improving standards across all laboratories:* This will involve standardization of testing menus across different levels of care and optimization of equipment to mitigate the proliferation of laboratory commodities. Furthermore, a long-term plan will be developed to accredit laboratories as well as improving supportive supervision to laboratories.
- *Strengthen coordination mechanism:* A national multi-sectoral commodity security technical working group will be established to ensure continuous availability of commodities.

SECTION 13:
STRATEGIC INFORMATION MANAGEMENT

" Strategic information management comprises of the monitoring and evaluation, surveys and surveillance and HIV research. "

SECTION 13: STRATEGIC INFORMATION MANAGEMENT

Programme objective: Ensure timely availability of comprehensive and quality data and strategic information products to inform policy, service delivery and programming

Situational analysis

Strategic information management comprises of the monitoring and evaluation, surveys and surveillance and HIV research.

Monitoring and evaluation of the HIV response in Botswana is anchored in the "three ones" principles. The "one M&E framework" is linked to M&E systems in all sectors that report on HIV indicators – the public health information system, other government ministries, civil society and private sector M&E systems.

Regarding the public health information system, the MoHW has in place four major electronic health information systems that it uses to collect and collate data: the Integrated Patient Management System (IPMS), Patient Information Management System (PIMS), District Health Information System (DHIS) and the Open Medical Records System (MRS).

- *Data capture system:* Patient data at health facility level is captured using IPMS and PIMS electronic systems are not available or not working, paper-based tools are used. IPMS is an online system while PIMS runs offline. The Open MRS is used to capture TB data. Data at district level and in hospitals is captured using paper based tools and the DHIS electronic system. At the district level, data from health facilities is aggregated either manually or using the DHIS web based electronic system.

  Community level data is captured by various organisations implementing the community HIV response using their own standalone data capturing systems which are either paper based or electronic.

- *Data entry:* Healthcare workers/clinicians are responsible for data entry at the facility level while district M&E officers with support of district programme officers, programme focal persons and data clerks (where available) are responsible for data entry at district level. On the other hand, TB data from health facilities is fed into the open MRS by the district TB coordinator.

- *Information systems support:* Each district has one Information Technology (IT) Officer deployed to support the PIMS while the IPMS is supported by a help desk at the MoHW composed of one permanent IT officer and five temporary officers supporting 27 health districts. The DHIS, a centralised web based system, is supported by one IT officer based at the MoHW.

- *Monitoring and evaluation personnel:* Each of the 27 districts is assigned one M&E Officer (as part of the DHMT) accounting for all health programmes, with the support of programme officers, programme focal persons and data clerks. Moreover, each district has one M&E officer, as part of the District AIDS Coordinating (DAC) office, responsible for monitoring district-level multi-sectoral HIV response including CSOs' community HIV response. At the national level, ARV, and TB each have a donor funded M&E officer working on contract; HTS has been assigned an M&E focal person; and PMTCT has an M&E officer employed on permanent position contract. Other programmes such as STI and SRH have a focal person assigned M&E duties.

- *Data archiving:* A data warehouse which serves as a data repository is in place at the MoHW headquarters. Where IPMS is used, data is transmitted real time to the repository while PIMS data backups are transported to the MoHW on a monthly basis on encrypted memory sticks. All health

facilities' data backups are also submitted together with paper-based summary reports. The data warehouse is managed by the informatics and IT unit composed of 2 officers that process and provide reports as required. A Data Warehouse Committee is also in place, tasked with the management of data requests.

Regarding M&E systems for civil society, private sector and other government ministries, other sectors implementing the HIV response have their own M&E systems unique from those used in public health facilities. Civil society organisations (implementing the community response) use their own standalone systems and tools to capture data and report. Private and public sector implementers have M&E systems that have integrated HIV data.

- *Surveys and surveillance:* The country has a surveillance system in place for HIV and has carried out several surveys, including the antenatal care sentinel surveillance and Botswana AIDS Impact Surveys (I, II and III), the Youth Risk, Biological and Behavioural Surveillance Survey (YRBBSS), Stigma Index Survey, Gender Indicators Survey, and the Behavioural and Biological Surveillance Survey (BBSS) for key populations among others. The Botswana AIDS Impact Survey (V) and the TB Prevalence Survey are also planned to be undertaken.
- *HIV research:* Various research on HIV has been carried out in Botswana by national programmes and academic institutions. The country continues to support and utilize HIV research findings to improve the HIV response.

Gaps and challenges

Challenges in availability of data at district level (DHIS)

- Irregular use of standardized data flow system
- Irregular submission of PIMS data backups to the district level
- Lack of interoperable between the electronic systems (PIMS and IPMS)
- Limited capacity for Operational Research to augment data gaps in the surveillance systems

Challenges in availability of community data at district and community level

- Unclear Community data reporting flow path to district and national levels
- Lack of protocols or standard operating procedures for community data sharing at district and national level
- Lack of standardized indicators for reporting by community partners
- Inadequate resources for most of the community organizations to capture and report data to district and national level

Challenges in data availability at the national level data warehouse

- Irregular submission of PIMS data backups to the Data Warehouse,
- Use of paper based reporting systems such that what reaches that MoHW is summary report in cases where electronic systems are not used
- Insufficient feedback provided downstream from national to district and to facility level
- Inconsistent generation of strategic information from surveillance, surveys and research (e.g. Stigma Index survey, Drug Resistance Surveys, BBSS, etc) to augment the Surveillance systems

- Out-of-date HIV Research Agenda and inadequate capacity to carry out research

Compromised data quality (completeness, accuracy and timeliness) due to:

- Inconsistent use of electronic systems
- Heavy work overload for the District M&E officers
- Unavailability of standard operating procedures for data collection and management
- Late reporting and non-reporting due to complexity within the data flow, attitude and work overload of personnel
- Failure to record other variables within the registers and reports and or compile a report from all health facilities due to lack of capacity, lack of prioritization of data entry and heavy work overload
- Some of the donor-funded programmes use their own databases, limiting data sharing which compromises alignment of interventions
- Use of paper based systems which compromises completeness, timeliness and accuracy

Insufficient M&E capacity

- Shortage of skilled monitoring and evaluation personnel at district and national level due to weak staff retention program. Most M&E positions are donor supported and the seasoned M&E staff tend to leave their posts when programmes close or when lucrative opportunities arise.
- Inadequate support supervision and mentorship at district and facility level for all health personnel carrying out the M&E functions
- M&E audits and routine data quality assessments are not conducted regularly

Strategies

Strengthen Health Information Management System at all levels (Community, Health facility, District level and National level)

- Strengthen the Implementation of the National M&E Work Plan at all levels and in all sectors
- Fast track the rolling out and support of electronic systems (PIMS and or IPMS) to all health facilities
- Increase personnel for Health Informatics at District and National level.
- Develop health information systems interoperability using the phase approach and develop the systems interfaces to be user friendly
- Provide On the Job training and mentoring on the use of the information systems
- Capacitate the current IT officers that support Health Information Management Systems on Health Informatics
- Build capacity of M&E officers in data analysis and develop data analysis plans at all levels
- Develop data entry and management standard operating procedures at all levels and for all sectors
- Develop, standardise and disseminate Community Health Systems Indicators

- Collaborate with academia and other institutions to strengthen HIMS and mobilise resources to support HIS strengthening

Establish and/or strengthen M&E systems and surveillance to provide real-time granular data

The country will explore use of technology and ensuring all national surveys are powered adequately to provide granular data to drive district level prioritisation and targeting of the response. Currently data is missing around HIV prevention pillars, TB, stigma and discrimination among other areas. The M&E system will be strengthened to address these data gaps.

Strengthen the capacity of the country to implement surveys and research at both national and district levels

- Review and update the HIV research agenda
- Develop and Implement a costed activity plan for the critical surveys and HIV & AIDS research that address NSF 2019-2023 data gaps at both national and district levels
- Disseminate the research plan and invite experts for collaboration in its implementation
- Build capacity of health care workers to conduct surveillance and research focusing on protocol writing, data management, analysis, report writing and writing for publication
- Undertake full implementation of case-based surveillance (CBS) for timely case detection - including point-of-care rapid testing
- Allocate adequate resources to enable and promote research within each programme
- Conduct mid-term and end-term evaluations of NSF III
- Develop and implement an action plan to utilise the conducted surveys and research to influence policy and programming
- Collaborate with academia and other research institutions to strengthen research and mobilise resource to fund research

Improve data quality at all levels and in all sectors reporting on HIV indicators

- Recruit additional data clerks at district level to support the district level data entry into DHIS
- Develop and implement a plan to absorb contract M&E officers, on permanent and pensionable basis, for all HIV and AIDS programs at national level
- Increase the number of personnel in the national Informatics Unit to carry out the responsibilities of data management within the data warehouse at national level
- Develop and implement a costed activity plan for Data Quality Assurance for all HIV and AIDS Programmes at health facility level
- Build the capacity on M&E, data management and analysis across all levels (community, health facility, district level and national level)
- Integrate a culture of data demand and information use at all levels

SECTION 14:

IMPLEMENTATION OF THE NSF III

" NSF III implementation will be implanted through advocacy, planning, monitoring and direct service delivery using a multi-sectoral approach. "

SECTION 14: IMPLEMENTATION OF THE NSF III

14.1 Following a Multi-sectoral Approach

NSF III implementation will be implanted through advocacy, planning, monitoring and direct service delivery using a multi-sectoral approach. Implementation will take place at national, district and community levels. The key service providers will include public sector institutions particularly the MoHW, private sector and civil society organisations. Mechanisms will also be put in place to ensure community participation in the response. Participation will be guided by mandate, capacity and comparative advantage of individual organisations.

14.1.1 Operational Planning

NSF III will be translated into action by developing a National Operational Plan (NOP). The NOP will detail activities to be implemented, timeframes for activity implementation, lead institutions responsible for implementation of activities and the cost. Activities will be linked to the strategies outlined in NSF III. The NOP will be developed through a consultative process with the respective programmes and implementers.

The NOP will form a basis for the development of a systems for tracking financial resources and programme implementation. The data collected through this system will inform efficiency analyses and will enable the country to interrogate the costs for activity implementation to identify cost efficiency gains.

The implementation of the NOP will be reviewed periodically, preferably every six months. At the end of the year, the NOP will be reviewed, and activities and the cost additional year added to it. The findings of the annual reviews will also inform adjustments to the NSF.

14.1.2 Monitoring and Evaluation of the NSF III

A robust monitoring and evaluation plan for NSF III will be developed to the operationalization of the NSF results framework. This plan will help to collect data on all the indicators in the NSF results framework and measure progress towards achievement of output, outcome and impact targets. The M&E plan will also be a tool for implementing the strategies for strategic information management outlined in section 12 of the NSF III.

14.1.3 Development of District-level Operational Plans and Targets

In order to decentralise the HIV response, the NSF implementation will be cascaded to the district level through the development of district HIV operational plans and targets. District operational plans will be linked to the national operational plan and will use formats and processes that are in line with district level development planning. The district level targets will be aligned to the NSF III results framework and will be in line with the HIV prioritisation in each individual district. All implementers from all sectors in individual districts will participate in the process of developing district targets based sub-national (district) level data. Relevant government ministry responsible and accountable for this planning process will be identified and its capacity strengthened.

14.1.4 District HIV Reviews

District HIV reviews will be undertaken to assess progress in implementation of HIV programmes, extent of achievement of district targets, identify challenges and seek solutions. These reviews will be organized by the mechanisms to be put in place to coordinate the HIV response at district level. All key implementers of the HIV response will participate in these reviews. District review reports will be submitted to the national level while the district HIV coordination platforms will ensure recommendations from the reviews are implemented.

14.1.5 Programme Technical Working Groups

TWGs for key programme areas will be established to review progress in implementation of the NSF. The TWGs will be established for HIV prevention, HIV treatment, care and support and Strategic Information and Knowledge Management, Financing of the HIV response. These groups will meet quarterly. They will provide feedback to the Joint Oversight Committee every six months.

14.1.6 Joint Oversight Committee (JOC)

The JOC will meet periodically to review progress at a strategic level. A dashboard that reports progress in achievement of output and outcome indicators will be established to provide user friendly information and enable the JOC to identify areas lagging being in implementation. The JOC will provide strategic and policy guidance to support the implementation of the HIV response.

ANNEX 1: ROLES AND RESPONSIBILITIES IN KEY INSTITUTIONS IN IMPLEMENTATION OF THE NSF III

Institution	Roles and responsibilities
National AIDS and Health Promotion Agency (NAHPA)	• Overseeing the day to day coordination and management of the NSF III • Developing, coordinating implementation and periodically reviewing the national operational plan • Developing and implementing of NSF III monitoring and evaluation plan • Reviewing, updating and implementing the NSF III coordination framework • Managing the development and implementation of the HIV and AIDS research agenda • Overseeing financial resource mobilization, allocation and review of cost efficiencies • Coordinating periodic reviews of NSF implementation through ensuring the convening TWGs, JOC and district level review meetings • Advocating for the multi-sectoral HIV response • Managing dissemination and communication of the NSF III to all stakeholders • Providing on-going strategic thinking and direction for the HIV response
Ministry of Health and Wellness	• Managing and implementing of the health sector HIV response • Developing and strengthening guidelines and protocols for service outreach and mobile services for key health sector activities • Continuing to provide technical support to other stakeholders in the development and implementation of health sector related activities • Strengthening monitoring, surveillance, clinical trials and HIV research activities • Testing, adapting and adopting new and alternative technologies for delivery of HIV prevention, treatment and care services • Strengthening the MoHW leadership role in advocacy for and development of HIV related policy • Strengthening the health system to deliver integrated HIV and health services
Ministry of Local Government and Rural Development	• Identifying and mobilizing of community structures in support of HIV and AIDS planning and programme implementation • Facilitating financial and programme monitoring and evaluation • Coordinating local level knowledge management and information dissemination • Strengthening the HIV coordination mechanisms at district and community levels
Ministry of Presidential Affairs, Governance and Public Administration	• Engaging the strategic office to act as a key driver of mainstreaming HIV and AIDS to ensure linkage with NDP 11 implementation, coordination and monitoring • Mainstreaming HIV and AIDS into the management of public service • Assessing and enhancing the capacity of the public service to respond to HIV and AIDS • Monitoring and implementation of HIV and AIDS related policies and administrative instruments within the public service • Developing public sector wide workplace HIV programmes • Providing policy and legal guidance to public sector institutions in the mainstreaming of HIV and AIDS into existing policies • Promoting awareness of the policy and legal issues surrounding HIV and AIDS through legal education programmes throughout the public service
Ministry of Finance and Economic Development	• Supporting joint planning and review methodologies under Results Based Management • Supporting cost-benefit analyses of major programmes within the national response and implementing agreed recommendations • Supporting the development of a long term financial horizon for the national response to HIV and AIDS

Ministry of Nationality, Immigration and Gender Affairs	• Strengthening the Ministry's leadership role in advocating for HIV and AIDS relevant policies and legislation addressing key sectors and populations (labour, women, immigration (non-citizens), prisons etc) • Facilitating the Men and Women's Sector Programmes • Coordinating gender mainstreaming in all HIV and AIDS Programmes • Supporting the development of HIV and AIDS related research on areas within its mandate – migrants, women and gender-based violence data. • Support gender responsive HIV and AIDS initiatives for strengthened response • Supporting the strengthening of civil society through re-engineered process of registration of community and faith based organisations • Developing the Ministry's capacity and role in monitoring the status of the epidemic in specific areas of its mandate, especially key and vulnerable populations
Ministry of Basic Education and Ministry of Tertiary Education, Research, Science and Technology	• Reviewing and revising pedagogical methods to promote behaviour change • Strengthening the Ministry's leadership role in the development of the policy environment dealing with HIV and education policy • Developing schools as platforms for delivery of local level, context and age specific HV education programmes • Supporting the establishment and undertaking key research especially using expertise within the university and other local and international tertiary institutions • Strengthening HIV and AIDS and SRH related curriculum into all levels and institutions
Ministry of Youth Empowerment, Sport and Culture Development	• Developing sports and culture oriented youth centres to reach at risk youth population with appropriate HIV and health messages and services • Utilising national and local sports teams to contribute and facilitate implementation of social and behavioural change communication • Providing technical expertise and resources for the development of culturally relevant HIV and AIDS related materials • Developing HIV and AIDS programmes specifically targeting out-of-school and unemployed youth • Coordinating and expanding implementation of HIV programmes through youth led civil society organisations • Strengthening the Ministry's leadership role in the advocacy for the development of HIV and AIDS related policy and legislation for the youth • Mainstreaming HIV and AIDS into the girl and boy child programmes
Ministry of Investment, Trade and Industry	• Integrating HIV and AIDS into policy and legislation instruments such as Trade and Liquor Act, Industrial Development Policy and Small Business and Micro Enterprise Policy • Improving regulation of the granting of liquor licenses • Promoting the development of appropriate HIV and AIDS policies in the private sector • Developing policies to improve access of young people to entrepreneurship opportunities • Assisting and supporting efforts to promote cost effectiveness of procurement of vital HIV commodities
Ministry of Transport and Communication	• Integrating internet and mobile telephones into HIV programme design and implementation • Promoting the development and devoting television air time to shows related to HIV and AIDS response • Providing leadership in advocating for development and legislation that promote expansion and utilization of communication technologies for the national response • Facilitating the linkage of various HIV and AIDS related programmes through communication technologies

All government ministries and departments	• Developing and implementing HIV and AIDS work place interventions • Sustain the integration of HIV and AIDS into policies and administration procedures • Monitoring implementation of HIV mainstreaming • Undertaking research and segment both institutional personnel and clientele • Developing HIV and AIDS related interventions aligned to institutional mandate, capacity and scope of operations that target specific populations
Private sector	• Apply private sector tools and techniques such as market segmentation and produce or service research and branding to HIV programming • Undertaking mainstreaming of HIV into the internal and external domains of the private sector enterprises • Utilizing private sector products, logistical networks and advertising channels to support implementation of the HIV and AIDS plans • Supporting the national M&E system by reporting on private sector interventions and sharing best practices • Mobilizing additional resources for planned HIV activities including financing specific HIV interventions • Providing mentorship to other private sector companies to effectively respond to the HIV epidemic
Civil society	• Identifying and assisting community based organisations and structures to mobilise human, financial and material resources to support HIV interventions • Participating in the development and review of HIV programmes at national, district and community levels • Strengthening civil society advocacy role • Collaborating with MOHW and other sectors to deliver integrated HIV services at community level • Participating in the development of the national HIV research agenda • Promoting development of local level HIV support groups and networks • Improving coordination of civil society organisations at all levels • Strengthening the capacity of local level programmatic monitoring and ensuring quality data gathering, analysis and utilization
Development partners	• Sharing information through participation in coordination structures and facilitating linkage to international forums • Providing financial and technical support to the country in a coordinated and harmonized approach • Ensuring adaptability to of their support to respond to emerging HIV priorities and specific interventions areas • Assisting in the development of joint operational plans through global experience, knowledge and information exchange • Enhancing support by rationalizing and streamlining reporting and planning periods with the national planning cycle • Strengthening inter-organisation and inter-agency coordination
The media	• Advocating for alternative channels of resources that will enable the media to play innovative and consistent role in the national response • Providing support to research, monitoring and evaluation through dissemination of results and findings to enhance public awareness and understanding of priority HIV related issues • Enhancing participation of all media channels in the national response through integrated cross-sectoral communication activities • Strengthening media HIV and AIDS capacity through periodic training • Providing active advocacy support for key strategic HIV issues • Developing a systematic, collaborative programme for media editors reporting on HIV related issues • Mobilise and galvanize communities for greater participation in HIV and AIDS planning, research, implementation, evaluation and documentation

Organised Labour	• Participating in joint planning and review processes for the national operational plan • Ensuring the dissemination and understanding of relevant policies, guidelines and codes of conduct among workers • Developing and implementing specific HIV programmes for labour, in partnership with employers • Strengthen labour's participation and integration with national and sub-national coordinating structures • Strengthening labour's leadership role in advocating for labour laws and policy development, especially those addressing HIV stigma and discrimination, access to HIV and health services and better human resources management practices • Developing strategies to link workers with a range of HIV and AIDS related services for prevention, treatment, care and support

Annex 2 : NSF III Results Framework

Result	Reference Number	Indicator	Disaggregation	Baseline			Targets					Comments
				Value	Year	Data source	2018	2019	2020	2021	2022	2023
Impact												
Reduced number of new infections of HIV among young people and adults by 75% by 2020 and 90% by 2023	I-1.1	Number of new HIV infections among 15+ year olds	All	13,208	2017	Spectrum 2018	10300	6801	3,302	3104	2906	This is based on a 75% reduction from 2010 to 2020 (Applied a interpolation from the 2017 point estimateup to 2020). A 90% reduction target by 2030 was applied , with a and a liner interpolation between 2020 and 2030. 2,708
			Male	6,047	2017	Spectrum 2018	4715	3113	1,512	1,421	1,331	1,240
			Female	7,160	2017	Spectrum 2018	5585	3688	1790	1683	1575	1468
	I.1.2	Number of new HIV infections among 15-24 year olds	All	5,079	2017	Spectrum 2018	3511	2391	1270	1,194	1,118	1,042
			Male	1,639	2017	Spectrum 2018	1099	755	410	385	361	336
			Female	3,440	2017	Spectrum 2018	2412	1636	860	808	757	705
	I.1.3	Number of new HIV infections among 10-19 year olds	All	2,117	2017	Spectrum 2018	1464	996	529	498	467	436
			Male	463	2017	Spectrum 2018	364	309	116	109	102	95
			Female	1,653	2017	Spectrum 2018	1368	1169	413	388	363	339
	I.1.4	Number of New Ifections among older Men 30-44 years	Men 30-44	1,972	2017	Spectrum 2018	1856	1174	493	463	433	New infections are consistently higher among older men aged 30-44 years. A request to add this from the Men thematic group. 404
Reduced the number of new infections among children (under 15 years) by 95% by 2023	I.1.5	Number of new infections among children under 15 years (0-14 years)	All	827	2017	Spectrum 2018	418	230	41	41	41	95% Reduction from 2010 to 202041
Reduced MTCT Rate to <1% by 2023	I.1.6	% of HIV infected infants aged 6-8 weeks who are born to HIV positive mothers	All	<1%	2017	Programme data	<1%	<1%	<1%	<1%	<1%	Global elimination target is <1%<1%
	1.1.7	% MTCT rate at 6 weeks		2.81	2017	Spectrum 2018	<1%	<1%	<1%	<1%	<1%	Global elimination target is <1%<1%
	1.1.8	% Final MTCT rate at breastfeeding		4.97	2017	Spectrum 2018	<1%	<1%	<1%	<1%	<1%	Global elimination target is <1%<1%
Reduced Incidence Prevalence Ratio to 1 by 2023	1.1.9	Incidence Mortality Ratio	All	2	2017	2018 Spectrum	1.99	1.69	1	1	1	1
Reduced Incidence Prevalence Ratio to 0.03 in 2023	1.1.10	Incidence Prevalence Ratio	All	0.04	2017	2018 Spectrum	0.03	0.03	0.03	0.03	0.03	0.03
Reduced New HIV Infections per 1000 uninfected population to 4.09 by 2023	1.1.11	New HIV Infections per 1000 uninfected population	All	8	2017	2018 Spectrum	6.66	5.59	5.02	4.6	4.23	The 2018-2023 figures are projections from What is the Global benchmark 4.09
Reduced AIDS Related Deaths to 1 205 per year by 2023	1.1.12	AIDS Realetd Deaths	All	5,878	2017	2018 Spectrum	3192	2330	1469	1381	1293	1205
Reduction of TB related dealths among people living with HIV by 75% by 2023	I.1.13	Mortality among HIV positive new and relapse TB patients	All	4279	2017	program data	3209	2140	1,070	856	642	75% reduction by 2020 and 90% reduction by 2023 . The number of TB related deaths among PLHIV is higher than the number of AIDS related deaths. Please confirm the baseline and targets with the TB Program. 428
Eliminate HIV related Stigma and Discrimination to <1% by 2023	I.1.14	% of women and men aged 15-49 who report discriminatory attitudes towards people living with HIV	All	13.20%	2013	BAIS IV	9%	6%	2%	<1%	<1%	<1%
Eliminate HIV-related stigma and discrimination in the health-care setting	I.1.13	% of FSW who avoided seeking health care (HIV testing or Medical care or HIV treatement) in the last 12 months	All	TBD	2017	Preliminary BBSS						
	I.1.14	% of MSM who avoided seeking health care (HIV testing or Medical care or HIV treatement) in the last 12 months	All	TBD	2017	preliminary BBSS						
Reduced Prevalence of recent intimate Partner Violence to <1% by 2023	I.1.15	% of ever-married or partnered women aged 15-49 who experienced physical or sexual violence from a male intimate partner in the past 12 months	All	3.10%	2013	BAIS IV	<1%	<1%	<1%	<1%	<1%	<1%

Annex 2 : NSF III Results Framework

Result	Reference Number	Indicator	Disaggregation	Baseline			Targets					Comments
				Value	Year	Data source	2018	2019	2020	2021	2022	2023
1.Specific programmes for adolescent girls and young women												
Outcomes												
90% of adolescents girls and young women reached with standardised packages of HIV Services by 2023	OC-1.1	**% of adolescents girls and young women reached with standardised packages of HIV Services by 2023**	Females 10-24 years				N/A	N/A	N/A	N/A	N/A	90
Increase % of young people 15-24 years of age reporting the use of condoms every-time they had sex with non-regular partners in the last 12 months to 95% by 2023	OC-1.2	% of young people 15-24 years of age reporting the use of condoms every-time they had sex with non-regular partners in the last 12 months	All	65.20%	2013	BAIS IV	**N/A**	**80**	**N/A**	**N/A**	**N/A**	**95**
Increased % of young women and men aged 15-24 years who correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission to 95% by 2023	OC-1.3	% of young women and men aged 15-24 years who correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission		47.9	2013	BAIS IV	**N/A**	80	**N/A**	**N/A**	**N/A**	Based on BIAS IV has 15-24 data 95
Reduced % of sexually active AYP 10-24 who had more than one sexual partner in the last 12 months to 29.2% among males and 17% among Females by 2022	OC-1.4	% of sexually active AYP 10-24 who had more than one sexual partner in the last 12 months	Males	49.2	2016	BYRBBSS	**N/A**	44.2	**N/A**	**N/A**	29.2	Assummption: gov't and key stakeholders (CSOs) invest in programs for AYP in and out of school (lifeskills, CSE, SBCC, YSF): reduce by 15% by 2023 N/A
			Females	37	2016	BYRBBSS	**N/A**	32	**N/A**	**N/A**	17	50% reduction by 2023N/A
Reduced % of young women and men aged 15-24 who have had sexual intercourse before the age of 15 to 2.20% by 2023	OC-1.5	% of young women and men aged 15-24 who have had sexual intercourse before the age of 15	All	4.40%	2013	BAIS IV	**N/A**	3.3	**N/A**	**N/A**	**N/A**	Consider using this global indicator. 2023 target of 50% reduction as set below2.20%
			Males	6.80%	2013	BAIS IV	**N/A**	5.1	**N/A**	**N/A**	**N/A**	3.40%
			Females	2.70%	2013	BAIS IV	**N/A**	2.025	**N/A**	**N/A**	**N/A**	1.35%
Reduced % of young women and men aged 15-24 who have had sexual intercourse before the age of 13 to 20.7% by 2023	OC-1.6	% young women and men aged 15-24 who had sexual intercourse before the age of 13	Males	41.4	2016	BYRBBSS	**N/A**	37.4	**N/A**	**N/A**	**N/A**	Reduce by 50% by 2023 Indicator to be monitored through Surveys20.7
			Females	22.1	2016	BYRBBSS	**N/A**	20.1	**N/A**	**N/A**	**N/A**	11
Reduced % male and female aged 10-24 years reporting having sexual partners 5 years older than them to 30% by 2023		% male and female aged 10-24 years reporting having sexual partners 5 years older than them	Males	69.7	2016	BYRBBSS	**N/A**	59.7	**N/A**	**N/A**	**N/A**	assumption: Age of consent of Bill will be passed into law and enforced; intensified efforts for females 30
			Females	72.6	2016	BYRBBSS	**N/A**	62.6	**N/A**	**N/A**	**N/A**	30
Reduced % of AYP who experienced physical or sexual violence from a male intimate partner in the past 12 months to 0% by 2023	OC-1.7	% of AYP who experienced physical or sexual violence from a male intimate partner in the past 12 months	Males	16.5	2016	BYRBBSS	**N/A**	13	**N/A**	**N/A**	**N/A**	Baseline covers 12-19 years. 0
			Females	29.9	2016	BYRBBSS	**N/A**	23.9	**N/A**	**N/A**	**N/A**	0
Increased % of Young People that use some form of Contraceptive to 95% by 2023	OC-1.8	% of Young People that use some form of Contraceptive	All	83.80%	2016	BYRBBSS	N/A	90%	N/A	N/A	N/A	(Number of currently sexually active women 15-24 using a contraceptive method / Total number of currently sexually active women 15-24) x 100. 2007 Family Health survey only has prevalence for women 15-49 years-52.8%95%
Reduced % of adolescents who have ever been pregnant or caused a pregnancy to 5% by 2023	OC-1.9	% of adolescents who have ever been pregnant or caused a pregnancy	Males	13.0	2016	BYRBBSS	N/A	11	N/A	N/A	N/A	Number of adolescent females who report having ever been pregnant/ Total number of adolescent females) x 100 OR Number of adolescent males who report having ever caused a pregnancy/ Total number of adolescent males) x 1005
			Females	13.4	2016	BYRBBSS	N/A	10	N/A	N/A	N/A	5
Increased % HPV vaccine coverage among adolecent girls aged 9-13 to more than 98.6% by 2023	OC-1.10	% HPV vaccine coverage among adolecent girls aged 9-13	Females	89.6	2016	Programme Data	91.4	93.2	95	96.8	98.6	HPV Vaccine coverage from Programme data >98.6
Maintain Percentage of schools that provides lifeskills based HIV and sexuality education in the previous academic year at 100% through to 2023	OC-1.11	Percentage of schools that provides lifeskills based HIV and sexuality education in the previous academic year		100%	2017	MoESD Programme Data	100%	100%	100%	100%	100%	No baselline. Data is colllected through EMIS100%
Increased % of Health Facilities providing targeted integrated SRHR/HIV services to adolescents and Young People to xxx% by 2023	OC-1.14	% Health Facilities providing targeted integrated SRHR/HIV services to adolescents and Young People		TBD		ASRH Program Data	TBD	TBD	TBD	TBD	TBD	TBD

Annex 2 : NSF III Results Framework

Result	Reference Number	Indicator	Disaggregation	Baseline			Targets					Comments
				Value	Year	Data source	2018	2019	2020	2021	2022	2023
2. Specific programmes for boys, young men and adult men												
Outcomes												
Increase % of adolescent boys and young men (10-24) and men aged 25 years and older reached with a defined integrated service package of HIV prevention, treatment, care and support interventions to 90% by 2023	OC-2.1	**% of adolescent boys and young men (10-24) and men aged 25 years and older reached with a defined integrated service package of HIV prevention, treatment, care and support interventions**	**10 - 24 yrs**	-	-	-	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**90%**
			25 - 64yrs	-	-	-	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**90%**
Increase % of men 15-49 years with more than one partner in the past 12 months who report the use of a condom during last sex to 95% by the end of 2023		% of men 15-49 years with more than one partner in the past 12 months who report the use of a condom during last sex		76.2	2013	BAIS IV	N/A	85	N/A	N/A	N/A	Indicator to be monitored through BAIS 95
Increased % of men 15-49 years who report the use of a condom during last sex to 90% by 2030	OC-2.2	% of men 15-49 years who report the use of a condom during last sex					N/A	TBD	N/A	N/A	N/A	Indicator to be monitored through BAIS 90%
Increase % of men 25 years and older reached with standardised package of HIV prevention services including screening for STIs, TB, Testing, VMMC and SRH Services to 90% by 2023	OC - 2.3	% of men 25 years and older reached with standardised package of HIV prevention services including screening for STIs, TB, Testing, VMMC and SRH Services					N/A	60	N/A	N/A	N/A	Indicator to be monitored through BAIS 90

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Result	Reference Number	Indicator	Disaggregation	Baseline			Targets					Comments
				Value	Year	Data source	2018	2019	2020	2021	2022	2023
3. Targeted HIV prevention interventions key populations												
Outcomes												
Increased HIV prevention coverage among key populations to more than 90% by 2023		% HIV prevention coverage among key populations	All	-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			FSW	-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			MSM	-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			Transgender	-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Increased HIV Treatment coverage among key Populations to 90% by 2023		% HIV Treatment coverage among key Populations	**All**									
Increased HIV care and support service coverage among key populations to more than 90% by 2023		% HIV care and support service coverage among key populations	**FSW**	**88%**	**2017**	**BBSS III (2018)**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**Could be monitored annually through modelling, else monitor progress through surveys**>90%
			MSM	**74%**	**2017**	**BBSS III (2018)**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**>90%**
			Transgender	**100%**	**2017**	**BBSS III (2018)**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**>90%**
			All	-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
		% HIV care and support service coverage among FSW	**<25 yrs**	-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			25yrs+	-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
		% HIV care and support service coverage among MSM	**<25 yrs**	-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			25yrs+	-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
		% HIV care and support service coverage among Transgender people	**<25 yrs**	-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			25yrs+	-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Reduced Percentage of female sex workers who avoided seeking healthcare in the last 12 months to xxx by 2023	OC-3.1	Percentage of female sex workers who avoided seeking healthcare in the last 12 months	**<25 yrs**	-	-	-	TBD	TBD	TBD	TBD	TBD	TBD
			25yrs+	-	-	-	TBD	TBD	TBD	TBD	TBD	TBD
Reduced Percentage of men who have sex with men who avoided seeking healthcare in the last 12 months to xxxx by 2023	OC-3.2	Percentage of men who have sex with men who avoided seeking healthcare in the last 12 months	**<25 yrs**	-	-	-	TBD	TBD	TBD	TBD	TBD	TBD
			25yrs+	-	-	-	TBD	TBD	TBD	TBD	TBD	TBD
Reduced Percentage of Transgender individuals who avoided seeking healthcare in the last 12 months to xxxx by 2023	OC-3.3	Percentage of Transgender individuals who avoided seeking healthcare in the last 12 months	**<25 yrs**	-	-	-	TBD	TBD	TBD	TBD	TBD	TBD
			25yrs+	-	-	-	TBD	TBD	TBD	TBD	TBD	TBD
Increased percentage of FSW reporting using a condom with their most recent client to xxxx by 2023	OC-3.4	percentage of FSW reporting using a condom with their most recent client	All	75.70%	2017	BBSS III (2018)	N/A	N/A	TBD	N/A	N/A	TBD
			<25 yrs	-	-	-	TBD	TBD	TBD	TBD	TBD	TBD
			25yrs+	-	-	-	TBD	TBD	TBD	TBD	TBD	TBD
Increased percentage of men reporting using a condom the last time they had anal sex with male partner to xxxx by 2023	OC-3.5	percentage of men reporting using a condom the last time they had anal sex with male partner	All	77.50%	2017	BBSS III (2018)	N/A	N/A	TBD	N/A	N/A	TBD
			<25 yrs	-	-	-	TBD	TBD	TBD	TBD	TBD	TBD
			25yrs+	-	-	-	TBD	TBD	TBD	TBD	TBD	TBD
Increased Percentage of transgendered people reporting using a condom during their most recent sexual intercourse or anal sex to xxxx by 2023	OC-3.6	Percentage of transgendered people reporting using a condom during their most recent sexual intercourse or anal sex.	All	60%	2017	BBSS III (2018)	N/A	N/A	TBD	N/A	N/A	The Baseline value is for condom use at last anal sexTBD
			<25 yrs	-	-	-	TBD	TBD	TBD	TBD	TBD	TBD
			25yrs+	-	-	-	TBD	TBD	TBD	TBD	TBD	TBD
Reduced Percentage of sex workers with active syphilis to 1.5% by 2020 and <1% by 2023	OC-3.7	Percentage of sex workers with active syphilis		9.40%	2017	BBSS III (2018)	N/A	N/A	1.5	N/A	N/A	<1
Reduced Percentage of men who have sex with men with active syphilis to 1.5% in 2020 and <1% in 2023	OC-3.8	Percentage of men who have sex with men with active syphilis		3.20%	2017	BBSS III (2018)	N/A	N/A	1.5	N/A	N/A	<1
Reduced Percentage of Transgender persons with active syphilis to xxxx by 2023		Percentage of Transgender persons with active syphilis		0.00%	2017	BBSS III (2018)	N/A	N/A	TBD	N/A	N/A	TBD
Increased Percentage of sex workers who tested for HIV in the past 12 months or know their current HIV status to xxx% by 2023	OC-3.9	Percentage of sex workers who tested for HIV in the past 12 months or know their current HIV status		51.60%	2017	BBSS III (2018)	N/A	N/A	TBD	N/A	N/A	TBD
Increased percentage of MSM who tested for HIV in the past 12 months or know they are living with HIV to xxxx by 2023	OC-3.10	percentage of MSM who tested for HIV in the past 12 months or know they are living with HIV		70%	2017	BBSS III (2018)	N/A	N/A	TBD	N/A	N/A	TBD
Increased percentage of Transgender persons who tested for HIV in the past 12 months or know they are living with HIV to xxxx by 2023		percentage of Transgender persons who tested for HIV in the past 12 months or know they are living with HIV		77%	2017	BBSS III (2018)	N/A	N/A	TBD	N/A	N/A	TBD
Reduced Prevalence of HIV-Hepatitis coinfection among KPs to <1% in 2023	OC-3.14	Prevalence of Hepatitis and coinfection with HIV among KPs	**All**	TBD	2017	BBSS III (2018)	N/A	N/A	1.5	N/A	N/A	Baseline values input are for Hepatitis B, Survey identified 0% prevalence of Hepatitis C<1
			FSW	4.20%	2017	BBSS III (2018)	N/A	N/A	TBD	N/A	N/A	Baseline values input are for Hepatitis B, Survey identified 0% prevalence of Hepatitis CTBD
			MSM	4.60%	2017	BBSS III (2018)	N/A	N/A	TBD	N/A	N/A	Baseline values input are for Hepatitis B, Survey identified 0% prevalence of Hepatitis CTBD
			Transgender	2.10%	2017	BBSS III (2018)	N/A	N/A	TBD	N/A	N/A	Baseline values input are for Hepatitis B, Survey identified 0% prevalence of Hepatitis CTBD

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Result	Reference Number	Indicator	Disaggregation	Baseline			Targets					Comments
				Value	Year	Data source	2018	2019	2020	2021	2022	2023
4. Condom programming												
Outcomes												
Increased condom use at last sex among high-risk males and females to 90% by 2023		% condom use at last sex among high-risk males and females	All	62.6	2013	BAIS IV (2013)	N/A	N/A	N/A	N/A	N/A	Baseline obtained from pop-15 -49yrs for condom use with Non-regular partner. This indicator is to be tracked from the general population among males and females having sex with non-regular partner90%
Increased % of young people 15-24 years with more than one partner in the past 12 months who report the use of a condom during last sex to more than 90% by 2023	OC-4.1	% of young people 15-24 years with more than one partner in the past 12 months who report the use of a condom during last sex	M-15-24 years	66	2013	BAIS IV (2013)	N/A	80	N/A	N/A	N/A	≥90
	OC-4.2		F - 15-24 years	70	2013	BAIS IV (2013)	N/A	80	N/A	N/A	N/A	≥90
Increased % of people 15-64 years having sex with Non-regular partner who report the use of a condom during last sex to 90% by 2023		% of people 15 - 64 years having sex with Non-regular partner who report the use of a condom during last sex	15 - 24 years	65.20%	2013	BAIS IV (2013)	N/A	TBD	N/A	N/A	N/A	90%
			25 - 64 years	30.50%	2013	BAIS IV (2013)	N/A	TBD	N/A	N/A	N/A	90%
	OC-4.3	% of men and women 15-49 years with more than one partner in the past 12 months who report the use of a condom during last sex	M- 15-49 years	76.2	2013	BAIS	N/A	90	N/A	N/A	N/A	≥90
	OC-4.4		F - 15-49 years	71.2	2013	BAIS	N/A	90	N/A	N/A	N/A	≥90
5. Voluntary Medical Male Circumcision												
Outcomes												
Increase male circumcision coverage among 10-29-year-old males to 90% by 2021 through to 2023		**%males aged 10 -29 yrs circumcised**		-	-	-	**N/A**	**N/A**	**N/A**	**90%**	**N/A**	**Indicator to be tracked via Survey** 90%
Increased % of Males circumcised per year against target to 2023	OC-5.1	% of mles 10-29 years circumcised		36	2017	Programme M&E Data	50	60	70	85	90	90
6. Pre Exposure Propylaxis												
Outcomes												
Increased % of people at substantial risk of HIV Infection initiated on PrEP to 88% by 2023	OC-6.1	% of people at substantial risk of HIV infection initiated on PrEP and offered condoms by age and sex	Total	0	2017	UNAIDS , 2016 PrEP Feasibility & implementation in Botswana	#REF!	#REF!	#REF!	#REF!	#REF!	Global experience shows that uptake of PrEP declines after screening & counselling. PrEP uptake will increase as awareness raising increases .We need to ensure that PrEP does not result in behavioral disinhibition#REF!
			FSWs	0	2017	UNAIDS , 2016 PrEP Feasibility & implementation in Botswana	#REF!	#REF!	#REF!	#REF!	#REF!	UNAIDS feasibility study indicated that there are 18 000 FSW and 62% of them are HIV + and therefore 38% are negative. Acceptance rate of 35% give us a total of 2394 FWS eligible. Indicator will be monitored annually from program implementation#REF!
			MSM	0	2017	UNAIDS , 2016 PrEP Feasibility & implementation in Botswana	#REF!	#REF!	#REF!	#REF!	#REF!	1% (12261)of the total males population in BW are MSM and 13.5% are HIV positive and 35% of the negative (10606) are eligible = 3712#REF!
			Targetted Adolescents and Young Girls	0	2017	N/A	#REF!	#REF!	#REF!	#REF!	#REF!	out of the total Population of AGYW, 5% are at risk of contacting HIV, and with 35% acceptability rate within those that are at risk it adds to 4472. Indicator will be monitored annually from program implementation42
			Discordant couples	0	2017	BHP, Discordant couples study	10	10	13.5	19.2	30	Indicator will be monitored annually from program implementation.37
7. HIV Testing Services												
Outcomes												
Increased % of PLHIV who know their HIV Status to 90% by 2020 and 95% by 2023		**% of PLHIV who know their HIV Status**	**All**	**86**	**2017**	**Spectrum 2018**	**88**	**89**	**90%**	**92**	**94**	**95%**
			Males 15+ years	74%	2017	Estimates 2018	90%	90%	95%	95%	95%	95%
			Females 15+ years	94%	2017	Estimates 2018	95%	95%	95%	95%	95%	95%
			0-14 year olds	87%	2017	Estimates 2018	90%	90%	95%	95%	95%	95%
			Males 15-24 years	TBD	2017	Estimates 2018	90%	90%	95%	95%	95%	95%
			Females 15-24 years	TBD	2017	Estimates 2018	90%	90%	95%	95%	95%	95%
		% of PLHIV who know their HIV Status	**All**	**86**	**2017**	**Spectrum 2018**	**N/A**	**89**	**N/A**	**N/A**	**N/A**	**Indicator to be monitored via Survey**95%

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Result	Reference Number	Indicator	Disaggregation	Baseline			Targets					Comments
				Value	Year	Data source	2018	2019	2020	2021	2022	2023
8. HIV treatment												
Outcomes												
	OC-8.5											
Increase % of People Living with HIV on ART to more than 90% by 2023		95% of people with HIV receiving antiretroviral therapy	All	84%	2017	AIDSInfo.unaids.org 2018	N/A	N/A	N/A	N/A	N/A	Indicator to be tracked via a survey95%
			Males 15+ years	72%	2017	AIDSInfo.unaids.org 2018	N/A	N/A	N/A	N/A	N/A	Indicator to be tracked via a survey95%
			Females 15+ years	94%	2017	AIDSInfo.unaids.org 2018	N/A	N/A	N/A	N/A	N/A	Indicator to be tracked via a survey95%
			Males 15-24 years	64%	2017	AIDSInfo.unaids.org 2018	N/A	N/A	N/A	N/A	N/A	Indicator to be tracked via a survey95%
			Females 15-24 years	64%	2017	AIDSInfo.unaids.org 2018	N/A	N/A	N/A	N/A	N/A	Indicator to be tracked via a survey95%
Increase % of People Living with HIV on ART to more than 90% by 2023		95% of people with HIV receiving antiretroviral therapy	All	84%	2017	AIDSInfo.unaids.org 2018	86%	88%	91%	93%	95%	Second treatment cascade target: 90% 95%
			Males 15+ years	72%	2017	AIDSInfo.unaids.org 2018	81%	81%	90%	90%	90%	95%
			Females 15+ years	94%	2017	AIDSInfo.unaids.org 2018	95%	95%	95%	95%	95%	95%
			Males 15-24 years	64%	2017	AIDSInfo.unaids.org 2018	81%	81%	90%	90%	90%	95%
			Females 15-24 years	64%	2017	AIDSInfo.unaids.org 2018	81%	81%	90%	90%	90%	95%
			0-14 year olds	68%	2017	AIDSInfo.unaids.org 2018	81%	81%	90%	90%	90%	95%
Increase % of people living with HIV that are Virally Suppresssed to 86% by 2023	OC-8.9	% of people living with HIV Virall Suppresssed	All	81%	2017	AIDSInfo.unaids.org 2018	N/A	86%	N/A	N/A	N/A	Indicator to be monitored via Survey86%
			15+ years	84.5	2017	AIDSInfo.unaids.org 2018	N/A	86%	N/A	N/A	N/A	Indicator to be monitored via Survey86%
			0-14 years	65%	2017	AIDSInfo.unaids.org 2018	N/A	73%	N/A	N/A	N/A	Indicator to be monitored via Survey86%
			Males 15+ years	70%	2017	AIDSInfo.unaids.org 2018	N/A	73%	N/A	N/A	N/A	Indicator to be monitored via Survey86%
			Females 15+ years	91%	2017	AIDSInfo.unaids.org 2018	N/A	86%	N/A	N/A	N/A	Indicator to be monitored via Survey86%
			15-24 years	85%	2017	AIDSInfo.unaids.org 2018	N/A	73%	N/A	N/A	N/A	Indicator to be monitored via Survey86%
Increase % of people living with HIV that are Virally Suppresssed to 86% by 2023	OC-8.9	% of people living with HIV Virall Suppresssed	All	81%	2017	AIDSInfo.unaids.org 2018	86%	86%	86%	86%	86%	Indicator to be monitored via Program data and UNAIDS Estimates on PLHIV86%
			15+ years	84.5	2017	AIDSInfo.unaids.org 2018	86%	86%	86%	86%	86%	Indicator to be monitored via Program data and UNAIDS Estimates on PLHIV86%
			0-14 years	65%	2017	AIDSInfo.unaids.org 2018	73%	73%	86%	86%	86%	Indicator to be monitored via Program data and UNAIDS Estimates on PLHIV86%
			Males 15+ years	70%	2017	AIDSInfo.unaids.org 2018	73%	73%	86%	86%	86%	Indicator to be monitored via Program data and UNAIDS Estimates on PLHIV86%
			Females 15+ years	91%	2017	AIDSInfo.unaids.org 2018	86%	86%	86%	86%	86%	Indicator to be monitored via Program data and UNAIDS Estimates on PLHIV86%
			15-24 years	85%	2017	AIDSInfo.unaids.org 2018	73%	73%	86%	86%	86%	Indicator to be monitored via Program data and UNAIDS Estimates on PLHIV86%

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Result	Reference Number	Indicator	Disaggregation	Baseline			Targets					Comments
				Value	Year	Data source	2018	2019	2020	2021	2022	2023
9. Elimination of Mother to Child Transmission of HIV												
Outcomes												
Reduced mother to child transmission rate to less than 1% by 2023		% estimated MTCT rate	6 weeks	2.81%	2017	Spectrum 2018	2.484	2.123	1.762	1.401	1.04	<1%
		% reported MTCT rate	6 weeks	1.40%	2017	Program Data	1.3	1.2	1.1	1	<1	<1%
		% estimated Final MTCT rate	8 weeks - 18 months	4.97%	2017	Spectrum 2018	4	3.03	2.06	1.09	0.12	<1%
		% reported MTCT rate	8 weeks - 18 months	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	OC-9.1	% of pregnant women with known HIV status		96	2017	Programme data	97	≥98	≥98	≥98	≥98	% of pregnant women tested for HIV at ANC - Programme data 2017 ≥98
	OC-9.2	% of male partners of pregnant women tested for HIV		17	2017	Programme data	30	40	50	70	80	Targets adjusted upwards. strategies will include self testing and roll out of ICPT amongst partners and use of CSO networks for F/U on ICPT80
	OC-9.3	% of pregnant women living with HIV who received antiretroviral medicine to reduce the risk of mother-to-child transmission of HIV		≥95	2016	UNAIDS	≥95	≥95	≥95	≥95	≥95	Baseline data source: UNAIDS aidsinfo≥95
	OC-9.4	% of syphilis-seropositive pregnant women treated	-	-	-	-	≥95	≥95	≥95	≥95	≥95	Treatment of syphilis among pregnant women is part of the strategy for dual elimination (HIV and Syphilis). 95% coverage can be achieved with a strong procurement and supply system, support supervision and mentorship, training of HCWs, sensitisation of pregnant women, ensuring all pregnant women are screened and tested for syphilis etc). Indicator to be monitored from Program data.≥95
	OC - 9.5	% of pregnant women with known HIV status already on ART		63.58	2017	Programme data	69.864	76.148	82.432	88.716	95	Indicator to be monitored from Program data.95
	OC - 9.6	% of pregnant women testing HIV Positive started on ART >4 weeks before labour/delivery		30.27	2017	Programme data	41.06	51.85	62.64	73.43	84.21	Indicator to be monitored from Program data.95
	OC-9.7	Percentage of reported congenital syphilis cases (live births and stillbirths)		-	-	-	TBD	TBD	TBD	TBD	TBD	Indicator to be monitored from Program data.TBD
10. Stigma and discrimination, gender and human rights												
Outcomes												
Reduced HIV related stigma and discrimination among PLHIV from 13.2% in 2013 to less than 5% by 2023		% of people reporting having personally felt discrimintated against or harrassed in the previous 12 months on the basis of a ground of dicrimination prihibited underinternational law	PLHIV	13%	2013	Stigma Index Survey Report Botswana, 2014	N/A	N/A	N/A	5%	N/A	N/A
Reduced Avoidance of health care among key populations because of stigma and discrimination to xxx by 2023		% of key populations who report to have Avoided health care because of stigma and discrimination	FSW	-	-	-	N/A	N/A	TBD	N/A	N/A	TBD
			MSM	-	-	-	N/A	N/A	TBD	N/A	N/A	TBD
			Transgender	-	-	-	N/A	N/A	TBD	N/A	N/A	TBD
Reduced % of people living with HIV who report experiences of HIV-related discrimination in healthcare settings to xxx by 2023		Percentage of people living with HIV who report experiences of HIV-related discrimination in healthcare settings	General Population	-	-	-	N/A	N/A	N/A	N/A	TBD	**This should be tracked by Stigma in the Health Care setting Survey**N/A
			FSW	-	-	-	N/A	N/A	N/A	N/A	TBD	N/A
			MSM	-	-	-	N/A	N/A	N/A	N/A	TBD	N/A
			Transgender	-	-	-	N/A	N/A	N/A	N/A	TBD	N/A
Reduced Discrimination and or harrassment among FSW to XXXXXX% by 2023			FSWs	refer to KP GROUP	2018	BBSS II	N/A	N/A	TBD	N/A	N/A	TBD
Reduced Discrimination and or harrassment among MSM to XXXXXX% by 2023			MSM	refer to KP GROUP	2018	BBSS II	N/A	N/A	TBD	N/A	N/A	TBD
Reduced occurances of physical, sexual and pyschological violence among women and girls to xxxx% by 2023	OC-10.2	% of ever-partnered women and girls aged 15 - 49 years subjected to physical, sexual and pyschological violence by a current or former intimate partner in the previous 12 months	All forms	3.1	2013	BAIS IV	N/A	2%	N/A	N/A	N/A	<1%
	OC-10.3	% of ever-partnered women and girls aged 15 years and above subjected to physical, sexual and pyschological violence by a current or former intimate partner in the previous 12 months	All forms	No Data	2017	GBV Surveillance	N/A	N/A	N/A	N/A	N/A	SDG Indicator ; Currently No Data Source- recommendation is to develop a data capture tool from Police as a proxyTBD

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Result	Reference Number	Indicator	Disaggregation	Baseline			Targets					Comments
				Value	Year	Data source	2018	2019	2020	2021	2022	2023
10. Stigma and discrimination, gender and human rights												
Outcomes												
Reduced HIV related stigma and discrimination among PLHIV from 13.2% in 2013 to less than 5% by 2023		% of people reporting having personally felt discrimintated against or harrassed in the previous 12 months on the basis of a ground of dicrimination prihibited underinternational law	PLHIV	13%	2013	Stigma Index Survey Report Botswana, 2014	N/A	N/A	N/A	5%	N/A	N/A
Reduced Avoidance of health care among key populations because of stigma and discrimination to xxx by 2023		% of key populations who report to have Avoided health care because of stigma and discrimination	FSW	-	-	-	N/A	N/A	TBD	N/A	N/A	TBD
			MSM	-	-	-	N/A	N/A	TBD	N/A	N/A	TBD
			Transgender	-	-	-	N/A	N/A	TBD	N/A	N/A	TBD
Reduced % of people living with HIV who report experiences of HIV-related discrimination in healthcare settings to xxx by 2023		Percentage of people living with HIV who report experiences of HIV-related discrimination in healthcare settings	General Population	-	-	-	N/A	N/A	N/A	N/A	TBD	**This should be tracked by Stigma in the Health Care setting Survey**N/A
			FSW	-	-	-	N/A	N/A	N/A	N/A	TBD	N/A
			MSM	-	-	-	N/A	N/A	N/A	N/A	TBD	N/A
			Transgender	-	-	-	N/A	N/A	N/A	N/A	TBD	N/A
Reduced Discrimination and or harrassment among FSW to XXXXXX% by 2023			FSWs	refer to KP GROUP	2018	BBSS II	N/A	N/A	TBD	N/A	N/A	TBD
Reduced Discrimination and or harrassment among MSM to XXXXXX% by 2023			MSM	refer to KP GROUP	2018	BBSS II	N/A	N/A	TBD	N/A	N/A	TBD
Reduced occurances of physical, sexual and pyschological violence among women and girls to xxxx% by 2023	OC-10.2	% of ever-partnered women and girls aged 15 - 49 years subjected to physical, sexual and pyschological violence by a current or former intimate partner in the previous 12 months	All forms	3.1	2013	BAIS IV	N/A	2%	N/A	N/A	N/A	<1%
	OC-10.3	% of ever-partnered women and girls aged 15 years and above subjected to physical, sexual and pyschological violence by a current or former intimate partner in the previous 12 months	All forms	No Data	2017	GBV Surveillance	N/A	N/A	N/A	N/A	N/A	SDG Indicator ; Currently No Data Source- recommendation is to develop a data capture tool from Police as a proxyTBD
	OC-10.4	% of ever-partnered women and girls aged 15 - 64 years subjected to physical, sexual and pyschological violence by a current or former intimate partner in the previous 12 months	All forms	No Data	2013	BAIS IV	N/A	N/A	N/A	N/A	N/A	National IndicatorTBD
	OC-10.5	% of ever-partnered women and girls aged 15 years and older subjected to violence by persons other than an intimate partner in the previous 12 months	All forms	No Data	No Data	GBV Surveillance	N/A	N/A	N/A	N/A	N/A	SDG Indicator ; Currently No Data Source- recommendation is to develop a data capture tool from Police as a proxyTBD
11. Post Exposure Propylaxis												
100% accessibility to Post Exposure Prophylaxis of persons exposed to HIV infection	OC-11.1	% of eligible sexually abused people receiving PEP by sex and age		0.18098	2016	Mmegi online, Pini Botlhoko, Fri 16 Jun 2017	0.1756	0.1731	0.1706	0.1681	0.1658	**Possible data sources for monitoring this indicator: Health facilities or Police**0.1635
	OC-11.2	% of exposed health care workers receiving PEP by sex and age		0.37	2015, 2016	Botswana Health Statistics 2007-2015 & Kassa, G., Selenic D., Lahuerta M., (2016) Occupational Exposur to bloodborne pathogens amongst health care workers in Botswana	0.37	10	30	50	70	100

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Result	Reference Number	Indicator	Disaggregation	Baseline			Targets					Comments
				Value	Year	Data source	2018	2019	2020	2021	2022	2023
12. Safe Blood Services												
Outcomes												
	OC-12.1	Prevalence of the following transfusion-transmissible infections in donated blood										
Reduce the prevalence of HIV to 1%, HBV to 0.5%, HCV to 0.5% and syphilis to less than 1% in donated blood by 2023		% prevalence of HIV in the donated blood		1.50%	2016	National Blood Transfusion Annual Report 2016		1%	1%	1%	1%	Treat All for all identified in this low risk group and linkage to care of the majority in-school children.1%
		% prevalence of HBV in the donated blood		0.80%	2016	National Blood Transfusion Annual Report 2016	0.50%	0.50%	0.50%	0.5	0.5	Vaccination available for adults and children including birth dose; treatment available; contact tracing0.5
		% prevalence of HCV in the donated blood		0.80	2016	National Blood Transfusion Annual Report 2016	0.50%	0.50%	0.50%	0.50%	0.50%	Globally Treatment now available, still to type the viruses and come up with treatment guidelines0.50%
		% prevalence of Syphilis in the donated blood		1.30%	2016	National Blood Transfusion Annual Report 2016	<1%	<1%	<1%	<1%	<1%	Treatment available. Need to contact trace. <1%
12. TB/HIV treatment												
Outcomes												
reach 90% of all people who need TB treatment including 90% of populations at high risk, and achieve at least 90% treatment success												
Reduce TB-related deaths among people living with HIV by 75% by 2023	OC-12.1	% of tuberculosis related deaths among people living with HIV		63/100,000	2015	Programme data	25	30	45	55	75	75
Increased % TB treatment success among registered new and relapsed TB cases who are HIV-positive to more than 87% by 2023	OC-12.3	% TB treatment success among registered new and relapsed TB cases who are HIV-positive		77.5	2015	Programme data	80	82	85	87	>87	>87
Increased % of estimated HIV-positive incident tuberculosis (TB) cases that received treatment for both TB and HIV to xxxxx by 2023		% of estimated HIV-positive incident tuberculosis (TB) cases that received treatment for both TB and HIV		-	-	-	TBD	TBD	TBD	TBD	TBD	Must be monitored via program TBD

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Result	Reference Number	Indicator	Disaggregation	Baseline			Targets					Comments
				Value	Year	Data source	2018	2019	2020	2021	2022	2023
13. SRH Indicators												
Outcomes												
Increased % Demand for family planning satisfied by modern methods	OC-13.1	percentage of women of reporductive age 15-49 years who have their demand for family planning satisfied with modern methods.		**TBD**	**2019**	**BAIS V -TB Prev. Survey**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**Indicator to be monitored through BAIS and or Demographic Health Surveys**TBD
Increased % of AGYW living with HIV provided with ECP to xxx by 2023	OC-13.3	% of AGYW living with HIV provided with ECP		-	-	-	**N/A**	**N/A**	**N/A**	TBD	**N/A**	To be monitored through the Stigma Index SurveyN/A
Increased proportion of women living with HIV provided with family planning services to over 90% by 2023	OC-13.4	% of women living with HIV provided with FP		-	-	-	**N/A**	**N/A**	**N/A**	TBD	**N/A**	To be monitored through the Stigma Index Survey90%
Increased % of women living with HIV using dual contraception to xxxx by 2023	OC-13.5	% of women living with HIV using dual contraception		-	-	-	**N/A**	**N/A**	**N/A**	TBD	**N/A**	To be monitored through the Stigma Index SurveyTBD
Reduction of Total STI cases among Males to xxxxxx by 2023		Number of reported STI Cases among Males	10-14	**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			15 - 19	**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			20-24	**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			15-49	**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			15 years and above	**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			Total	**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Reduction of total STI cases among Females to xxxxxx by 2023		Number of reported STI Cases among Females	10-14	**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			15 - 19	**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			20-24	**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			15-49	**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			15 years and above	**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
			Total	**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
		Number of Gonorrhea cases diagnised among Males		**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
		Number of Urethral Discharge cases diagnised		**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
		Number of Hepatitis B cases diagnised		**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
		Number of Hepatitis C cases diagnised		**TBD**	2017	Programme data	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**

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Result	Reference Number	Indicator	Disaggregation	Baseline			Targets					Comments
				Value	Year	Data source	2018	2019	2020	2021	2022	2023
14. Non Communicable Diseases												
Increased % of men living with HIV who have access to screening of prostate cancers to 90% by 2023		% men living with HIV screened for prostate cancer					TBD	TBD	TBD	TBD	TBD	90
Increased % of women patient living with HIV who have been screened for cervical cancer to more than 80% by 2023	OC-14.1	% of women patient living with HIV who have been screened for cervical cancer		-	-	-	TBD	TBD	TBD	TBD	80%	TBD
Increased % of women patient living with HIV who have been screened for breast cancer to more than 80% by 2023		% of women patient living with HIV who have been screened for breast cancer					TBD	TBD	TBD	TBD	80%	TBD
	OC-14.4	% patients with breast cancer detected early among PLHIV		-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	No baseline, Indicator to be monitored via SurveyTBD
	OC-14.5	% patients with cervical cancer detected early among PLHIV		-	-	-	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	No baseline, Indicator to be monitored via SurveyTBD
Reduce % of PLHIV who are catergorised as obese and or overweight to xxxx by 2023	OC-14.9	Prevalence of overweight and obesity among PLHIV		-	-	-	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	No baseline, Indicator to be monitored via SurveyTBD
Reduce % prevalence of tobacco use among PLHIV to xxx by 2023	OC-14.10	Prevalence of tobacco use among PLHIV		-	-	-	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	No baseline, Indicator to be monitored via SurveyTBD
15. Health and Community systems strengthening												
Outcomes												
	OC-15.2	% of women attending antenatal care	Still to get	-	-	BDS	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	WHO outcome indicators for functioning of a health systemTBD
	OC-15.5	% Health Facilities with tracer commodities within the set minimum-maximum stock levels	ARVs Test Kits, CD4, viral load, EID TB Condoms and lubs	TBD	2017	CMS Reports	TBD	TBD	TBD	TBD	TBD	TBD
Sustain the availability of an adequate number of skilled health care workers equitably distributed to support the provision of quality HIV services across all districts by 2023		% of health facilities with adequate number of skilled health care workers equally distributed to support the provision of quality HIV Services					TBD	TBD	TBD	TBD	TBD	TBD
	OC-15.6	% of ART sites that received all orders on time and in full (OTIF) from the central or regional stores										
	OC-15.7	% of funds allocated to community response		5%	2016	HIV Financing Assessments	5	8	12	18	25	30%
	OC-15.11	Early Infant Testing rate (6 weeks)	EID	53%	2017	PMTCT Program data	63%	100%	100%	100%	100%	100% is impractical but NSF has to be aligned to the national target of 100%.100%

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Result	Reference Number	Indicator	Disaggregation	Baseline			Targets					Comments
				Value	Year	Data source	2018	2019	2020	2021	2022	2023
16. Strategic Information and Knowledge Management												
Outcomes												
Improved data quality to 90% of Indicators reporting by the end of 2023	OC-16.1	% of output indicators reported scoring Improved Data Quality		0	2018	M&E Report for NSF	70	80	90	90	90	90
	OC-16.2	% of outcome indicators reported on with data at mid-term and end-term		0	2018	Report on NSF Mid term Review; Report on NSF End of Term Review	N/A	N/A	80	N/A	N/A	90
Strengthened M&E Systems at all levels (Community, Health Facility, District and National level) to 90% functionality by the end of 2023	OC-16.3	% level functionality of the M&E Systems at all levels	Community level	No Base Line	2018	Report on Mid-Term M&E Systems Assessment	N/A	N/A	80	N/A	N/A	90
			Health facility level	No Base Line	2018	Report on Mid-Term M&E Systems Assessment	N/A	N/A	80	N/A	N/A	90
			District level	No Base Line	2018	Report on Mid-Term M&E Systems Assessment	N/A	N/A	80	N/A	N/A	90
			National level	No Base Line	2018	Report on Mid-Term M&E Systems Assessment	N/A	N/A	80	N/A	N/A	90
17. Financing of the HIV response												
Outcomes												
Increased Domestic funding to 75% of the Total HIV & AIDS Funding by 2023	OC-17.1	% of Domestic funding for HIV (as a percentage of Total HIV funding)		57	2013/14	National Health Accounts	60	60	70	70	75	75
Increased Government expenditure level to 90% by 2023	OC-17.2	% Government expenditure on HIV as a percentage of total HIV funding		75	2013/14	National Health Accounts	80	83	85	86	90	95%
	OC-17.3	% of funds allocated to prevention programmes		10	2016	National Health Accounts	25	30	35	35	35	35

MISSION

NAHPA exists to coordinate national response through a sustained multi-sectoral partnership to prevent new HIV infections and reduce the burden of NCDs and AIDS

VISION

An AIDS free Botswana living a healthy lifestyle by 2030

VALUES

Botho
Intergrity
Accountability
Transparency
Responsiveness

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