

MONITORING AND EVALUATION PLAN FOR THE NATIONAL STRATEGIC PLAN ON

HIV, TB AND STI (2017 – 2022)









MONITORING AND EVALUATION PLAN

For the National Strategic Plan on HIV, TB and STI

(2017 – 2022)

Monitoring and Evaluation Plan for the National Strategic Plan for HIV, TB and STIs: 2017 – 2022 1

Foreword by the Chairperson of the South African National Aids Council (SANAC)

Honourable Mr. David Mabuza, Deputy President of the Republic of South Africa

It has been almost two years since South Africa launched the fourth National Strategic Plan (NSP) for Human Immunodeficiency Virus (HIV), Tuberculosis (TB) and Sexually Transmitted Infections (STIs) (2017-2022) on 31 March 2017. The NSP (2017-2022) builds on previous plans and achievements, focusing on improving and scaling up service delivery and implementing evidence-based interventions. Within this context, the South Africa National AIDS Council (SANAC) developed a Monitoring and Evaluation (M&E) Plan on HIV, TB and STIs (2017-2022) which serves as a guide on how the NSP will be monitored and evaluated. The M&E Plan outlines the core indicators, their definitions, data sources, data collection tools, data flow mechanisms, reporting timelines and the roles and responsibilities of all relevant stakeholders.

Ongoing monitoring of the NSP implementation and scale-up of HIV, TB, STI interventions and evaluation of impact is important and requires effective and efficient M&E systems. The NSP M&E Plan will enable the monitoring and evaluation of progress towards the NSP goals, strategic objectives and targets. Effective monitoring and evaluation facilitates the establishment of accountability mechanisms within and across stakeholders, including civil society, the private sector and donors at national, provincial and district levels.

The financial year 2019-2020 is a pivotal one for SANAC working together with development partners and communities, to achieve the ambitious goals of the NSP. The SANAC Trust has grown in strength over the last year and ensured an increasing level of corporate governance. This is evidenced by a fourth consecutive unqualified audit opinion of the governance, compliance, financial management and programmatic performance.

The trustees have reviewed the mandate of SANAC Trust as recorded in the Trust Deed and have resolved to clarify that it is primarily to fulfil functions related to the NSP that focus on coordination, support, monitoring and resource mobilisation. The Trust's programme for the next year must therefore aim to fulfil these objectives as far as possible within the available resources. The SANAC Trust will support the Deputy President in his role as the Chairperson of SANAC and as the body that brings together government, civil society, the private sector and development partners to discuss policies and monitor the progress of the AIDS, TB and STI responses in South Africa.

On behalf of the President of the Republic of South Africa, fellow Cabinet members, SANAC trustees and all the South Africans, I wish to express my heartfelt appreciation to all the stakeholders for their concerted efforts towards realising the strategic objectives we have envisioned for ourselves in the 2017-2022 NSP. I would like to take this opportunity to thank all the SANAC structures as well as the Chief Executive Officer (CEO) of the SANAC Trust Secretariat and his management team for putting together this Plan.

Contents

For	eword	by the Chairperson of SANAC	2
Acr	onym	S	4
Sec	tion 1	: Introduction	6
	1.1	Objectives of the M&E Plan	7
	1.2	Guiding principles of the M&E Plan	8
Sec	tion 2	: Monitoring and Evaluation Framework	9
	2.1	M&E Plan target audience	10
	2.2	The M&E indicator framework	10
Sec	tion 3	: NSP M&E System Enabling Environment	18
	3.1	NSP M&E organisational structures	19
	3.1.1	M&E policies	19
	3.1.2	Coordination structures	19
	3.2	Human resources to support NSP M&E system	20
	3.3	M&E system partnerships	20
	3.4	A costed M&E work plan	21
	3.5	NSP M&E advocacy and communication strategy	21
Sec	tion 4	: NSP Data Management Processes	22
	4.1	Data collection systems and processes	23
	4.2	Focus for impact	24
	4.3	Survey and surveillance	25
	4.3.1	Special surveys	25
Sec	tion 5	: NSP M&E Data Use	27
	5.1	Data analysis plan	28
	5.2	Performance reviews	28
	5.3	Reporting and dissemination	29
An	nexure	e 1: NSP 2017-2022 Indicators	30
	Indica	tor reference sheets	30
	Indica	tor Protocol Reference Number: IM1	30
	New H	IV infections	30
	Indica	tor Protocol Reference Number: IM2	31
	AIDS r	elated mortality	31
	Indica	tor Protocol Reference Number: IM3	32

Acronyms

ACF	Autocorrelation Function
AGYW	Adolescent Girls and Young Women
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care Surveillance
ANOVA	Analysis of Variance
APP	Annual Performance Plan
ARC	Audit and Risk Committee
ART	Antiretroviral Treatment
ARV	Antiretroviral (drugs)
CBIMS	Community Based Information System
CBO	Community Based Organisation
CCM	Country Co-ordinating Mechanism
CDC	Centres for Disease Control and Prevention
CEO	Chief Executive Officer
CFO	Chief Financial Officer
COGTA	Department of Cooperative Governance and Traditional Affairs
CMS	Council of Medical Schemes
CSF	Civil Society Forum
CYP	Couple Year Protection
DAC	District AIDS Council
DATIM	Data for Accountability, Transparency and Impact Monitoring
DBE	Department of Basic Education
DCS	Department of Correctional Services
DFID	Department for International Development (UK)
DHER	District Health Expenditure Review
DHET	Department of Higher Education and Training
DHIS	District Health Information System
DIPs	District Implementation Plans
DoHA	Department of Home Affairs
DPME	Department of Planning, Monitoring and Evaluation
DPSA	Department of Public Service and Administration
DREAMS	Determined, Resilient, AIDS-free, Mentored and Safe Initiative

DSD	Department of Social Development
DSP	District Strategic Plan
DST	Department of Science and Technology
EIS	Enterprise Information System
ETR	Electronic Tuberculosis Register
ETR	End-Term Review
EHW	Employee Health and Wellness
FDC	Fixed Dose Combination
FFI	Focus for Impact
FSW	Female Sex Worker
GARP	Global AIDS Response Report
GAM	Global AIDS Monitoring
GBV	Gender-Based violence
GF	Global Fund
GF CCM	Global Fund Country Co-ordinating Mechanism
GHS	General Household Survey
GIS	Geographical Information System
GIZ	German International Cooperation
GWMES	Government-Wide Monitoring and Evaluation System
HTS	HIV Testing Services
HEAIDS	Higher Education and Training HIV/AIDS Programme
HIV	Human Immunodeficiency Virus
HSRC	Human Sciences Research Council
HOS	Heads of Secretariats
IBBS	Integrated Biological Behavioural Survey
IC	Investment Case
IGSS	Intergovernmental and Sector Support
ILO	International Labour Organisation
IMC	Inter-Ministerial Committee
KP	Key Populations
LAC	Local AIDS Councils
LGBTI	Lesbian, Gay, Bisexual, Transgender and Intersex
LURITS	Learner Unit Record Information Tracking System
M&E	Monitoring and Evaluation

M&E TTT	Monitoring and Evaluation Technical Task Team
MDR	Multi-Drug Resistance
MIS	Management Information System
MMC	Medical Male Circumcision
MSM	Men having Sex with Men
MTBPS	Medium-Term Budget Policy Statement
MTR	Mid-Term Review
NASA	National AIDS Spending Assessment
NCS	National Communication Survey
NICD	National Institute for Communicable Diseases
NDoH	National Department of Health
NDP	National Development Plan
NFD	Non-Financial Data
NGO	Non-Governmental Organisation
NISPIS	National Integrated Social Protection Information System
NPR	National Population Register
NRMC	National Resource Mobilisation Committee
NSP	National Strategic Plan
NSWP	National Sex Worker Plan
OVC	Orphans and Vulnerable Children
PACF	Partial Autocorrelation
PCAs	Provincial Councils on AIDS
PEPFAR	United States President's Emergency Plan For AIDS Relief
PWID	People Who Inject Drugs
PFIP	Partnership Framework Implementation Plan
PFMA	Public Finance Management Act (Act 1 of 1999, as amended)
PIP	Provincial Implementation Plans
PLHIV	People Living with HIV
PMTCT	Prevention of Mother-to-Child Transmission
PreP	Pre-exposure Prophylaxis

PRC	Programme Review Committee
PRs	Principal Recipients
PSA	Public Service Announcement
PSE	Population Size Estimation
PSP	Provincial Strategic Plans
PWDs	People with Disabilities
SABCOHA	South African Business Coalition on HIV and AIDS
SALGA	South African Local Government Association
SANAC	South African National AIDS Council
SABSSM	National HIV Prevalence, Incidence and Behaviour Study
SAQAF	South African Statistical Quality Assurance Framework
SAS	Statistical Analysis System
SOCPEN	Social Grants Payment and Administration System
SPSS	Statistical Package for the Social Sciences
SI	Strategic Information
SITWG	Strategic Information Technical Working Group
STIs	Sexual Transmitted Infections
SWEAT	Sex Worker Education and Advocacy Taskforce
SWs	Sex Workers
ТВ	Tuberculosis
TROA	Total Clients Remaining on ART
TTT	Technical Task Team
TWG	Technical Working Group
UN	United Nations
UNAIDS	United Nations Joint Programme on HIV/ AIDS
USAID	United States Agency for International Development
WHO	World Health Organisation



Introduction

Background

South Africa's Monitoring and Evaluation (M&E) system for the National Strategic Plan (NSP) 2017-2022 serves as a guide on how the implementation of the National Strategic Plan (NSP) 2017-2022 will be monitored and evaluated. The M&E Plan outlines the core indicators, their definitions, data sources, data collection tools, data flow mechanisms, reporting timelines as well as roles and responsibilities of all stakeholders.

The NSP (2017-2022) builds on previous plans and achievements, focusing on improving and scaling up service delivery and implementing proven interventions. Ongoing monitoring of the NSP implementation and scale-up of HIV, TB, STI interventions and evaluation of impact is important and requires effective and efficient M&E systems. The NSP M&E Plan will enable the monitoring and evaluation of progress towards NSP goals, strategic objectives and targets. Effective monitoring and evaluation facilitates the establishment of accountability mechanisms within and across stakeholders, including the civil society sector, the private sector and donors at national, provincial and district levels.

1.1 Objectives of the M&E Plan

The M&E Plan advocates for the use of existing structures and where necessary, recommends the modification of these, to ensure the consolidation of gains from the implementation of key activities for the realisation of earlier NSP goals. The M&E Plan provides guidance to implementing partners at all levels as to how the proposed NSP programmatic interventions will be collaboratively monitored and evaluated.

Furthermore, the Plan provides guidance on how information will be collected, collated, analysed, reported and used to determine whether proposed NSP strategies are yielding improvement in HIV, TB, STI outcomes; and whether outcomes are being achieved efficiently. Given the centrality of the "focus for impact" in the NSP 2017-2022, the M&E Plan provides particular focus on populations and locations with a higher burden of HIV, TB and STI and reflects on how best to maximise the impact of interventions.

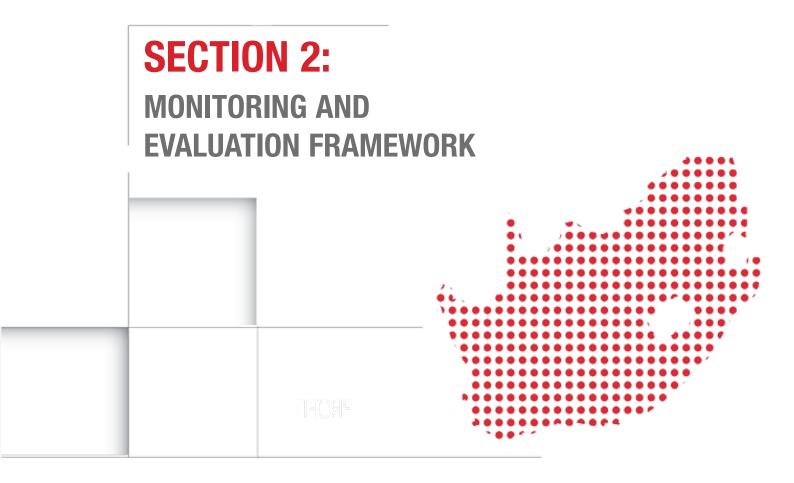
The specific objectives of the M&E Plan are to:

- Provide guidance on data collection and reporting that is useful in the M&E of the NSP.
- Strengthen the focus on populations and locations with the greatest vulnerability and opportunity for achieving the highest impact.
- Guide the development and strengthen stakeholder M&E systems.
- Assist all HIV, TB and STI stakeholders in conceptualising and harmonising a coordinated M&E system for the national response.
- Increase the understanding of trends and changes in HIV, TB and STIs incidences.
- Promote the utilisation of M&E data in planning and programme management.
- Establish a multi-sectoral and integrated real-time data hub to provide updates on the epidemic, the national response and accountability at all levels.

1.2 Guiding principles of the M&E Plan

The principle of the internationally agreed "three ones" informs the M&E plan in addressing the HIV, TB and STI epidemics, with particular emphasis on the need for having one country M&E system for effective coordination. The operational M&E Plan will be guided by the following principles:

- a) Harmonisation and alignment: All the three spheres of the national response, including government, private sector, civil society/sectors and partners will collaborate to realise achievements in the implementation of the NSP in a harmonised and coordinated manner. The M&E Plan will provide guidance to enable implementing organisations and supporting partners to harmonise their data and M&E processes and work collaboratively to facilitate an efficient and coordinated process of tracking, monitoring and evaluating the NSP results.
- b) **Standardisation of indicators:** NSP indicators have been standardised to allow comparability of NSP outcomes and impact across the country and between sectors.
- c) **Granularisation and disaggregation:** Data collection, analysis and dissemination will be conducted in a manner that allows for disaggregation by sex, meaningful age groups and further disaggregation as indicated by the context. The district level will serve as the standard subnational data analysis level, allowing for provincial and national collation.
- d) Establishment of a National M&E Technical Task Team (M&E TTT): The establishment of the M&E TTT will create a platform for reviewing progress in the NSP implementation and assess the effectiveness of HIV, TB, and STI programmes.
- e) Data demand and use: Data collected at all levels will be accessible for use in decision-making and programming of HIV, TB, and STI interventions at all key levels.
- f) Transparency, accountability and feedback: Information dissemination mechanisms will be utilised to promote transparency and enhance accountability at all levels, taking advantage of information technology to enhance efficiency. Some of these mechanisms will include the development of geo-social-structural and biological risk profile(s) using: Geographical Information System (GIS) techniques and comprehensive dashboards linking the information enterprises (DHIS-Tier.net), the Electronic TB register (ETR.Net), the Learner Unit Record Information Tracking System (LURITS), the Social Grants Payment and Administration System (SOCPEN) to the planned National Integrated Social Protection Information System (NISPIS) and those implemented across implementing partners.



Monitoring and Evaluation Framework

2.1 M&E Plan target audience

The M&E Plan is intended for all NSP stakeholders that are committed to realising the outcomes of the NSP. The SANAC Secretariat will provide coordination and stewardship to this end. Relevant stakeholders include the following: Provincial and district AIDS councils, relevant government departments, HIV, TB and STI control programme coordinators and managers at national, provincial and district levels, staff members from development and technical agencies, non-governmental organisations (NGOs), civil society and community-based organisations (CBOs), the private sector involved in supporting collaborative HIV, TB and STI activities, research institutions and the development partners.

2.2 The M&E indicator framework

The M&E indicator framework for the NSP is based on overall goals and objectives of the NSP 2017-2022. Tables 1 to 10 provide a summary of the key indicators selected to track the NSP goals and objectives. The indicators constitute a core set of impact, outcome, output and process indicators with corresponding baselines and targets (where available). The selected indicators form the basis for monitoring progress towards the NSP goals by all stakeholders.

The indicators are aligned to the National Development Plan (NDP) 2030 and the UNAIDS 90-90-90 HIV/TB strategy. The provincial and district implementation plans include M&E indicators with more detailed process indicators that specifically lead to the NSP outcomes. Appendix 1 provides a more detailed description of each indicator including the definition, rationale, target setting criteria and frequency of collection.

Table 1

Impact level indicators										
Indicator ¹	Data source	Baseline (2016)	2018-19 target ²	2019-2020 targets	2020-2021	2021-2022 target	Respon- sibility ³			
New HIV infections	Thembisa⁴ Model	267 000	176 220	88,0005	TBD	TBD	NDoH SANAC ⁶			
HIV prevalence among key populations	Integrated Biological Behavioural Survey (IBBS)	See footnote ⁷	To be determined (TBD)			TBD	NDoH SANAC			
TB incidence	National TB data sources	834/100 000 (includes HIV+TB)	700/100 000 (includes HIV+TB)			617/100 000 (includes HIV+TB)	NDoH, SANAC			
Male Urethritis Syndrome incidence	District Health Information Systems (DHIS)	New indicator				TBD	NDoH			
AIDS-related mortality	Statistics South Africa (Stats SA)	27.9%	TBD			50% reduction	NDoH Statistics South Africa SANAC			
TB mortality rate	National TB data sources	46/100 000	TBD			43% reduction	NDoH, SANAC			

¹Refer to the indicator reference sheets on Annexure 1 for full indicator definitions with calculations and disaggregation.

²Targets have been set at mid- and end- term with an expectation of new infections which is set for 2020, in line with the UN Prevention 2020 Road Map. ³Responsibility for government departments and sectors refers to implementation and reporting validated data while SANAC collates and reports the data. ⁴Thembisa Model financial years are from July to June of the following year, whereas the Government's financial years are from April to March of the following year.

⁵The target has been factored into the Provincial Implementation Plans.

⁶SANAC entails all stakeholders responding to the epidemic at all levels including government, civil society, private and business sectors and development partners. Names of respective stakeholders under SANAC will be outlined in the Provincial and District Implementation Plans.

Goal 1: Accelerate	prevention	to reduce n	ew HIV, TB a	ind STI						
Indicator [®]	Indicator type	Data source	Baseline	2018-19 target	2019- 2020 targets	2020- 2021	2021- 2022 target	Respon- sibility		
Mother-to-child transmission (MTCT) rate at 10 weeks	Impact	Programme data (DHIS)	1.47% (2015/16)	1.26% (2019/20)			0.8% (2021)	NDoH		
MTCT rate at 18 months	Impact	Programme data (DHIS)	4.3%	<3.2%			<2%	NDoH		
Number of medical male circumcisions performed	Output	Programme data (DHIS)	413 880 [NDoH Annual Perfor- mance Plan (APP) 2018/19- 2020/21]	600 000 3000 000 cumula- tively (between 2016 and 2021)	550 000	500 000	TBD	NDoH		
Number of HIV tests ⁹	Output		11 898 308 (NDoH Annual Report 2015/16)	14 million	14 million		14 million	NDoH		
Number of male condoms distributed	Output		839,532,901 (NDoH Annual Report 2015/16)	850 million			850 million ¹⁰	NDoH		
Number of female condoms distributed	Output		27,005,805 (NDoH Annual Report 2015/16)	40 million			40 million ¹¹	NDoH		
Number of Adolescent Girls and Young Women (AGYW), Female Sex Workers (FSWs), Men having Sex with Men (MSM), Injected Drug Users (IDU) receiving oral Pre-exposure Prophylaxis (PrEP) for the first time during the reporting period	Output	NDoH PrEP M&E Report	2003 (2016/17)	18215			86556	NDoH		
Number of learners reached through combination prevention interventions aimed at retention of learners in schools	Output	DBE provincial reports	85 000 [Depart- ment of Basic Education (DBE) Annual Report 2015/16]	86 250			87 500	DBE		

⁸Refer to the indicator reference sheets on Annexure 1 for full indicator definitions with calculations and disaggregation.

^oThe indicator changed (number of people reached in the National Health Screening and Testing Campaign annually) – NDoH APP 2018/19 -2020/21. The baseline is for the number of HIV tests.

¹⁰Number to be re-confirmed with the NDoH.

¹¹Number to be re-confirmed with the NDoH.

Goal 1: Accelerate	prevention	to reduce n	ew HIV, TB a	and STI				
Indicator ⁸	Indicator type	Data source	Baseline	2018-19 target	2019- 2020 targets	2020- 2021	2021- 2022 target	Respon- sibility
Delivery in 10 to 19 years in terms of facility rate	Outcome	DHIS	7.3% (2015/16) (NDoH APP 2017/ 18-2019/ 2020)	7.2% (NDoH APP 2017/18- 2019/20)			6.7% (NDoH APP 2017/18- 2019/20)	NDoH
Couple year protection rate	Outcome	DHIS	51% (NDoH APP 2017/ 18-2019/ 2020)	70% (NDoH APP 2017/ 18-2019/ 2020)			74% (NDoH APP 2017/ 18-2019/ 2020)	NDoH
Percentage of individuals who correctly identify risks of HIV, STI & TB transmission and how to prevent them and reject major misconceptions about HIV, STI & TB	Outcome	SABSSM [Human Sciences Research Council (HSRC) survey] ¹²	26.8% (HSRC 2012)	TBD			TBD	SANAC
Percentage of men and women aged 15 years and older who report condom use at last sexual intercourse with most recent sexual partner	Outcome	National HIV Preva- lence, Incidence and Behaviour Study (SABSSM) (HSRC survey]	Total: 36.2% Males 38.6% Females 33.6% Youth 15–24: 58.4% (HSRC survey, 2012)	TBD			TBD	SANAC
Percentage of women and men aged 15–49 years who have had sexual intercourse with more than one partner in the last 12 months	Outcome	SABSSM (HSRC survey)	12.6% (HSRC survey, 2012)	TBD			<5%	SANAC

Goal 2: Reduce m	Goal 2: Reduce morbidity and mortality by providing treatment, care and adherence support for all										
Indicator ¹³	Indicator type	Data source	Baseline	2018-19 target	2019- 2020 target	2020- 2021	2021- 2022 target	Respon- sibility			
Percentage of people living with HIV who know their HIV status	Outcome	Thembisa Model	Adults: 85.4% Men: 80.6% Women: 88.3% (Thembisa Model, 2015)	87%	90%		90%	NDoH, SANAC			

 $^{\rm 12}{\rm All}$ indicators with data from HSRC survey to be updated once the full report has been published.

¹³Refer to the indicator reference sheets on Annexure 1 for full indicator definitions with calculations and disaggregation

Goal 2: Reduce morbidity and mortality by providing treatment, care and adherence support for all								
Indicator ¹³	Indicator type	Data source	Baseline	2018-19 target	2019- 2020 target	2020- 2021	2021- 2022 target	Respon- sibility
Number of adults and children living with HIV on ART (TROA)	Output	Programme reports Private sector survey	3 831 730 (NDoH APP 2018/ 19-2020/ 21) Private sector: 287 408 (June 2015) – Thembisa	5 000 000 NDoH APP (2018/ 19-2020/ 21)	5 800 000 NDoH APP (2018/ 19- 2020/21)	6 100 000 NDoH APP (2018/19- 2020/21)	TBD	NDoH, the private sector, SANAC
			Report)					
Percentage of adults and children living with HIV known to be on antiretroviral therapy (ART) for 12 months	Outcome	DHIS	78%	90%			95%	NDoH
People living with HIV viral load suppressed rate (VLS) at 12 months	Outcome	DHIS	85%	90%			90%	NDoH
TB client treatment success rate	Outcome	DHIS	83.3% (2014 cohort) Multi-drug resistance (MDR): 47.2% (2013 cohort) (NDoH Annual Report 2015/16)	86.93% MDR: 65%			90%	NDoH

	Goal 3: Reach all key and vulnerable populations with comprehensive, customised and targeted interventions (Goal 3 comprises mostly surveys done every two years)											
Indicator ¹⁴	Indicator type	Data source	Baseline	2018-19 target	2020 target	Responsibility						
Percentage of specific key and vulnerable populations living with HIV who know their HIV status (First 90)	Outcome	IBBS	See footnote ¹⁵	TBD		SANAC, NDoH, Department of Correctional Services (DCS)						

¹⁴Refer to the indicator reference sheets on Annexure 1 for full indicator definitions with calculations and disaggregation.

¹⁵PWID (RAR, 2013) - Gauteng: 49%; KZN 54%; WC: 61%; FSW: (IBBS, 2015)-JNB 73.8%; CPT 56.7%; DUR77.0%; MSM: (IBBS 2015/16)- JNB- 55.7%; MAF-29.35%; BLO-31.82%; CPT-50.34%; POL-24.71%; INMATES DCS=100%.

(Goal 3 comprises mostly surveys done every two years)										
Indicator ¹⁴	Indicator type	Data source	Baseline	2018-19 target	2020 target	Responsibility				
Percentage of key populations who correctly identify risks of HIV, STI & TB transmission and how to prevent them and reject major misconceptions about HIV, STI & TB	Outcome	IBBS	See footnote ¹⁶	TBD		SANAC				
Percentage of key populations who report condom use at last sexual intercourse with most recent sexual partner	Outcome	IBBS	See footnote ¹⁷	TBD		SANAC, NDoH DCS				
Percentage of key populations living with HIV known to be on ART for 12 months	Outcome	IBBS	See footnote ¹⁸	Inmates DCS=75% TBD for SWs		SANAC, NDoH DCS				
Percentage of key populations living with HIV viral load suppressed rate (VLS) at 12 months	Outcome	IBBS	See footnote ¹⁹	TBD		SANAC, NDoH DCS				
Percentage of key populations who ever experienced human rights violations	Outcome	IBBS	SW Police violence: 55% Client violence: 57% [Sex Worker Education and Advocacy Taskforce (SWEAT), 2013]	50 % reduction		SANAC				

Goal 3: Reach all key and vulnerable populations with comprehensive, customised and targeted interventions (Goal 3 comprises mostly surveys done every two years)

Table 5

Goal 4: Address the social and structural drivers of HIV, TB and STI infections						
Indicator ²⁰	Indicator type	Data source	Baseline	2018-19 target	2022 target	Responsibility
Percentage of beneficiaries receiving social behaviour change programmes	Outcome	SABSSM (HSRC survey)	HSRC survey 2017	TBD	TBD	SANAC
Number of children accessing services through drop in centres	Output	Non-Financial Data (NFD) Indicators Report 2015/16	152 531 (DSD NFD Report 2015/16)	188 309	2 15 6585	DSD

¹⁶FSW (IBBS, 2015)- JNB: 32.8%; CPT: 19.6%; DUR: 4.6%; MSM (HSRC Marang Study 2015)- JNB: 48.7%; CPT: 40.0%, DUR: 42.3%.

¹⁷FSW (IBBS, 2015) - Johannesburg: 76.4%; Cape Town: 89.4%; Durban: 84.5%; MSM - JNB-85.7%; MAF-83.4%; BLO-88.5%; CPT-63.6%; POL69.1%; PWID - 38.9% (HSRC 2012).

¹⁸FSW (IBBS, 2015) - Johannesburg: 19.1%; Cape Town: 25.6%; Durban: 27.7%; MSM: (IBBS 2015/16)-JNB-43.04%; MAF-29.35%' BLO-36.36%; CPT-40.00%; POL-22.35%; INMATES -DCS=98%.

¹⁹MSM: (IBBS 2015/16) -JNB-57.81%; MAF-33.70%; BLO-38.64%; CPT-39.31%; POL-32.94%; INMATES (END JUNE 2016 = 81% (≤ 1000).

 20 End June 2016 = 63% (\leq than 40).

Goal 4: Address th	Goal 4: Address the social and structural drivers of HIV, TB and STI infections					
Indicator ²⁰	Indicator type	Data source	Baseline	2018-19 target	2022 target	Responsibility
Number of beneficiaries receiving Department of Social Development (DSD) social behaviour change programmes	Output	DSD report	47 135	600 000	1 500 000	DSD
Proportion of ever-married or partnered girls or young women aged 15-24 who experienced physical or sexual violence from a male intimate partner in the past 12 months	Outcome	SABSSM (HSRC survey)	Ages 15-19: 7.7% Ages 20-24: 7.3% (HSRC 2012)	7.3% 6.9%	6.9% 6.6% (SHE Conquers target)	SANAC
Percentage of TB affected families facing catastrophic costs due to TB	Outcome	TB survey 2017/18	TBD in 2018/19	TBD	TBD	NDoH
Proportion of health facilities accessible to people with physical disabilities	Outcome	Facility survey	37% [Department of Monitoring and Evaluation (DPME), June 2016]	80% (NDoH APP 2016/17)	100%	NDoH

Goal 5: Ground th	Goal 5: Ground the response to HIV, TB and STIs in human rights principles and approaches					
Indicator ²¹	Indicator type	Data source	Baseline	2018-19 target	2022 target	Responsibility
Percentage of people living with HIV who report stigma and discrimination	Outcome	Stigma Index Survey	35.5% external stigma 43% internal stigma 36.3% TB-related stigma 21.7% of PLHIV experiencing discrimination (Stigma Index, 2015)	TBD	27.8% 22 % 18 % 11 %	SANAC
Percentage of population expressing accepting attitudes towards People Living with HIV (PLHIV) and/or TB	Outcome	S HSRC survey 2017	To be established in the HSRC SABSSM V Survey	TBD	TBD	SANAC

²¹Refer to the indicator reference sheets on Annexure 1 for full indicator definitions with calculations and disaggregation

	Goal 6: Promote leadership at all levels and shared accountability for a sustainable response to HIV, TB and STIs					liv,
Indicator ²²	Level	Data source	Baseline	2018-19 target	2022 target	Responsibility
SANAC accountability performance score	Outcome	Scorecard report	Baseline to be established in 2017	TBD	TBD	SANAC
Provincial Councils on AIDS (PCA) and District AIDS Councils accountability performance score	Outcome	Scorecard report	Baseline to be established in 2017	TBD	TBD	SANAC, PCAs

Table 8

Goal 7: Mobilise r	Goal 7: Mobilise resources to support the achievement of NSP goals and ensure a sustainable response						
Indicator ²³	Indicator type	Calculation	Data source	Baseline	2018-19 target	2022 target	Respon- sibility
Total expenditure on HIV, TB and STIs	Outcome	Numerator: Total expenditure on HIV, TB and STIs Denomina- tor: Total cost estimate	National AIDS Spending Assessment (NASA)	TBD	80%	TBD	SANAC, PCAs
Percentage of budget from sources other than government	Output	Numerator: Total budget (develop- mental partners and private sector) Denomina- tor: Includes all public sector budgets on HIV, TB and STIs	Investment case	25.9% (2016/17)	20%	20%	SANAC, PCAs

Table 9

Goal 8: Strengthe	Goal 8: Strengthen strategic information and research to drive progress towards achievement of NSP goals					
Indicator ²⁴	Indicator type	Data source	Baseline	2018-19 target	2022 target	Responsibility
Number/ percentage of core NSP and PIP indicators reported	Output	SANAC M&E reports	None	80%	100%	SANAC
Number of provinces and districts with annual HIV, TB and STI profiles/ implementation plans /quarterly reports/annual	Output	Profiles	None	9 provincial profiles 52 district profiles		SANAC,PCAs

²²Refer to the indicator reference sheets on Annexure 1 for full indicator definitions with calculations and disaggregation ²³Refer to the indicator reference sheets on Annexure 1 for full indicator definitions with calculations and disaggregation ²⁴Refer to the indicator reference sheets on Annexure 1 for full indicator definitions with calculations and disaggregation

Critical enablers						
Indicator ²⁵	Indicator type	Data source	Baseline	2018-19 target	2022 target	Responsibility
Percentage of individuals who correctly identify the risks of HIV, STI and TB transmission, how to prevent them and how to reject major misconceptions about HIV, STI and TB	Outcome	SABSSM (HSRC survey)	26.8% HSRC survey, 2012	TBD	ТВ	SANAC, PCAs
Percentage of men and women aged 15 years and older who report condom use at last sexual intercourse with most recent sexual partner	Outcome	SABSSM (HSRC survey)	Total: 36.2% Males 38.6% Females 33.6% Youth 15–24: 58.4% (HSRC 2012)	TBD	TBD	SANAC, PCAs
Percentage of women and men aged 15–49 years who have had sexual intercourse with more than one partner in the last 12 months	Outcome	HSRC survey 2012	12.6% (HSRC survey, 2012)	TBD	<5%	SANAC, PCAs
Percentage of people reached by prevention communication at least twice a year	Outcome	HSRC survey	82% (NCS 2012)	TBD	95% (Investment case)	SANAC, PCAs
Percentage of organisations with HIV, TB and STI workplace policies and programmes	Outcome	Government departments: 68% of 161 (2016/17) [Department of Public Service and Administration (DPSA) Employee Health and Wellness (EHW) report]	90% (20% increase in departments with annual operational plans SABCOHA 45%	100% 60%	Government departments: 68% of 161 (2016/17) (DPSA EHW report) 30%	DPSA, South African Business Coalition on HIV and AIDS (SABCOHA)

²⁵Refer to the indicator reference sheets on Annexure 1 for full indicator definitions with calculations and disaggregation



NSP M&E System Enabling Environment

3.1 NSP M&E organisational structures

3.1.1 M&E policies

The NSP M&E Plan is informed by national policies, which in turn guide the spheres of Government and different partners (organisational structures) on how to implement the Plan. The NSP M&E Plan is designed within the South African government frameworks created for performance management and reporting on public programmes in the country. The following are the key policies that have guided the development of this NSP M&E Plan:

- 1. A policy framework for the Government-Wide Monitoring and Evaluation System (GWMES).
- 2. Framework for Programme Performance Information (National Treasury).
- 3. The South African Statistical Quality Assurance Framework (SASQAF, Stats SA).
- 4. The National Evaluation Policy Framework (DPME).

The NSP M&E Plan provides a framework that NSP implementation stakeholders will use to generate information from the GWM&E system(s); to create an overall picture of national, provincial and local performance. The data generated from the proposed sources of data source (systems) should meet the data quality standards as defined through SASQAF. In addition, the data and information produced should allow for overall evaluation in line with the guidance provided through the National Evaluation Policy Framework (DPME).

3.1.2 Coordination structures

The HIV, TB and STI response necessitates a multi-sectoral intervention and an all-encompassing M&E system. Monitoring and evaluation of the multi-sectoral responses requires coordination of all implementing agencies (public, private, civil society and development partners) to ensure optimal utilisation of available resources and continual learning through shared experiences. The (SANAC coordinates the national and provincial government departments, civil society and private sector organisations to work together to reverse the HIV, TB and STI epidemics. Provincial, district and local AIDS councils form part of SANAC's structures that mandated to coordinate, monitor and evaluate the HIV, STIs and TB response at the provincial and district levels.

The key M&E coordinating structures, together with their key roles and responsibilities in the implementation of the NSP M&E Plan are summarised in Table 11 below:

Table 11

M&E coordination s	M&E coordination structures				
Structure	Level	Responsibilities			
Strategic Information (SI) Technical Task Team (TTT) or Technical working group (proposed)	National	 Consists of SI experts from South Africa government departments, development and implementing partners, professional bodies and academic institutions. 			
Coordinates and maintains partnerships among stakeholders who are involved in planning and managing the NSP SI System (to include M&E an HIV Surveillance, Epidemiology and Modelling Technical Working Group).	National	 Collates national NSP data. Develops and manages NSP M&E database and related reporting dashboard. Analyses bottlenecks of the NSP M&E data. Generates a "gaps" report with improvement recommendations. Supports the operationalisation of the NSP M&E system. Provides M&E analysis capacity at provincial and district AIDS council levels. Supervises and mentors M&E officers at provincial AIDS councils. Coordinates annual NSP performance review meetings. Compiles and disseminates annual NSP performance reports and technical briefs. Performs routine data quality audits of the NSP data. Coordinates and disseminates findings of key NSP linked surveys, studies & modelling. 			

M&E coordination structures				
Structure	Level	Responsibilities		
Provincial AIDS Council M&E Unit	Provincial	 Collates provincial M&E data from all district AIDS councils. Analyses bottlenecks of the provincial M&E data. Generates "PIP gaps" reports with improvement recommendations. Coordinates annual PIP performance review meetings. Performs routine data quality audits of district data. Coordinates and disseminates provincial information products to key stakeholder. 		
District AIDS Council M&E Unit	District	 Collates NSP data from local councils and other stakeholders. Analyses bottleneck of the district M&E data. Generates district "DIPs gaps" report with improvement recommendations. Coordinates/hosts annual DIP review meetings. Performs routine data quality audits of district DIP data. Coordinates and disseminates district information products to key stakeholder. 		

3.2 Human resources to support the NSP M&E system

This component entails ensuring that the NSP has the appropriate human resources to effectively implement the NSP M&E Plan. This involves identifying the appropriate human resources needed at national, provincial and district levels to collect, collate, analyse and report NSP data at these levels. The key tasks that will be implemented to ensure appropriate human resources will include the following:

- Defining the skills set for key M&E human resources needed at national, provincial and district AIDS councils.
- Perform an M&E human capacity assessment and develop related M&E Human Resource Development Plan.
- Develop or adapt a standard curriculum for M&E for NSP M&E human resources at all levels.
- Train, mentor and supervise human resource on M&E for the NSP M&E units at national, provincial and district levels.

Table 12 summarises the indicative M&E posts, both full-time and part-time, that the NSP will consider as they build their network of organisations with M&E functions.

Table 12:

M&E human resources				
Structure	Capabilities			
SANAC Strategic Information Unit	Current occupied positions • Executive Manager: Strategic Information • Technical Lead: M&E • Senior M&E Officer Proposed new positions: • Research/Knowledge Management Specialist			
Provincial AIDS Council	Current occupied positions 9 SANAC seconded M&E officers 			
District AIDS council M&E units	Proposed new positions: Phased approach to have full time positions • District M&E Officer – Responsible for collecting, collating, reporting and verifying NSP M&E data			

3.3 M&E system partnerships

Establishing and maintaining strong partnerships is important for the NSP and consistent with the idea that the HIV, STI and TB response has a diversity of stakeholders from different institutions and sectors) that need to work together towards the same goal and set of objectives. The main objectives of establishing M&E partnerships will be to ensure that a stronger M&E system is developed and maintained through:

- Better communication about M&E to maintain a joint vision among stakeholders.
- Better coordination by SANAC SI Unit.
- Mobilisation of required technical and financial support to implement the SI system.
- Simplifying, harmonising and aligning the SI and reporting procedures across stakeholders.

Key strategic activities that will define the M&E system partnerships for the NSP will include:

- Setting up an SI TTT and/or technical working group (SI TWG) and HIV Surveillance, Epidemiology and Modelling Technical Working Group as well.
- Performing joint SANAC SI Unit and SI TWG mission trips.

Strategic Information Technical Working Group (SI TWG):

The SI TWG will be a multi-sectoral partnership representing all NSP S&I stakeholders. SI TWG functions will include providing advice on technical M&E issues and establishing a partnership or consultation forum for all stakeholders through the SANAC's SI unit. The SI TWG should be formally included in the implementation plan of the NSP and thus given the legitimacy and authority to make decisions or provide advice to the NSP guided by written terms of reference. At a minimum, the M&E TWG will include the following institutions:

- Government departments involved in the social protection, community and human development cluster.
- Development partners and donors.
- · Civil society.
- Private sectors.
- Academic and research institutions.
- Provincial and local government authorities.

NSP SI trips

Undertaking joint SI missions/trips will enable consolidated M&E feedback to be shared between NSP partners and assist the NSP SI TWG to develop new strategies and explore possible rational solutions to national, provincial and district level challenges over a shorter period of time. The joint mission trip will be coordinated by the SANAC SI Unit and will involve performance of M&E capacity assessments. The SANAC's S&I Unit will explore the possibilities of joint visits and will develop a schedule that will be shared with all key stakeholders interested in participating in such visits. Clear goals and objectives of the joint visits will be outlined and joint mission debrief will be conducted with the SI Unit and the SI TWG.

3.4 A costed M&E work plan

A costed, multi-year, multi-sectoral, and multi-level M&E work plan is a useful tool for prioritising, planning, and coordinating activities relating to the M&E system. In addition, a costed M&E Plan will enable the NSP stakeholders to determine funding requirements, mobilise resources and assign funding appropriately. The NSP M&E activities will include both the once-off or periodic activities required when establishing an M&E system.

The following steps will be undertaken to develop the M&E work plan:

- SANAC SI Unit will perform annual national M&E capacity assessment.
- SANAC SI Unit will collate work plans and budgets for NSP stakeholders to identify M&E activities.
- SI TWG and SANAC SI Unit meet to select key M&E activities.
- SI TWG and SANAC SI Unit will complete a customised M&E work plan with agreed activities, timeframes and responsible stakeholders.
- The SI TWG and SANAC SI Unit will select costing method for the group of activities and allocate costs.
- The SI TWG and SANAC SI Unit will approve costed work plan.
- SANAC secretariat will mobilise and secure funding for M&E work plan.

The costed M&E work plan will be used by SANAC to:

- Advocate for and track efficiencies in the implementation of the NSP 2017-2022.
- Track the progress on development and implementation of the NSP M&E system.
- Update or develop job descriptions of staff members together with M&E responsibilities.
- Manage the activities of the M&E Unit on a daily, weekly, monthly or quarterly basis.

3.5 THE NSP M&E Advocacy and Communication Strategy

The goal of the Strategy is to ensure knowledge and awareness about M&E needs and expectations among NSP stakeholders. The main objectives for a clear NSP communication strategy include but not limited to:

- Encourage staff members at provincial and district AIDS councils to carry out their M&E functions.
- Increase demand for NSP M&E data at all levels.
- Generate and consolidate reports from universal reporting systems.

The following key activities will be implemented as part of the strategy to improve NSP M&E advocacy and communication:

- Identify M&E champions at provincial, district and local levels to advocate for NSP M&E issues.
- Develop M&E champion communication messages.
- Design and distribute M&E technical briefs suitable for different levels of stakeholders.
- Develop a website with M&E infographics that are appealing and accessible to all stakeholders.
- · Conduct M&E advocacy workshops for senior staff members in all NSP stakeholder level.



NSP Data Management Processes

4.1 Data collection systems and processes

In line with the "Three-ones principle", of the NSP (2017 – 2022) Focus for Impact (FFI) web-based application will be enhanced by SANAC. Through the FFI web-based application, information will be collated and shared with different stakeholders in a coordinated manner.

The system will be able to:

- Use GIS capability of the Management Information System (MIS) to allow generation of the geo-profile of disease burden; access and utilisation of social protection and health systems; health outcomes, and to generate geographically-targeted prevention and care plans involving all sectors.
- Remotely collect and collate data of all core indicators from different sub-information systems sources and generate reports using a web-based interface that will also allow remote viewing and downloading of reports at national, provincial and district level.

Data from several data sources generating data on the indicators selected for NSP 2017-2022 will be utilised through data sharing agreements for the unified MIS. The system will be able to consolidate data, generate NSP reports as required and enable the production and updating of a performance dashboard for each of the key performance areas (objectives and sub-objectives) of the NSP.

Some of the sub-systems that will provide data to the MIS include but, are not limited to the DHIS; Tier.Net; ETR.Net; Community Based Information System (CBMIS); the Social Grants Payment and Administration System (SOCPEN); Data for Accountability, Transparency Impact Monitoring (DATIM); the Council for Medical Aid Schemes (CMS) database(s); BIZWELL; the General Household Survey, etc. See Annexure 4 for a schematic of the proposed integrated NSP HIV, STI, & TB management information system including the type of information products that will be generated by the systems. Note that the NSP does not propose development of a new system but rather a system to integrate existing sub-systems using enterprise information system (EIS) technology.

Sub-system	Type of data	Responsibility
CBIMS	Data on burden of child vulnerability	DSD
SOCPEN	Data on individuals and households receiving social grants	DSD
DHIS	Data on processes and outcomes of HIV, STI & TB care Data on HIV testing to also be included	NDoH
TIER.Net	Data on processes and outcomes of HIV care	NDoH
ETR	Data on processes and outcomes of TB care	NDoH
Sentinel surveillance	Data on the burden of STI	NICD
DATIM	Data on processes and outcomes of HIV, STI & TB and Orphans and Vulnerable Children (OVC) care	United State President's Emergency Plan for AIDS Relief (PEPFAR)
General Household Survey (GHS)	Data on social, economic and cultural vulnerability	STATS SA
Cost data including DHER	Data on costs/ expenditure linked to HIV, STI & TB care	NDoH
BIZWELL	Data on HIV testing in the private sector	SABCOHA
Council for Medical Schemes (CMS)	Data on outcomes of HIV, STI & TB private care	CMS

Table 13 below provides a summary of the information systems and the type of data that they generate.

4.2 Focus for Impact

The FFI approach brings together three important components to support planning, coordination, monitoring and decision-making in the HIV, TB and STI response.



The FFI approach sets out to systematically answer four key questions:

- 1 Where are the HIV and TB high burden areas (spatial location)?
- 2 Why are these high burden areas (associated risk profile)?
- 3 Who is at increased risk of new infection in these high burden areas (population specific)?
- 4 What are the multi-level multi-sectoral high impact interventions (tailored interventions) that should be put in place to reduce the burden in this area?

In the development of the FFI approach, the following has been identified as critical:

- **Tools and technology** The FFI intelligence platform provides the functionality for the data integration from the various sources defined above.
- **Data integration and analytics** The data integration allows SANAC to bring together data sources from various data custodians to meet the information requirements of the various SANAC stakeholders, both internal and external, as set out in the NSP.
- Users of the FFI intelligence platforms The roles and responsibilities of the different users of the system defined in this M&E Plan will guide the functionality and reporting outputs of the intelligence system. The capacity of users to optimally use this system is essential for the monitoring of the progress in the NSP implementation.

FFI tools

As directed by the NSP, the FFI approach provides the tools for provinces to use a step-wise approach for the implementation of the NSP. Provinces will use data, including geospatial mapping, to strategically focus and intensify responses in high-burden areas. Within these areas, spatial mapping data will be used to identify hotspots/high-burden areas where interventions are most needed. Profiling of communities in these areas will be undertaken to develop a clearer, more detailed understanding of the local contextual drivers of the epidemics, the individual and community resources and strengths and the location of available and needed resources.

Some of the specific tools that support steps in the FFI approach are as follows:

- The FFI web-application which includes a user registration form and an FFI user manual; to identify high-burden areas (heath facility and catchment area) within local municipalities/districts.
- Key stakeholder lists; identify key stakeholders in area.
- · Capture tool for community risk discussions, convene community engagement workshops.
- · Participatory mapping of risks and community services tool, convene community engagement workshops.
- Google Earth for mapping.

- The FFI high-burden area risk profiling template; compile risk profiling.
- The FFI district risk profile template; summarise multiple high-burden profiles into district profiles.
- The FFI provincial risk profiling template; summarise multiple district profiles into the provincial report.

The tools may evolve as more tools are developed or refined to support implementation.

4.3 Survey and surveillance

The NSP proposes the continuation of a focused and integrated surveillance system; systematically collect, analyse and disseminate information and share knowledge about the pattern of HIV, TB and STI disease occurrence and the related factors that determine occurrence and distribution in South Africa. South Africa's surveillance system consists of a mixture of biological and behavioural surveys to best track the burden and distribution of HIV, TB and STIs.

The following surveys and surveillance related activities will be conducted between early 2017 and early 2022 and are key to generating information for the NSP M&E indicator framework:

4.3.1 Special surveys

In addition to key population IBBS and ANC Sentinel Surveillance, the following surveys will be conducted:

4.3.1.1.1 General Household Survey (GHS)

The GHS is an annual household survey conducted by Stats SA since 2002. The Survey is an omnibus household-based instrument aimed at determining the progress of development in the country. It measures, on a regular basis, the performance of programmes as well as the quality of service delivery in a number of key service sectors in the country. The GHS covers six broad areas, namely: education, health and social development, housing, household access to services and facilities, food security, and agriculture. For the NSP, the GHS will be used to provide baseline and follow up data on indicators related to the social structural drivers of HIV, STI and TB, specifically access and outcomes of education, genderbased violence and poverty.

4.3.1.1.2 Stigma Survey

The Stigma Survey is aimed at identifying whether PLWH experience HIV-related stigma and discrimination, and to describe how such stigma affects their daily lives including access to quality services, relationship and support at family, community and work level. The survey will be performed at least once a year across the country. Provinces may seek their own funding to perform more localised stigma surveys. Online versions of the survey may be conducted to reduce cost as well as improve the speed of generating more recent information among the key population most of whom have access to mobile phones.

4.3.1.1.3 National AIDS and TB spending assessment

This assessment will be conducted at least once every year to determine resource allocation and expenditure on HIV and TB prevention and care including sources and focus of expenditure at national, provincial and district levels. Specifically, the information will be used to determine allocative efficiency and equity in resource allocation for HIV and TB priorities. This assessment will be complemented using data from annual district health expenditure reviews (DHER) which are produced annually by each district and include HIV/AIDS programme expenditure up to the sub-district level.

4.4 Evaluations

To assess the effectiveness, impact and sustainability of the NSP, mid-term and end-term evaluations will be conducted.

Mid-term Review (MTR)

This will be conducted by external experts in 2019/2020. The overall goal of NSP MTR will be to provide an in-depth analysis of the NSP implementation with a specific focus on progress made towards achieving the targets set for each of the eight goals. The review is intended to illustrate emerging issues and opportunities, lessons learnt, gaps and challenges encountered during the implementation of the NSP in the first half of the NSP term. The MTR findings will inform targeted implementation in the remaining NSP period and guide recommendations towards the end of the NSP term.

End-term Review (ETR)

This will be conducted by external experts in 2021/2022. The evaluation will focus on the extent at which the NSP impact and outcome results have been achieved during the implementation period. The ETR findings will inform the development of the next NSP.

4.5 M&E supervision and data quality control

Supportive supervision of provincial and district AIDS Council M&E units from the SANAC Secretariat will be an essential element of routine monitoring of the NSP progress. This will include quality checks for data recording and reporting, including inspection and validation of data reported for consistency and rechecking data transferred to the NSP performance reports. Supportive supervision will also involve identification and discussion of difficulties faced by Provincial and district AIDS Council M&E staff or misunderstandings in data management and provides an opportunity for learning. The frequency of supportive supervision will depend on availability of resources to support M&E of the NSP. Routine supportive supervision by the SANAC SI Unit will be conducted at least quarterly. Tools, such as scorecards or certificates of excellence for good reporting and recording, may be used to motivate health workers.

At least once every two years, a more systematic review of the NSP monitoring systems may be carried out by the SANAC SI Unit. The review will involve participation of the M&E TWG and any selected provincial and district HIV, TB, STI programme coordinators. Activities will include validating selected data items from quarterly and annual reports and systematic sampling and validating of source documents for selected HIV, TB, and STI care outcomes and services data. Data quality improvements will be proposed by following these reviews.

The SANAC secretariat will work jointly with provincial AIDS councils to provide a platform for different departments involved in the implementation of NSP to exchange and reconcile data.

4.6 Research agenda

Scientific and big data approaches are critical to generating new information about the most effective and efficient ways to respond to the HIV, STI and TB epidemic. The research approach will focus on prioritisation and coordination of HIV, TB and STI research to promote achievement of the NSP. The NSP should have a specifically funded learning agenda with clear methods or approaches to guide donors and researchers to align their work to NSP priorities.

Recognising the mandate of the SANAC Secretariat as a primarily coordinating structure and the array of recognised research institutions, the SI Unit will adopt an approach that seeks to facilitate and coordinate NSP-related research, working with multiple stakeholders. The initial plan will be to drive the development of an NSP-related research and knowledge management agenda through a consultative process with researchers, programme implementers, donors/ funders and key affected populations in the country.

Objectives of the research agenda

- To define HIV research priorities in the country over the period of the NSP.
- To provide a national framework to guide HIV, TB, and STI research.
- To facilitate coordination of research on HIV, TB, and STIs among all stakeholders in the implementation of the NSP.
- To serve as a tool for resource mobilisation and allocation for HIV, TB, and STIs research.

Guiding principles for the research agenda

- Relevance: research to be of public good, contributing to the achievement of the NSP goals.
- Multi-disciplinary and complementary: the research agenda to promote partnerships among different sectors to ensure a harmonised multi-sectoral response.
- Ethical soundness: all research to abide by all ethical requirements set in the country and different ethical bodies.
- **Research focus:** the research should have a national focus providing an opportunity for the provinces and districts to learn and share and learn best practises.

All the proposed learning and research activities will be used to generate new knowledge about challenges and inform best practices that will be addressed or scaled up respectively to increase the effectiveness, efficiency and impact of HIV, STI and TB prevention programmes. This will include the development of better models and packages of preventing HIV, STI and TB transmission.



NSP M&E Data Use

5.1 Data Analysis Plan

A key aspect of data analysis of the NSP will be to determine performance among certain populations and geographical areas against the following key aspects:

- The burden of HIV, STI and TB.
- Risk factor prevalence.
- The availability of services.
- The use and quality of services.
- The outcomes and effectiveness of interventions.
- The cost-effectiveness of interventions.

The NSP SI Unit will support provinces and districts to:

- Use data on geographical distribution of disease burden and risk factors to determine disparities in health outcomes as well as access to quality social protection and health care services This will involve increased use and availability of other sources of data like the Council for Medical Schemes (CMS) to help provide a more complete and timely picture of HIV, STI and TB disease burden, risk factors, outcomes, and access to services.
- Use data on availability, use and quality of minimum package of HIV, STI and TB services to determine gaps in services that need improvement by geographical area and population group.
- Use data on disease burden across sectors for example private sector and education to increase awareness about the role of such sectors including the level and approaches of interventions that need to be used.
- Use data on costs to determine costs and cost effectiveness of current and new interventions in improving outcomes of HIV, STI and TB interventions and generating strategies on how to optimise and scale up such interventions.
- Use overall surveillance data on HIV, STIs and TB to reveal the current level of performance against the targets across geographical areas and population groups to determine where efforts are still needed.

5.2 Performance reviews

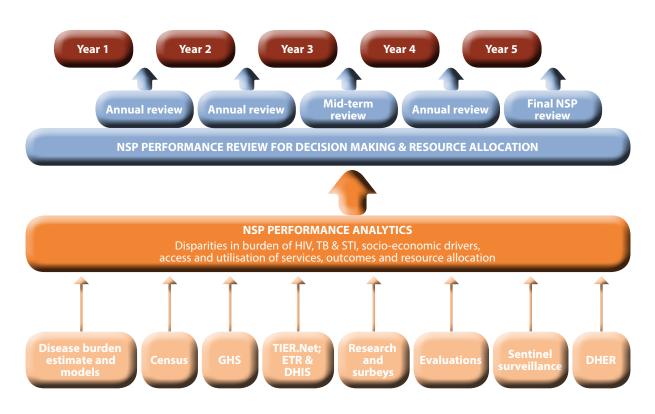
A key component of the NSP will be to ensure sound accountability by each of the stakeholders involved in the implementation of the NSP. This will involve implementation of performance reviews to reassess their targets and inform the redesigning of programs with a mix of interventions to scale up and intensify programs necessary to reach NSP goals. Performance will be guided by the Data Analysis Plan outlined above.

The NSP performance reviews will support the following:

- District quarterly peer review of performance on key District Strategic Plans (DSP) process and output indicators this will include all implementing partners involved in implementing NSP strategies at the district level.
- District AIDS Council semi-annual review this will involve internal district review of NSP performance.
- Provincial annual performance review this will include all district AIDS councils presenting annual performance of district strategic plans.
- National annual performance review this will include all provinces presenting annual performance of provincial strategic plans. Summary findings from the national annual performance reviews will be compiled into an annual NSP performance report.



Going forward, the reviews will also involve implementing partners in the health, social development, education, private and civil society sectors and CBOs. This will be in line with the South African Government's strategy of fostering an integrated approach to governance and ensuring alignment of government wide priorities, monitoring implementation of priority programs through a consultative cross cutting platform. The graphic below shows an overview of the overall NSP performance review process.



5.3 Reporting and dissemination

The annual NSP report will be generated at national and provincial levels with emphasis on disseminating information about major decision points especially about the need to pivot or adjust interventions, implementation plans and resource allocation.

Besides compiling performance review reports against the NSP goals and objectives, the NSP SI Unit will compile data reports that better communicate performance of the NSP with emphasis on presenting key programmatic performance data that allows NSP stakeholders, including implementing partners, civil society and the general public to relate better to the data especially as points for decision making. Examples of reporting and dissemination tools that will be used include the following:

- An NSP performance summary bulletin This can be generated semi-annually to provide synthesised NSP performance data to HIV, STI and TB programme managers and implementers at all levels.
- **An NSP performance dashboar**d Like the report card, the NSP will generate a summary at-a-glance perspective of NSP performance using data from the multi-sectoral information system. Dashboards will be generated from the provincial, district and national databases so that users can change key inputs to see how they affect what is displayed on the dashboard and allow drill down to source data.
- NSP policy briefs These will be two-five page/s summaries of recommended actions to a specific problem that is being
 addressed through a specific intervention in the NSP [especially for new interventions like Pre-exposure Prophylaxis
 (PreP) for key populations]. Using mainly graphics, pictures and photos the policy briefs will share a problem, solution
 with compelling evidence. Policy briefs will be used to convey evidence based policy recommendations for some of the
 new and or game changing interventions recommended in the new NSP.

Annexure 1: NSP 2017-2022 Indicators

As part of the process of developing the new NSP indicators, a working group comprised of M&E experts from SANAC, international agencies (UNAIDS, WHO), government departments (NDoH, DBE, DSD) and research institutions were assigned with the responsibility of developing recommendations for indicators, and targets to monitor progress towards achieving the NSP goals. The working group established criteria (see box) for reviewing and selecting indicators, identifying data sources and targets. In determining the sources of data,

Indicator selection criteria

The indicator is fully-defined. The indicator is feasible to collect and analyse. The indicator has been used or field tested. The indicator is needed and useful. The indicator has technical merit. The indicator set is coherent and balanced. The indicator is easy to understand and concise.

the working group considered that such sources should be nationally and sub-nationally (province and district) representative and can provide data on a routine, timely basis and the data can be comparable across years, geographical region, age group, sex/gender, risky behaviour and social structural characteristics. The rest of the section provided details of core impact and outcome indicators for the NSP.

Indicator reference sheets

The following reference sheet is a guideline for the core impact and outcome indicators for the National Strategic Plan 2017-2022.

Impact indicators

Indicator Protocol Referen	ce Number: IM1
Indicator	New HIV infections
Rationale/purpose	New HIV infections can be estimated through mathematical models that have been fitted to HIV prevalence data. An advantage of the mathematical modelling approach is that it is possible to integrate data sources other than household HIV prevalence in the model fitting procedure (e.g. mortality data, sexual behaviour data and antenatal prevalence data), and thus to achieve greater statistical precision.
	Another advantage is that mathematical models can be used to construct counterfactual scenarios (i.e. estimating what the HIV incidence rate would have been in the absence of interventions), making it possible to quantify the impact of interventions on HIV incidence. However, mathematical models require many assumptions about sexual behaviour, HIV transmission and HIV disease progression, and these can all influence the fitted new HIV infections trend as well as the estimates of intervention impact.
	The new HIV infections indicator is used to assess the effectiveness of various HIV interventions that includes prevention programmes such as BCC, treatment as prevention programmes, condom use as well as other interventions being rolled out in the country.
Numerator	The estimated number of new infections occurring in a particular year for individuals aged 15 to 49 years old.
Data collection frequency	Annually.
Disaggregation	Age: Adults: 25-49 years, young people: 15-24 years, male female, key populations, national, provinces and districts.
Measurement tool	Modelled, estimates using data from various data sources.

Method of measurement	The THEMBISA Mathematical Model is a model of the South African HIV epidemic. The Model stratifies the population by demographic characteristics (age and sex), sexual behaviour characteristics (marital status, risk group and sexual experience), engagement in HIV prevention programmes (history of HIV testing and male circumcision status) and HIV disease stage (HIV-positive individuals are stratified by CD4 count if untreated, and by baseline CD4 count and ART duration if treated). Assumptions regarding sexual behaviour and changes in behaviour over time are based on reviews of South African sexual behaviour data, and assumptions regarding changes over time in HIV testing and ART uptake are based on reported rates of HIV testing and reported numbers of ART patients. The Model is fitted to age-specific HIV prevalence data from antenatal surveys and household surveys, as well as age-specific reported death data, using a Bayesian procedure. Parameters varied in the model fitting procedure included rates of partnership formation, probabilities of HIV transmission per act of sex, rates of HIV-related mortality and CD4 decline, and the percentage reduction in unprotected sex
la terra te ti ca	following an HIV-positive diagnosis.
Interpretation	New HIV infections is defined as the number of new HIV infections occurring over a specified period, usually in a population during a specified time period. People who were infected before that time period are not included in the total, even if they are still alive.
Other relevant information	The interpretation of new HIV infections is increasingly difficult as antiretroviral treatment programs expand. Reliable new HIV infections are critical to monitoring transmission trends and guiding an effective national response to the epidemic. Mathematical models, such as the Thembisa Model, can also generate estimates of incidence by leveraging household survey data together with data from antenatal clinic surveillance and information on survival patterns of people living with HIV and behaviours.
	However, the risk with the Thembisa Model is that biases in the estimates can be introduced when certain assumptions do not hold, and as the method is based on using prevalence data, sudden changes in incidence will not be detected rapidly, since such changes only manifest in prevalence levels after a considerable delay. The incidence trajectory in Thembisa is constrained to follow a path dictated by the patterns of risk assumed, for which some reliance is placed upon a simplified scheme of sexual behaviour derived from self-reported data, which may be inaccurate.

Indicator Protocol Reference Number: IM2	
Indicator	AIDS related mortality
Rationale/purpose	The indicator measures the success of HIV and TB programmes.
Numerator	Number of deaths due to AIDS per 100 000.
Denominator	Estimated population in the reporting year.
Disaggregation	Age, sex, national, provinces.
Data collection frequency	Yearly.
Measurement tool	Recorded AIDS-related deaths on vital registers from the Department of Home Affairs (DoHA) updates on the National Population Register (NPR) before passing on the death notification form to Stats SA for analysis on cause-of-death data. The number of AIDs-related deaths can also be modelled using the Thembisa Model.
Method of measurement	Stats SA survey estimates or the Thembisa Model.
Interpretation	Empirical data from different AIDS mortality data sources are consolidated to obtain estimates of the level and trend of HIV infection and of mortality in the population. This indicator measures the proportion of HIV/AIDS-related deaths in the population.
Other relevant information	The estimated number of adults and children who have died due to AIDS-related causes in a specific year, expressed as a rate per 100 000 population. Empirical data from different HIV surveillance sources are consolidated to obtain estimates of the level and trend of HIV infection and of mortality in adults and children. Standard methods and tools for HIV estimates that are appropriate to the pattern of the HIV epidemic are used. However, to obtain the best possible estimates, judgement must be used as to the quality of the data and how representative it is of the population. Adjustments are often needed because of underreporting/misclassification of HIV/AIDS deaths. To calculate mortality rates, the total population is derived from the latest estimates produced by Stats SA.

Indicator Protocol Referen	
Indicator	TB incidence rate (per 100,000 population).
Rational/purpose	Incidence (cases arising in a given time period) gives an indication of the burden of tuberculosis (TB in a population, and of the size of the task faced by a national TB control programme. Incidence can change as the result of changes in transmission (the rate at which people become infected with N tuberculosis, the bacterium which causes TB), or changes in the rate at which people infected with N tuberculosis develop TB disease (e.g. as a result of changes in nutritional status or of HIV infection).
Numerator	Number of new and relapse cases of TB (all forms) estimated to occur in a given year.
Denominator	Total population per 100 000.
Disaggregation	Age, sex, national and provincial levels.
Data collection frequency	Yearly.
Measurement tool	The incidence of TB is the estimated number of new and relapse tuberculosis cases arising in a given year, expressed as the rate per 100,000 population. All forms of TB are included, including cases in people living with HIV. Estimates for all years are recalculated as new information becomes available and techniques are refined, so they may differ from those published previously.
Method of measurement	Estimates of TB incidence based on annual case notifications, assessments of the quality and coverage of TB notification data, national surveys on the prevalence of TB disease and information from deat (vital) registration systems.
Interpretation	Proportion of new and relapse cases of TB (all forms) estimated to have occurred in a given year.
Other relevant information	Incidence is defined as the number of new and recurrent (relapse) episodes of TB (all forms) occurring in a given year. Recurrent episodes are defined as a new episode of TB in people who have had TB in the past and for whom there was bacteriological confirmation of cure and/or documentation that treatment was completed.
Source	WHO, Global Tuberculosis Report.
Indicator	HIV prevalence among key and vulnerable populations.
Rational/purpose	Decline in HIV prevalence can reflect saturation of infection among those individuals who are most vulnerable and rising mortality, rather than behaviour change.
	Sex workers typically have higher HIV prevalence than the general population in both concentrated and generalized epidemics. Reducing the prevalence among sex workers is a critical measure of national-level response to HIV.
	Men who have sex with men typically have the highest HIV prevalence in countries with either concentrated or generalised epidemics. Reducing the prevalence among men who have sex with men is a critical measure of a national-level response to HIV.
	People who use drugs often have high HIV prevalence. In many cases, the prevalence among thes populations can be more than twice the prevalence among the general population. Reducing th prevalence among people who inject drugs is a critical measure of a national-level response to HIV.
	Transgender persons often have higher HIV prevalence than the general population in many setting. In many cases, the prevalence is more than twice that of the general population. Reducing th prevalence among transgender persons is an important measure for monitoring the national HI response.
	In many cases, the HIV prevalence among prisoners is greater than the prevalence among the general population. Addressing HIV among prisoners is an important component of the national response.
	Adolescent girls and young women are at high risk of HIV infection. Patterns in HIV prevalence for young people are a better indication of recent trends in HIV incidence and risk behaviour.
	In older populations, shifts in HIV prevalence are slow to reflect changes in the rate of new infection because the average duration of infection is long.
Numerator	The number of people in a specific key and vulnerable population who test positive for HIV,
Denominator	The number of people in a specific key and vulnerable population tested for HIV
Calculation	Numerator/denominator.
Disaggregation	Age, gender (male, female, transgender), Key and vulnerable populations: sex workers (SWs), MSM people who inject drugs (PWID), transgender persons, prisoners, provinces, districts.
Method of measurement	This indicator is calculated using data from HIV tests conducted among respondents in the sentine site(s) or participants in bio-behavioural surveys. The sentinel surveillance sites used for calculation this indicator should remain constant to allow for tracking changes over time.
Measurement frequency	Annual.
Source of definition	GAM 2017.

Indicator Protocol Reference Number: IM5	
Indicator	Mother-to-child transmission of HIV at ten weeks.
Rationale/purpose	Progress in providing women with antiretroviral medicines to reduce mother-to-child transmission of HIV during ANC and labour.
	Efforts have been made to increase access to interventions that can significantly reduce mother-to- child transmission of HIV, including combining antiretroviral medicine prophylactic and treatment regimens and strengthening counselling on infant feeding. The impact of interventions for preventing mother-to-child transmission in reducing the number of children newly infected with HIV through mother-to-child transmission needs to be assessed. The percentage of children who are living with HIV should decrease as the coverage of interventions for preventing mother-to-child transmission and the use of more effective regimens increase.
Numerator	Sum of infants delivered by women living with HIV that test PCR positive at around 10 weeks in the previous 12 months to women living with HIV
Denominator	Sum of infants delivered by women living with HIV that receive PCR test around 10 weeks in the previous 12 months.
Calculation	Numerator/denominator.
Disaggregation	Provinces, districts.
Method of measurement	Data on infants eligible and PCR tested at around 10 weeks is collected from delivery registers, tick registers and laboratory records to collate number tested. The total number of infants that test PCR positive can be aggregated monthly.
Measurement frequency	Annually.

Indicator Protocol Reference Number: IM6	
Indicator	Mother-to-child transmission of HIV at 18 months.
Rationale/purpose	The indicator measures the performance of comprehensive quality Prevention of Mother to Child Transmission (PMTCT) programme performance especially during the post-natal period as it tracks post-natal sero-conversion and effectiveness of infant breastfeeding. The indicator will be used as proxy measure of the performance of Prevention of Mother-to-Child Transmission (PMTCT) interventions focused on retaining mother-baby pairs in care, ensuring mother-baby pairs receive nutritional advice, counselling and support; testing of mother-baby pairs and ART coverage of mother-baby pairs during the post-natal period.
Numerator	Sum of infants that test HIV positive at around 18 months in the previous 12 months.
Denominator	Sum of infants eligible for rapid HIV test at 18 weeks in the previous 12 months.
Calculation	Numerator/denominator.
Disaggregation	Province, district and sub-district.
Method of measurement	Data on infants eligible and tested for HIV using rapid HIV antibody test at 18 weeks is collected from delivery registers, tick registers and laboratory records to collate number tested. The total number of infants that test HIV positive can be aggregated monthly. Infants with positive PCR at birth, six and ten weeks have to be excluded.
Measurement frequency	Annually.

Indicator Protocol Reference Number: IM7	
Indicator	Number of men reporting urethral discharge in the past 12 months.
Rationale	Urethral discharge among men is a sexually transmitted infection syndrome generally most commonly caused by Neisseria gonorrhoea or Chlamydia trachomatis. Presentation with an acute sexually transmitted infection syndrome, such as urethral discharge, is a marker of unprotected sexual intercourse and urethral discharge facilitates HIV transmission and acquisition. Surveillance for urethral discharge therefore contributes to second-generation HIV surveillance by providing early warning of the epidemic potential of HIV from sexual transmission and ongoing high-risk sexual activity that may require more aggressive programme interventions to reduce the risk. Untreated urethral discharge can result in infertility, blindness and disseminated disease. Increasing resistance to the recommended treatment options for Neisseria gonorrhoea may render this infection untreatable.
Numerator	Number of men reported with urethral discharge during the reporting period.
Denominator	Number of men 15 years and older.
Calculation	Numerator/denominator.
Disaggregation	Males.
Method of measurement	Routine health information systems.
Measurement frequency	Data should be recorded daily and reported quarterly to the national, provincial and district levels.

Outcome indicators

Goal 1: Accelerate prevention to reduce new HIV, TB and STI infections.

Indicator Protocol Reference Number: OC1	
Indicator	Deliveries in health facilities by women aged 10-19 years.
Rationale/rationale	Discrepancies exist between sexual behaviour self-reports and sexual risk behaviour outcomes. Unintended pregnancy mainly results from inconsistent, incorrect and lack of effective contraceptive methods. Among adolescent girls, a significant number of pregnancies are unintended.
Numerator	Total number of deliveries in health facilities by women aged 10-19 years.
Denominator	Total sum of deliveries in health facilities.
Calculation	Numerator/denominator.
Method of measurement	The total number of deliveries will be collated from health facility delivery registers. Note that this does not include terminations of pregnancy among teenagers.
Measurement frequency	Annually.
Disaggregation	Province, district and sub-district, age groups: 10–14 years and 15-19 years.

Indicator Protocol Reference Number: OC2	
Indicator	COUPLE YEAR PROTECTION (CYP) rate
Rationale/purpose	CYP monitors progress in the delivery of contraceptive services at the program and project levels.
Numerator	Couple year protection.
Denominator	Population females aged 15-49 years.
Calculation	Numerator/denominator.
Method of measurement	Couple year protection is the total of (oral pill cycles / 15) + (Medroxyprogesterone injection / 4) + (Norethisterone enanthate injection / 6) + (IUCD x 4.5) +) + (subdermal implant x 2.5) + Male condoms distributed / 120) + (female condoms distributed / 120) + (male sterilisation x 10) + (female sterilisation x 10). The population will be divided by 12 in the formula to make provision for annualisation.
Measurement frequency	Annually.
Disaggregation	Province, district and sub-district.

Indicator Protocol Reference Number: OC3	
Indicator	Percentage of individuals who correctly identify the risks of HIV, STI & TB transmission and how to prevent them and reject major misconceptions about HIV.
Rationale/purpose	HIV epidemics are perpetuated through primarily sexual transmission of infection to successive generations of young people. Sound knowledge of HIV is an essential pre-requisite - albeit, often an insufficient condition - for adoption of behaviours that reduce the risk of HIV transmission.
Numerator	Number of respondents aged 15–24 years who gave the correct answer to all five questions. 1. Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners? 2. Can a person reduce the risk of getting HIV by using a condom every time they have sex? 3. Can a healthy-looking person have HIV? 4. Can a person get HIV from mosquito bites? 5. Can a person get HIV by sharing food with someone who is infected?
Denominator	Number of all respondents aged 15–24 years.
Calculation	Numerator/denominator.
Method of measurement	 This indicator is constructed from responses to the following set of prompted questions: 1. Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners? 2. Can a person reduce the risk of getting HIV by using a condom every time they have sex? 3. Can a healthy-looking person have HIV? 4. Can a person get HIV from mosquito bites? 5. Can a person get HIV by sharing food with someone who is infected?
	The first three questions should not be altered. Questions 4 and 5 ask about local misconceptions and may be replaced by the most common misconceptions in your country. Examples include: "Can a person get HIV by hugging or shaking hands with a person who is infected?" and "Can a person get HIV through supernatural means?" Those who have never heard of HIV and AIDS should be excluded from the numerator but included in the denominator. An answer of 'don't know' should be recorded as an incorrect answer. Scores for each of the individual questions (based on the same denominator) are required as well as the score for the composite indicator.
Measurement frequency	Every three to five years.
Disaggregation	Sex: male and female, age groups 15 – 24 years and 25+ years.

Outcome indicators

Goal 2: Accelerate prevention to reduce new HIV, TB and STI infections.

Indicator Protocol Reference Number: OC4	
Indicator	Percentage of people living with HIV who know their HIV status at the end of the reporting period.
Rationale/purpose	Progress towards increasing the proportion of people living with HIV who know their HIV status and the efficacy of HIV testing interventions. People living with HIV who know their HIV status will be able to access the HIV care and treatment services required to live healthy, productive lives and to reduce the potential of transmitting HIV to other people. The most effective way to ensure that people living with HIV are aware of their HIV status is to offer HIV testing services at locations and among populations with the highest HIV burden. This measure is one of the 10 global indicators in the 2015 WHO consolidated strategic information guidelines for HIV in the health sector and helps to monitor the first 90 of the UNAIDS 90–90–90 targets: that 90% of the people living with HIV know their HIV status by 2020.
Numerator	Number of people living with HIV who know their HIV status.
Denominator	Estimated number of individuals living with HIV infection (diagnosed or undiagnosed).
Calculation	Numerator/denominator.
Data collection frequency	Annually.
Disaggregation	Sex: males and females; Age groups: 0–14, 15–49 and 50+ years; for survey-based measures: 0–14 and 15+ years provinces, districts and sub-districts.
Method of measurement	The NSP target will be based on estimating this measure using the Thembisa Model.
	For the numerator: The number of people living with HIV who know their status is the same as the number of people diagnosed with HIV and reported to through NDoH DHIS system and surveillance system who are still alive.
	For the denominator: The estimated number of individuals living with HIV will be calculated using the Thembisa Model and a detailed description of the model is available.
	UNAIDS can provide technical assistance to a SANAC to estimate the knowledge of HIV status for published population-based surveys if requested.

Indicator Protocol Referen	ce Number: OC5
Indicator	Percentage and number of adults and children on ART among all adults and children living with HIV at the end of the reporting period.
Rationale/purpose	To measure progress towards providing ART to all people living with HIV. ART has been shown to reduce HIV-related morbidity and mortality among people living with HIV and to halt onward transmission of the virus. Studies also show that early initiation, regardless of a person's CD4 cell count, can enhance treatment benefits and save lives. WHO currently recommends treatment for all. The percentage of people on ART among all people living with HIV provides a benchmark for monitoring global targets over time and comparing progress across countries. It is one of the 10 global indicators in the 2015 WHO consolidated strategic information guidelines for HIV in the health sector and helps monitor the second 90 of the UNAIDS 90–90–90 targets: that 90% of the people who know their HIV-positive status will be on antiretroviral therapy by 2020.
Numerator	Number of people on ART at the end of the reporting period.
Denominator	Estimated number of people living with HIV.
Calculation	Numerator/denominator.
Data collection frequency	Data should be collected continually at the facility level and aggregated periodically, preferably monthly or quarterly. The most recent monthly or quarterly data should be used for annual reporting.
Disaggregation	• Gender.
	• Age groups (0–14, 15+, <1, 1–4, 5–9, 10–14, 15–19, 20–24, 25–49 and 50+ years).
	Public or private sector.
	Province, district and sub-district.
	• Numbers of people newly initiating ART during the current reporting year (these data should be available from the same sources as the total number of people receiving ART).
	Number of people eligible for treatment in countries in which ART eligibility according to national criteria guidelines is a subset of all people living with HIV.
Data sources	DHIS and Thembisa Model.
Method of measurement	The numerator will be generated by counting the number of adults and children who are on antiretroviral therapy at the end of the reporting period from the DHIS-Tier.Net system. The count will not include people who have stopped treatment, died or emigrated to another country or who are otherwise lost to follow-up at the facility during this period. Protocols should be in place to avoid duplicate counting of individuals across facilities or over time, and to ensure that all facility level data is reported in a timely manner. The numerator will also include people on ART in the private sector if these data are available.
	This indicator does not include antiretroviral medicines taken only for preventing mother-to-child transmission and post-exposure prophylaxis. This indicator includes pregnant women living with HIV who are receiving lifelong antiretroviral therapy. The numerator will be triangulated with national procurement and drug monitoring systems and adjusted appropriately. Data quality assessments or reviews will be used to monitor the extent to which facilities are able to accurately report the number of people on treatment during reporting periods should also adjust programme numerator data to account for these inconsistencies.
	For the denominator: the estimated number of individuals living with HIV will be calculated using the Thembisa Model and detailed description of the model should be available.
Interpretation	Possible data limitations and threats.
	This indicator monitors trends in ART coverage in a comparable way across the country and over time. It does not, however, measure treatment cost, quality, effectiveness or adherence, which varies within and between provinces and are likely to change over time. The accuracy of the number of people on ART will depend on the quality of the underlying reporting system. The number of people on ART may be under-reported due to missing or delayed reporting of facility data to the national level. The numbers of people on ART also may be over-reported as a result of not removing people from registries who stopped treatment, died or transferred facilities. Other errors, such as incorrectly abstracting data from facility-based registries or completing reporting forms, can lead to over and underreporting to varying degrees of magnitude.
Other relevant information	The subset of people initiating ART during the last reporting year is requested. Provide the number of people who are eligible in cases where ART eligibility is according to a subset of all people living with HIV. The number of people on antiretroviral treatment as reported through the country's drug distribution system is requested, where available. This figure should be triangulated with the number reported from programme data and differences resolved or explained as appropriate.
	Provide district data disaggregated by sub-districts as well as city-specific data for this indicator. Provide information for the capital city as well as one or two other key cities of high epidemiological relevance. For example, those that have the highest HIV burden or have committed to ending AIDS by 2030.
	Data custodians have the option to use Thembisa data for the denominator.

Indicator	Percentage of adults and children living with HIV known to be on ART 12 months after starting.
Rationale/purpose	Progress in increasing survival among adults and children living with HIV by maintaining them on ART. One goal of any ART programme is to increase survival among people living with HIV. As ART is scaled up around the world, understanding why people drop out of treatment programmes and how many do this is important. The data can be used to demonstrate the effectiveness of programmes and highlight obstacles to expanding and improving them.
Numerator	The number of adults and children who are still alive and receiving ART 12 months after initiating treatment in reporting period.
Denominator	The total number of adults and children initiating ART in the reporting period, within the reporting period, including those who have died since starting ART, those who have stopped treatment and those recorded as lost to follow-up at month 12.
Calculation	Numerator/denominator.
Disaggregation	• Gender.
	• Age (0–14 and 15+ years).
	Pregnancy status when starting therapy.
	Breastfeeding status when starting therapy.
	Province, district and sub-district.
Data collection frequency	As people start ART, monthly cohort data should be collected continuously. Data for monthly cohorts completing at least 12 months of treatment should then be aggregated.
Data sources	The DHIS and CMS.
Method of measurement	Programme monitoring tools; cohort and group analysis forms; ART registries and ART cohort analysis report forms.
	The reporting period is defined as any continuous 12-month period that has ended within a predefined number of months from the submission of the report. National reporting requirements can determine the predefined number of months. If the reporting period is 1 April to 31 March 2017, this indicator will be calculated by using everyone who started ART any time between 1 April and 31 March 2016. Retention at 12 months after starting antiretroviral therapy is defined as the outcome: whether the person is still alive and receiving ART, dead or lost to follow-up.
Other relevant information	Provide city-specific data for this indicator as well as one or two other key cities of high epidemiological relevance. For example, those who have the highest HIV burden or have committed to ending AIDS by 2030.

Indicator	Number and percentage of people living with HIV who have suppressed viral loads at the end of th
	reporting period.
Rationale/purpose	Individual-level viral load is the recommended measure of ART efficacy and indicates treatmen adherence and the risk of transmitting HIV. A viral load threshold of <1000 copies/mL define treatment success according to the 2016 WHO consolidated guidelines on the use of antiretrovira drugs for treating and preventing HIV infection. People with viral load test results below the threshole should be considered as having suppressed viral loads.
	Viral suppression among people living with HIV is one of the ten global indicators in the 2015 WHC consolidated strategic information guidelines for HIV in the health sector. This indicator also help monitor the third 90 of the UNAIDS 90–90–90 targets: that 90% of the people receiving antiretrovira therapy will have suppressed viral loads by 2020.
Numerator	Number of people living with HIV in the reporting period with suppressed viral loads (<1000 copies mL).
Denominator	Estimated number of people living with HIV.
Calculation	Numerator/denominator.
Disaggregation	• Sex (male and female).
	• Age: -14, 15+, <1 year, 1-4 years, 5-9, 10-14, 15-19, 20-24, 25-49 and 50+ years.
	Province, district and sub-district.
Data collection frequency	Annually
Data sources	The DHIS and CMS.
Method of measurement	Viral load suppression may be measured using two different data sources. These sources include either clinical and programme data or nationally representative surveys. In either case, vira suppression is defined as <1000 copies/mL. For countries with other thresholds (such as undetectable <50 copies/mL or <400 copies/mL), preliminary evidence from several studies suggests that the proportion of those with 50 copies/ml or above and less than 1000 copies/ml is small, so no adjustmen is required. The testing threshold value should be reported for levels other than <1000 copies/mL.
	For the numerator. The NSP will report the actual number of people that have suppressed viral load at the end of the reporting period using data from the DHIS-Tier.net system. In either case, viral load testing should be routine rather than episodic. For example, when treatment failure is suspected. viral load is tested repeatedly for a person, only the last routine test result should be used. An indication of whether the indicator is direct or adjusted should be included.
	For the denominator: The estimated number of individuals living with HIV will be calculated using th Thembisa Model and a detailed description of the model is available.
Interpretation	When viral load suppression testing data are collected from all people receiving ART or a nationall representative sample, this measurement provides important information on adherence, treatmen efficacy and transmission risk at the individual and programme level. However, several challenge may arise from using available data to monitor viral load.
	Firstly, viral load monitoring capacity is being scaled up but remains limited in low-income setting: As a result, the summary data from the viral load indicator as measured through ART registries of clinical programme data may not be representative of the viral load of the broader treatmen population. This applies especially when viral-load testing is not routine for everyone receiving antiretroviral therapy but performed selectively to determine when to initiate treatment or for peopl with questionable treatment outcomes. The data reported from the viral load testing of peopl suspected of treatment failure will underestimate viral load suppression.
	Secondly, the accuracy of the value of an individual's viral load may depend on the specimen availabl (whole blood versus dried blood spots). Determining whether a person has achieved undetectabl viral load also varies depending on the sensitivity of the assays used. For this reason, suppression at value of <1000 copies/mL rather than undetectable viral load should be used. Patient monitoring systems may yield cross-sectional and programme data. Data may also come from studies. If laborator data are used, they need to be adjusted to avoid double counting people with more than one vira load test in the reporting period. In addition to this indicator, collecting data on retention and vira suppression at 12 months among cohorts may be useful to triangulate these different measures to better describe the impact of effective antiretroviral therapy.

Goal 3: Reach all key and vulnerable populations with comprehensive, customised and targeted interventions.

Indicator	Percentage of specific key and vulnerable populations living with HIV who know their HIV status
	(first 90)
Rational/purpose	Ensuring that people living with HIV receive the care and treatment required to live healthy, productive lives and reducing the chance of transmitting HIV require that they know their HIV status. In many countries, targeting and counselling at locations and populations with the highest HIV burden is the most efficient way to reach people living with HIV and ensure that they know their HIV status. This indictor captures the effectiveness of HIV testing interventions targeting populations at higher risk of HIV infection.
What it measures	Progress providing HIV testing services to members of key populations who are living with HIV and measuring against the first 90 of the 90-90-90 target: the percentage of people living with HIV who know their HIV status.
Numerator	Number of specific key and vulnerable populations who know their HIV status.
Denominator	Total number of respondents who answered the question: "Do you know your HIV status from an HIV test?
Calculation	Numerator/denominator.
Disaggregation	Geographic area, age, gender (male, female and transgender), SWs, MSM, PWID, inmates and People with Disabilities (PWDs).
Measurement tool	IBBS
Method of measurement	 Measurement of this indicator will be through a structured questionnaire where respondents are asked to answer questions relating to their knowledge of HIV status as part of a more comprehensive set of questions. The questions will specifically reference if respondents have ever been tested for HIV and if so, do they know and understand: 1) their test result 2) what the result means to them. This will establish if respondents fully understand their HIV status and the measures that one can follow upor diagnosis. The expected question and answer prompts will be: A. Do you know you HIV status from an HIV test? 1. No, I have never been tested.
	 Yes, I have been tested. If yes, when were you last tested? Six months. Six to 12 months. More than 12 months.
	C. Was the result of your last test:1. Positive.2. Negative.3. Indeterminate.
	Knowing their HIV status means answering 'yes' to A and positive to C if positive, or 'yes' to A, 1 or 2 to B and negative to C.
Interpretation	It is important to determine the proportion of people living with HIV who know their HIV status, as this knowledge is the entry point to the continuum of care.
Data collection frequency	Annually
Other relevant information	If sub-national data is available provision of such disaggregation by administrative area and/or site would be an added advantage.
	Sources: Global AIDS Monitoring 2017; indicators for monitoring the 2016 United National Politica Declaration on HIV and AIDS and consolidated strategic information guidelines for HIV in the health sector, WHO, 2015.

Indicator	Percentage of key populations who correctly identify risks of HIV, STI & TB transmission and how to
indicator	prevent them and reject major misconceptions about HIV, STI & TB.
Rationale/purpose	To assess progress towards increased and universal knowledge of the essential facts about HIV transmission specifically for key populations and to ascertain whether they are able to identify risk factors associated with HIV, STI and TB transmission and any related misconceptions.
	This indicator is a knowledge-based indicator measuring the level of understanding of all key and vulnerable populations on aspects associated with HIV, STI and TB transmission including misconceptions related to HIV.
Numerator	Number of respondents who gave a correct answer to a set of prescribed question (answering a minimum of five questions correctly).
Denominator	Total number of all respondents.
Calculation	Numerator/denominator.
Disaggregation	 Geographical area. Sex Gender SWs MSM PWID PWDs Inmates
Measurement tool	IBBS.
Method of measurement	Method of measurement will be through an IBBS. Measurement will be constructed from responses obtained from a prescribed set of questions related to risky sexual behaviour, HIV, STI and TB transmission methods, prevention of infection and misconception based questions. Respondents are expected to answer at least five questions correctly for them to be considered knowledgeable on this subject matter.
Interpretation	The belief that a healthy-looking person cannot be infected with HIV is a common misconception that can result in unprotected sexual intercourse with infected partners. Rejecting major misconceptions about modes of HIV transmission is as important as correct knowledge of true modes of transmission. For example, a healthy looking person who is not infected can weaken the motivation to adopt safer sexual behaviour, while the belief that HIV can be transmitted through sharing food or through shaking someone's hand that is infected reinforces the stigma faced by people living with HIV/AIDS.
Data collection frequency	Three to five years.
Other relevant information	Sources: Global AIDS Monitoring 2017; Indicators for monitoring the 2016 United National Political Declaration on HIV and AIDS.

Indicator Protocol Reference Number: OC10	
Indicator	Percentage of specific key and vulnerable populations reporting using a condom.
Rationale/purpose	Various factors increase the risk of exposure to HIV among key and vulnerable populations. The risk of sexually transmitting HIV can be greatly reduced by using a condom consistently and correctly a every sexual encounter. More so in the key population groups.
	In the case of SWs, the risk of exposure to HIV includes multiple, non-regular and more frequent sexual encounters. However, SWs can substantially reduce the risk of transmission, both from clients and to clients, by consistently and correctly using condoms.
	In the case of MSM, condom use should be greatly advocated for more especially because of the nature of penetrative sexual encounter that occurs. The physiological make of the wall of the entry point, is sensitive and delicate in nature, and warrants greater care and protection during a sexual encounter to minimise the risk of HIV transmission during unprotected sexual encounter. Provision condoms particularly to this key population group should also be accompanied with lubricating get in order to minimise transmission of HIV. MSM can also have female partners who could become infected hence the need for consistent and correct condom use at all times.
	Safer injecting and sexual practices among people who inject drugs are essential, even in countries in which other modes of transmission predominate, because the risk of HIV transmission from contaminated injecting equipment is extremely high, and people who inject drugs can spread HI ^I (such as through sexual transmission) to the wider population.
	Strides should be taken to ensure that data collected for the key population groups adhere to stric confidentiality rules and does not compromise the identity of the respondents.
What it measures	This indicator measures the degree of condom use among key and vulnerable populations.
Numerator	Number of specific key and vulnerable populations who reported using a condom.
Denominator	Total number of respondents.
Calculation	Numerator/denominator.
Disaggregation	Geographical area, SWs, MSM, PWID, inmates and PWDs.
Measurement tool	IBBS (Behavioural surveillance or other special surveys).
Method of measurement	Behavioural surveillance or other special surveys. Respondents are asked a specified set of question to establish their risk factors and perception of risk in relation to HIV transmission. The survey will b in a form of a questionnaire i.e. structured questions that respondents are asked and need to responto. The structured questions can include feedback loop checks with various questions that lin together to ensure the most accurate responses are obtained.
	Whenever possible, data for all key populations should be collected through or with civil societ organisations that have worked closely with this population group in the field.
	Access to survey respondents and the data collected from them must remain confidential and secure
Interpretation	Results obtained will assist with programme planning and implementation with an aim to improv preventative health services and minimise exposure to HIV through unprotected sex for all ke population groups. Special tailor made programmes can be developed to ensure that services reac- key and vulnerable population groups.
	Safer injecting and sexual practices among PWID are also essential, even in countries in which othe modes of HIV transmission predominate.
Data collection frequency	Every three years.
Other relevant information	Source: Global AIDS Monitoring 2017; Indicators for monitoring the 2016 United National Politica Declaration on HIV and AIDS.

Indicator	Percentage of specific key and vulnerable populations living with HIV receiving ART (Second 90).
Rationale/purpose	The indicator measures progress towards providing ART to people living with HIV in key populations ART has been shown to reduce HIV-related morbidity and mortality among people living with HIV and to reduce the transmission of HIV. People living with HIV in key populations should be able to access mainstream services that provide ART without fear of facing stigma or discrimination and to be able to receive care from health-care workers who have the clinical knowledge to meet their specific needs. Ideally, all of these mainstream services should meet the standards for becoming sensitised to the need of key populations. Accordingly, ART coverage is a crucial way of assessing access to mainstream services.
	In recent years, the guidelines on eligibility for ART have changed several times. National guidelines do not always match global guidelines. As a result, ART coverage has been reported using numerous definitions, including those based on global guidelines, or national guidelines, or both. Wher guidelines are modified to increase eligibility among people who are living with HIV, coverage estimates will decrease. To avoid multiple ART coverage values, the number of key population members living with HIV.
	This indicator will be aligned with the indicator on ART coverage among all people living with HIV.
Numerator	Number of respondents living with HIV who report receiving ART in the past 12 months.
Denominator	Number of respondents living with HIV.
Calculation	Numerator/denominator.
Disaggregation	 SWs (female, male), transgender persons, MSM, PWID, inmates. Age (<25 and 25+ years). Province, district and sub-district.
Measurement tool	IBBs.
Method of measurement	Bio-behavioural survey – most treatment programmes do not collect behavioural risks in medica charts, so programme data are of limited use.
Interpretation	Measures overall scale-up of ART programme. Disaggregation provides additional information to assess enrolment among specific populations.
Data collection frequency	Annually.
Other relevant information	If subnational data is available provision of such disaggregations by administrative area and/or site would be an added advantage.
	Sources: Global AIDS Monitoring 2017; Indicators for monitoring the 2016 United National Politica Declaration on HIV and AIDS and the consolidated strategic information guidelines for HIV in the health sector; WHO, 2015.

Indicator	Percentage of specific key and vulnerable populations living with HIV who have suppressed vira loads (Third 90).
Rationale/purpose	The indicator measures progress towards providing antiretroviral therapy to people living with HIV in key and vulnerable populations.
	Individual-level viral load is the recommended measure of antiretroviral therapy efficacy and indicates treatment adherence and the risk of transmitting HIV. A viral load threshold of <1000 copies/ml define treatment success according to the 2016 WHO consolidated guidelines on the use or antiretroviral drugs for treating and preventing HIV infection. People with viral load test results below the threshold should be considered as having suppressed viral loads. People living with HIV in key populations should be able to access mainstream services that provide antiretroviral therapy without fear of facing stigma or discrimination and should implicitly have viral load suppression.
	To avoid multiple ART coverage values, the number of key population members living with HIV with viral load suppression will be presented in relation to the total number of key population members living with HIV. This indicator will be aligned with the indicator on antiretroviral therapy coverage among all people living with HIV with viral load suppression.
Numerator	Number of people living with HIV in a key population in the reporting period with suppressed vira loads (≤1000 copies/mL).
Denominator	The estimated number of people living with HIV in a key population.
Calculation	Numerator/denominator.
Disaggregation	 SWs (female, male), transgender people, MSM, PWID, inmates. Age (<25 and 25+ years). Province, district and sub-district.
Interpretation	Measures clinical outcomes of patients in care and overall quality of care as ART programmes expand In addition, viral load suppression is the best available measure of patient adherence to ART.
Measurement tool	Lab blood monitoring.
Method of measurement	Viral load suppression may be measured using two different data sources. These sources include either clinical and programme data or nationally representative surveys. In either case, vira suppression is defined as <1000 copies/mL. For countries with other thresholds (such as undetectable <50 copies/mL or <400 copies/mL), preliminary evidence from several studies suggests that the proportion of those with 50 copies/ml or above and less than 1000 copies/ml is small, so no adjustment is required. The testing threshold value should be reported for levels other than <1000 copies/mL.
Data collection frequency	Annually and/or ever three years.
Other relevant information	Sources: Global AIDS Monitoring 2017; Indicators for monitoring the 2016 United National Politica Declaration on HIV and AIDS and the consolidated strategic information guidelines for HIV in the health sector; WHO, 2015.

Indicator Protocol Reference Number: OC13	
Indicator	Percentage of individuals among key and vulnerable population who experienced human right violations.
Rationale/purpose	 Progress towards reducing discriminatory attitudes and support for discriminatory policies Discriminatory attitudes and human rights violations could be: 1. Avoidance and/or denial of HIV services due to perceived and/or experienced stigma and discrimination towards SWs. 2. Avoidance and/or denial of HIV services due to perceived and/or experienced stigma and discrimination towards MSM. 3. Avoidance and/or denial of HIV services due to perceived and/or experienced stigma and discrimination towards PWID. 4. Avoidance and/or denial of HIV services due to perceived and/or experienced stigma and discrimination towards transgender persons. 5. Denial in protection by law enforcement. 6. Violence experienced by and towards key population groups. This indicator directly measures fear of, or experienced stigma or discrimination. This indicator could provide further understanding and improve interventions in reducing HIV stigma and discrimination, (2) enabling comparisons between national, provincial, state and more loca administrations, (3) indicating priority areas for action. Discrimination is a human rights violation and is prohibited by international human rights law and most national constitutions. Discrimination in the context of HIV refers to unfair or unjust treatment (an act or failing to act) of an individual based on his or her real or perceived HIV status. Discrimination exacerbates risks and deprives people of their rights and entitlements, fuelling the HIV epidemic. HIV related stigma refers to negative beliefs, feelings and attitudes towards people living with HIV, group associated with people living with HIV (e.g. the families of people living with HIV) and other key populations at higher risk of HIV infection, such as PWID. High rates of HIV among women have brought into sharp focus the problem of violence against women and girls, shape their risk of vulnerability to HIV infection. Violence and HIV infection. Viole
	 have been linked through direct and indirect pathways. Studies in many countries indicated that many women have experienced violence in some form or another at some point in their lives. The indicator is not going to measure achieving zero discrimination but can inform on whethe discrimination is reducing service uptake.
Numerator	The number of key populations who ever experienced human rights violations (i.e. from colleagues neighbours, experienced violence, police harassment or arrest, partner violence.
Denominator	The total number of specific key populations who respondents.
Calculation	Numerator/denominator.
Disaggregation	MSM, SW, transgender persons and PWID.
Measurement tool	Survey.
Method of measurement	Behavioural surveillance or other special surveys, IBBS.
	Ideally, in addition to conducting surveys that measure the prevalence of discriminatory attitudes in a community, qualitative data should be collected to inform about the origins of discrimination. I would also be advisable to routinely collect data from people living with HIV on their experiences or stigma and discrimination via the People Living with HIV Stigma Index process (www.stigmaindex org) and to compare the findings with the data derived from the discriminatory attitudes indicators
Interpretation	The composite indicator can be monitored as a measure of a key manifestation of HIV-related stigm and the potential for HIV-related discrimination within the general population. This indicator could provide further understanding and improve interventions in HIV discrimination by showing chang over time in the percentage of people with discriminatory attitudes, allowing comparisons between national, provincial, state and local administrations and indicating priority areas for action. The respondents who have never heard of HIV and AIDS should be excluded from the numerator and denominator. Participants who respond do not know/not sure/it depends and those who refuse to answer should be excluded.
	 'Yes' and 'no' responses to each question may not add up to 100% if any participants respond "don' know" or values are missing. Calculating the percentage of people responding no to this question b subtracting the percentage of yes responses from 100% would therefore be inaccurate. 1. Findings derived from this indicator may lead to a better understanding on: 2. Fear of violence may keep women from insisting that a male partner whom they suspect is living with HIV use a condom. 3. Fear of intimate partner violence may keep key population groups from disclosing their HIV statu or seeking treatment. 4. Forced penetration may increase the likelihood of HIV transmission. 5. Rape is one manifestation of gender inequality and can result in HIV infection, although i represents a minority of cases. 6. Rape and other sexual and physical abuse can result in mental distress that manifests in high-ris sexual behaviour, increasing the chances of HIV transmission.
Data callection from on an	Every two to three years.
Data collection frequency	

Goal 4: Address the social and structural drivers of HIV, TB and STIs.

Indicator Protocol Referen	nce Number: OC14
Indicator	Proportion of ever-married or partnered women 15–49 years old who experienced physical or sexual violence from a male intimate partner in the past 12 months.
Rationale/purpose	Progress in reducing the prevalence of intimate partner violence against women, as an outcome itself and as a proxy for gender inequality an intimate partner is defined as a cohabiting partner, whether or not they were married at the time. The violence could have occurred after they separated.
	In areas with high rates of HIV infection among women have brought into sharp focus the problem of violence against women. There is growing recognition that deep-rooted, pervasive gender inequalities, especially violence against women and girls, shape their risk of and vulnerability to HIV infection. Violence and HIV have been linked through direct and indirect pathways.
Numerator	Women 15–49 years old who have or have ever had an intimate partner and report experiencing physical or sexual violence from at least one of these partners in the past 12 months. See the numerator explanation below for the specific acts of physical or sexual violence to include.
Denominator	Total number of women 15–49 years old surveyed who currently have or have had an intimate partner.
Calculation	Numerator/denominator.
Method of measurement	Population-based surveys.
Measurement frequency	Three to five years.
Disaggregation	• Age (15–19, 20–24 and 25–49 years).
	• HIV status (if available).
	Province, district and sub-district.
Explanation of the numerator	Ever-married or -partnered women 15–49 years old include those who have ever been married or have had an intimate partner. They are asked whether they have experienced physical or sexual violence from a male intimate partner in the past 12 months. Physical or sexual violence is determined by asking whether their partner did any of the following: slapped her or threw something that could hurt her; pushed or shoved her; hit her with a fist or something else that could hurt her; kicked, dragged or beat her up; choked or burned her; threatened or used a gun, knife or other weapon against her; physically forced her to have sexual intercourse against her will; forced her to do something sexual she found degrading or humiliating; made her afraid of what would happen if she did not have sexual intercourse. The numerator includes those reporting at least one incident corresponding to any item.
Explanation of the denominator	Total number of women 15–49 years old surveyed who currently have or had an intimate partner.

Goal 5: Ground the response to HIV, TB and STIs in human rights principles and approaches.

Indicator Protocol Reference Number: OC15	
Indicator	Percentage of people living with HIV who report stigma and discrimination.
Rationale/purpose	Discrimination is a human rights violation prohibited by international human rights law and most national constitutions. Discrimination in the context of HIV refers to unfair or unjust treatment (an act or an omission) of an individual based on his or her real or perceived HIV status. Discrimination exacerbates risks and deprives people of their rights and entitlements, fuelling the HIV epidemic. This indicator does not directly measure discrimination but rather measures discriminatory attitudes that may result in discriminatory acts (or omissions).
Numerator	Number of people living with HIV who report external or internalised stigma.
Denominator	Total number of respondents.
Calculation	Numerator/denominator.
Method of measurement	Survey.
Data collection frequency	Every two years.
Disaggregation	Geographic area, type of stigma.

Indicator	Percentage of women and men 15-49 years old who report discriminatory attitudes towards people living with HIV.
Rationale	Progress towards reducing discriminatory attitudes and support for discriminatory policies.
	Discrimination is a human rights violation prohibited by international human rights law and most national constitutions. Discrimination in the context of HIV refers to unfair or unjust treatment (an act or an omission) of an individual based on his or her real or perceived HIV status. Discrimination exacerbates risks and deprives people of their rights and entitlements, fuelling the HIV epidemic. This indicator does not directly measure discrimination but rather measures discriminatory attitudes that may result in discriminatory acts (or omissions). One item in the indicator measures the potential support by respondents for discrimination that takes place at an institution and the other measures social distancing or behavioural expressions of prejudice.
	The composite indicator can be monitored as a measure of a key manifestation of HIV-related stigma and the potential for HIV-related discrimination within the general population. This indicator could provide further understanding and improve interventions in HIV discrimination by showing change over time in the percentage of people with discriminatory attitudes, allowing comparisons between national, provincial, state and local administrations and indicating priority areas for action.
Numerator	Number of respondents who respond 'yes' to either of the two questions.
	Number of respondents (15-49 years old) who respond 'no' to either of the two questions.
Denominator	Number of all respondents who have heard of HIV.
	Number of all respondents (15-49 years old) who have heard of HIV.
Calculation	Numerator/denominator.
Method of measurement	Population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative survey)
	This indicator is constructed from responses to the following questions in a general population survey from respondents who have heard of HIV.
	 Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV? (yes, no, don't know/not sure/it depends).
	 Do you think that children living with HIV should be able to attend school with children who are HIV negative? (yes, no, don't know/not sure/it depends).
Data collection frequency	Every three to five years.
Disaggregation	• Age (15–19, 20–24 and 25–49 years).
	• Gender.
	Province, district and sub-district.
	Responses for each question (based on the same denominator) are required as well as the consolidated response for the composite indicator.
Other relevant information	This indicator provides an important measure of prevalence of discriminatory attitudes towards people living with HIV. More completely assessing progress towards eliminating HIV-related stigma and discrimination and the success or failure of efforts to reduce stigma requires measuring other domains of stigma and discrimination.

Goal 6: Promoting leadership and shared accountability for sustainable response to HIV, STIs and TB.

Indicator Protocol Reference Number: OC17	
Indicator	SANAC accountability performance score including the PCAs and DAC structures.
Rationale/purpose	To assess performance of the coordinating structure (SANAC/PCA) in coordinating stakeholders contributing to the performance of the NSP 2017-2022.
	The progressive performance related to the achievements of the NSP using key performance indicators and targets that evaluate factors that are crucial to the success of SANAC in achieving the goals of the NSP.
	The scorecard will also be used by the PCA's and district AIDS councils to measure performance.
Numerator	Scorecard developed and implemented.
Denominator	N/A.
Calculation	N/A.
Disaggregation	N/A.
Measurement tool	Performance scorecard.
Method of measurement	A graphical representation of the progress over time and a report of performance.
Interpretation	The scorecard will illustrated how well SANAC, PCAs and DACs have achieved the goals of monitoring the implementation and coordination of the NSP/PIP by all stakeholders contributing to achievements realised.
Measurement frequency	Annually.
Other relevant information	N/A.

Goal 7: Mobilise resources to support the achievement of NSP goal and ensure a sustainable response.

Indicator	Domestic and international HIV expenditure by programme categories and financing sources.
Rationale/purpose	Financing flows and expenditures of in-country HIV programmes/services by source in a standardised and comparable manner according to mutually exclusive categories. The HIV expenditures by programme or service here reported would need to be consistent with the number of people who have received the services reported elsewhere.
	Achieving country targets requires increased resources to provide the HIV care, treatment and prevention to reduce HIV incidence and extend life. It is critical to identify long-term, sustainable financing sources including domestic resource mobilisation, to maintain and build upon the successes achieved. The National AIDS Spending Assessment (NASA) classifications and definitions developed by UNAIDS are recommended as the framework to track and report HIV expenditure. NASA's classifications were defined by aligning the AIDS Spending Categories (ASC) to the programmes or services costed as part of the resource needs estimation process, which are the interventions/services (ASCs) or the sub-indicators are drawn from existing frameworks and are now structured around the ten commitments derived from the 2016 Political Declaration on HIV and AIDS: On the Fast-Track to Accelerate the Fight against HIV and to End the AIDS Epidemic by 2030. There are eight core sub-indicators of HIV expenditure and these include:
	A. Expenditure on HIV testing and counselling (non-targeted).
	B. Expenditure on ART (adults and paediatric).
	C. Expenditure on HIV-specific laboratory monitoring (CD4 cell counts, VL quantification).
	D. Expenditure on TB/HIV.
	E. Expenditure on the five pillars of combination prevention: Prevention for young women and adolescent girls (aged 10-24 years, exclusively in high prevalence countries; voluntary medica male circumcision (exclusively in high prevalence countries; Pre-exposure prophylaxis (PrEP stratified by key population (gay men and other MSM; SWs; PWID; transgender persons; prisoners young women and adolescent girls (10-24 years); serodiscordant couples); condoms (non targeted); and prevention among key populations (gay men and other MSM; SWs and their clients PWID; transgender persons; prisoners and other incarcerated people).
	F. Expenditure on prevention of vertical transmission of HIV.
	G. Expenditure on social enablers.
	H. Expenditure on cash transfer for young women and girls (aged 10-24 years, high prevalence countries; HIV-earmarked budgets).
Data type	Currency and monetary values.
Method of measurement	Primary:
	• NASA.
	Alternative:
	System of Health Accounts.
Data collection tools	Provincial and district reports on HIV expenditure by programme/service categories and financing sources using the national funding matrix template.
Measurement frequency	Annually for calendar or fiscal year.
Disaggregation•	Financing source.
	HIV and AIDS programme categories.
	 For selected sub-indicators, countries are encouraged to report expenditures on the most salient commodities under such programme (e.g. Antiretrovirals in the ART sub-indicator) separately from the rest of other direct and indirect expenditures like service delivery, etc.

Critical enablers

Indicator Protocol Reference Number: OC19	
Indicator	Percentage of women and men who correctly identify both ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission.
Rationale/purpose	Progress towards universal knowledge of the essential facts about HIV transmission.
	Sound knowledge about HIV and AIDS is necessary (although often insufficient) for adopting behaviour that reduces the risk of HIV transmission.
Numerator	Number of respondents who correctly answered all five questions.
Denominator	Number of all respondents.
Calculation	Numerator/denominator.
Method of measurement	Population-based surveys.
	This indicator is constructed from responses to the following set of prompted questions:
	1. Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners?
	2. Can a person reduce the risk of getting HIV by using a condom every time they have sex?
	3. Can a healthy-looking person have HIV?
	4. Can a person get HIV from mosquito bites?
	5. Can a person get HIV by sharing food with someone who is infected?
Measurement frequency	Every three to five years.
Disaggregation	• Age groups (15–19, 20–24 and 25–49 years).
	• Gender.

Indicator Protocol Reference Number: OC20	
Indicator	The percent of respondents who say they used a condom the last time they had sex with a non- marital, non-cohabiting partner, of those who have had sex with such a partner in the last 12 months.
Rationale/purpose	Progress towards preventing exposure to HIV through unprotected sexual intercourse among people with non-marital non-cohabiting partners.
	Condom use is an important way of protecting against HIV, especially among people with non-regular sexual partners.
Numerator	The number of respondents who report using a condom the last time they had sex with a non-marital, non-cohabiting partner.
Denominator	Total number of respondents who report that they had sex with a non-marital, non-cohabiting partner in the last 12 months.
Calculation	Numerator/denominator.
Method of measurement	Population-based surveys.
Measurement frequency	Three to five years.
	Disaggregation
	• Gender.
	• Age groups (15–19, 20–24 and 25–49 years).

Indicator Protocol Reference Number: OC21	
Indicator	Percentage of women and men aged 15-49 who have had sexual intercourse with more than one partner in the last 12 months.
Rational/purpose	It measures progress in reducing the percentage of people who have higher-risk sex.
	The spread of HIV largely depends upon unprotected sex among people with a high number of partnerships. Individuals who have multiple partners have a higher risk of HIV transmission than individuals who do not link into a wider sexual network.
Numerator	Number of respondents aged 15–49 years who have had sexual intercourse with more than one partner in the last 12 months.
Denominator	Number of all respondents aged 15–49 years.
Calculation	Numerator/denominator.
Method of measurement	Respondents' sexual histories are obtained. Analysis of sexual history is used to determine whether the respondent has had more than one partner in the preceding 12-month period.
Data collection method	Population-based survey.
Measurement frequency	Every three to five years.
Disaggregation	Gender.
	Age groups (15–19, 20–24 and 25–49 years).

Surveys and surveillance

4.2.1 National HIV Prevalence Survey	
Frequency	Every four to five years.
Target population	General population.
Indicators	HIV prevalence, incidence, ARV drug-exposure, sexual risk factors and health-seeking behaviour.
Disaggregation	Age, gender, race, occupational status/occupation.
Geographic availability	National, provincial, priority districts.
Recommendations	The household survey should not report on indicators that the survey is not powered to assess. Timing of activity should align to national timelines, such as NSP development/mid-term review and other key milestones (such as 90-90-90 by 2020). As nationally representative surveys of the general population are resource-intensive: 1) biomarkers related to TB, STIs, HIV drug levels and HIVDR should be included in the household survey rather than conducting these activities separately and 2) key priority districts should be oversampled to obtain snapshots of biological and behavioural measures in different key epidemiological zones (hotspots). A possible approach is to power the survey to assess some indicators at the provincial level and others at the district level (for priority districts only).
Cost	The estimated cost of this activity has not yet been established.

4.2.2 TB Prevalence Survey	
Frequency	This is a new activity. The future frequency is determined based on outcome of the first/2016 TB Prevalence Survey. It is recommended that subsequent rounds of this survey be timed to occur in year prior to the end of the NSP term.
Target population	General population household survey.
Indicators	TB symptoms among individuals \geq 15 years; Chest x-ray confirmed TB among individuals \geq 15 years, except those ineligible for chest x-rays; and sputum confirmed TB among those with TB symptoms or an abnormal chest x-ray.
Disaggregation	Age, gender.
Geographic availability	National, provincial.
Recommendations	Recommendations for future surveillance rounds to be determined based on the 2016 TB Prevalence Survey.
Cost	The estimated cost of conducting this activity has not yet been established.

4.2.3 HIV case reporting	
Frequency	Continuous – pilot phase.
Target population	Newly diagnosed PLHIV.
Indicators	HIV cases.
Disaggregation	Age, gender.
Geographic availability	Pilot in the Western Cape.
Recommendations	HIV case reporting can be performed using the HCT module in Tier.net (has functionality for surveillance). The use of unique identifiers (i.e., Health ID or national ID number) could strengthen data quality and usability. As this is being piloted in the Western Cape, evaluation of the pilot is required before expanding HIV case reporting.
Cost	The estimated cost of conducting this activity has not yet been established.

4.2.4 IBBS and Population	4.2.4 IBBS and Population Size Estimation (PSE)	
Purpose	To provide robust, representative data around HIV prevalence, risk, service access and reach, and reliable size estimates for target setting.	
Frequency	IBBS and PSE on the population of focus should be repeated in the same location and population every three to five years.	
Target population	SWs, MSM, PWID, prisoners, miners, migrant and mobile men (separate IBBS for each population).	
Indicators	Indicators around social and structural risk factors should be included (e.g. around violence and human rights violations; engagement with police; stigma and discrimination by health care and other service providers, and mobility) in addition to indicators around demographics, risk practices, service access and retention in care and viral suppression.	
Disaggregation	Age, gender and other characteristics depending on the population.	
Geographic availability	Four to six districts/hotspots for each survey/population.	
Recommendations	As far as possible, the IBBS should employ validated questionnaires that include standardised questions to allow for comparison across time, and where possible, with other surveillance activities. In addition to indicators around demographics, risk practices, service access and retention in care.	
Cost	The estimated cost of conducting IBBS with a single population at a single site, including a formative assessment, PSE, dissemination and capacity building activities is approximately ZAR 2,59 million (US\$ 185 000). ²⁶	

4.2.5 HIV sentinel surveillance and behavioural assessment (HSS+)	
Purpose	To generate low cost, local level data for programme managers to monitor and adapt programmes as needed in a timeous manner that complements IBBS activities.
Frequency	Annually.
Target population	SWs, MSM, PWID, prisoners, miners, migrant and mobile men (separate for each population) where Key Populations (KP) interventions are underway.
Indicators	Indicators around social and structural risk factors should be included (e.g. around violence and human rights violations; engagement with police; stigma and discrimination by health care and other service providers, and mobility) in addition to indicators around demographics, risk practices, service access, retention in care and viral suppression.
Disaggregation	Age, gender and other indicators depending on the population.
Geographic availability	Four to six selected districts/hotspots for each survey/population.
Recommendations	Surveillance workers who recruit 150-300 key/priority population members annually using targeted sampling methods at known locations where populations congregate and conduct a brief behavioural assessment and collect samples for laboratory analysis (64). PSE could be added to assist with target setting.
Cost	The estimated cost of conducting this activity, based on expenditure from South East Asia is ZAR 40 – 90 (US\$ 3-7) per person (65).

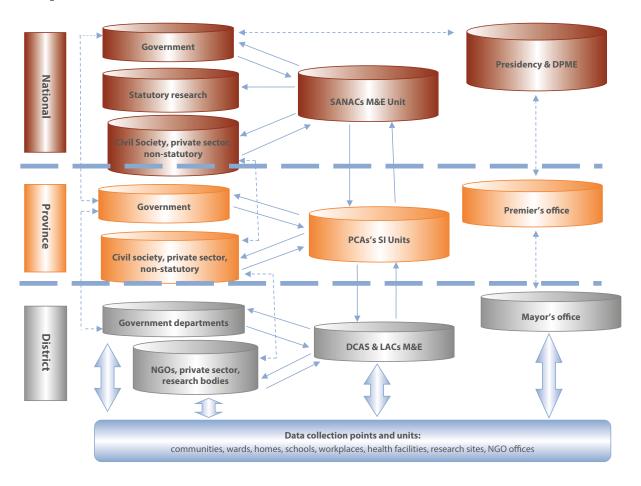
²⁶The total cost depends on sample size, sampling methodology and degree of capacity building and dissemination activities. These costs reflect cost of IBBS done among key populations in South Africa, see: http://globalhealthsciences.ucsf.edu/sites/default/files/content/pphg/ibbs/pdf/Budgets.pdf.

4.2.7 Antenatal Sentinel Surveillance	
Frequency	Annually. Discussions are in process as to the suggested frequency of this activity in light of the increasing quality and availability of robust PMTCT programmatic data.
Target population	Pregnant women attending public sector antenatal services.
Indicators	HIV prevalence, syphilis, ARV drug levels, viral load, HIV drug resistance (HIVDR).
Disaggregation	Age, race.
Geographic availability	National, provincial and district levels.
Recommendations	As prevalence among pregnant women has stabilised since 2004, ANC sentinel surveillance should assess indictors needed to further characterise the HIV epidemic, such as ART exposure, viral load, incidence, HIVDR and asymptomatic non-viral STIs.
Cost	The estimated cost of conducting ANC sentinel surveillance with district estimates is approximately ZAR 80 million per survey round (annually).

4.2.8 TB case reporting	
Frequency	Continuous.
Target population	TB patients.
Indicators	Per DHIS and ETR.net.
Disaggregation	Age, gender.
Geographic availability	National, provincial, district, sub-district.
Recommendations	TB cases reporting is conducted using the ETR.net
Cost	The cost of conducting this activity is included within the national TB programme.

Reporting system

At national and provincial levels, reporting will be done through existing SANAC structures using standardised reporting tools. Only data on the agreed set of indicators, collected quarterly and annually, will be reported. Data will be reported according to the level of operation – ward, district or province. The data submitted at each level is to be quality-assured and signed off.



Annexure 4: Schematic examples of integrated NSP HIV, STI, & TB management information system

