Global Fund Single Stream Funding (SSF)

Phase II

Indicator Protocol Reference Sheet

Data Collection and Reporting

Version 1: 22 April 2016

TABLE OF CONTENTS

1. Introduction

1.1. Purpose

This document provides essential information on the output, outcome and impact indicators in the Single-Stream Funding (SSF) Performance Framework that are used to assess the performance of this grant. The primary purpose of this document is to ensure uniformity of understanding of the indicators and to ensure consistency in collection and reporting of related data. Data collection, reporting and analysis are essential for implementers to monitor their performance and assess the success of their interventions. These processes require accurate, reliable and timely data.

1.2. Audience

The target audience for these guidelines is all individuals responsible for data collection and reporting at both the Sub-recipient (SR) and Principle Recipient (PR) level.

1.3. Structure

For each indicator, the protocols specify the following:

Strategic objective, service delivery area (SDA); indicator level; indicator definition; rationale/purpose; numerator; denominator; data collection frequency; measurement tool; method of measurement; interpretation; data quality control and other relevant information

Indicator Reference Sheet Template

Indicator Reference Sheets should be filled in for each indicator that is part of the M&E plan and of the Performance Framework. The Indicator Reference Sheet below shows an example to provide guidance on information to be included in each cell.

Indicator Protocol Reference Sheet: #	
Indicator	
Strategic Objective:	
SDA:	
Level of Indicator	
Rationale/Purpose	
Numerator	

Denominator	
Data collection frequency	
Measurement Tool	
Method of measurement	
Interpretation	
SR Responsible for Reporting	
Assumptions, Known Data Limitations and Significance:	
Actions Taken or Planned to Address this Limitation:	
Data Quality Control	
Other relevant information	

2. Indicator Overview

The Performance Framework (PF) for the SSF Phase II comprises of impact, outcome and output indicators. The ordering of the indicators in this document is aligned to the order in which they appear in the PF. The output indicators fall under different service delivery areas (SDAs), as shown below under section 2.2.

The Impact Outcome and Output indicators to be tracked by the PMU are:

Impact indicators:

1. HIV Incidence (CSW)
2. HIV incidence in general population
3. HIV Prevalence rate
4. AIDS related Mortality
5. Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy
6. Mother to child transmission rate at 6 weeks
7. TB Case registration rate (proxy TB incidence)
8. TB mortality rate

Outcome indicators:

1. Treatment Success Rate
2. MDR-TB treatment success rate
3. Percentage of men and women aged 15-24 reporting the use of a condom with their sexual partner at last sex
4. Percentage of sex workers reporting the use of a condom during penetrative sex with their most recent client
5. Percentage of men reporting the use of a condom the last time they had anal sex with a male partner
6. Percentage of pregnancies during the previous academic year amongst Grade 8-12 learners

Output Indicators:

Listed below are the output indicators, as per the Performance Frameworks for SSF Phase 2. The indicators are listed as they correspond to the key service delivery area (SDA).

Overview of SSF indicators by Service Delivery Area (SDA)

HIV Service Delivery Area

1. SDA: Antiretroviral therapy and monitoring

- Number and percentage of adults and children with advanced HIV Infection (currently) receiving antiretroviral therapy

2. PMTCT

- Proportion of HIV positive antenatal client initiated on ART rate

3. SDA: Pharmacovigilance

- Number of Pharmacovigilance sites reporting on ARV adverse effects

TB Service Delivery Area

4. SDA: TB/HIV

- Proportion of TB/HIV co-infected client initiated on ART

5. SDA: MDR-TB

- Proportion of laboratory confirmed MDR-TB patients enrolled on second line treatment
- Number of nurses trained in MDR-TB initiation and treatment (NIMDR)

6. SDA: High risk groups; Correctional facilities

- Number of inmates tested using the Xpert MTB/RIF

7. SDA: High risk groups; Mining sector

- Number of community members screened for TB by mobile units in peri-mine communities
- Number of community members offered HIV counseling and testing by mobile units in peri-mine communities
- Percentage of controlled mines that screen miners at least once a year

Management Indictors

1 Status of conditions precedent (CPs) and Time Bound Actions

2 Status of key PR management positions

3 Progress on contractual agreements with sub-recipients

4 Number of complete reports received on time

5 Budget and procurement of health products, health equipment, medicines and pharmaceuticals

6 Difference between current and safety stock

1.

3. Indicator Protocol Reference Sheets (IPRS)

3.1. Impact Indicators (IPRS: 1- 3)

Indicator Protocol Reference Sheet: 1	
Indicator	HIV Incidence (CSW)
Goal:	Reduce new HIV infections by at least 50% using combination prevention approaches
SDA:	N/A
Level of Indicator	Impact
Rationale/Purpose	The knowledge of new HIV positive cases among commercial sex workers is important in order to expand preventive and curative HIV/AIDS services for key populations
Numerator	Number of new HIV positive cases among CSW
Denominator	Number of known HIV positive cases among CSW
Data collection frequency	Annual
Measurement Tool	Survey
Method of measurement	Integrated Biomedical Behavioural Survey
Interpretation	The indicator is intended to monitor new cases of HIV infection among CSW. It focuses on new cases in relation to known cases in order to tell the progress of the country in its efforts to contain and reduce sexual transmission of HIV/AIDS.
SR Responsible for Reporting	NDOH
Assumptions, Known Data Limitations and Significance:	Key populations are not easy to reach. This population do not open up easily about their line of business; hence it is difficult to get a precise number of Commercial Sex Workers in the country. Nevertheless, HIV prevention interventions are vital important in the endeavours to curb the spread of HIV/AIDS.
Actions Taken or Planned to Address this Limitation:	The responsibility to conduct this survey is entrusted to a specialized research entity (University of California and ANOVA).
Data Quality Control	Jurisdiction of the research entity (University of California and ANOVA).
Other relevant information	N/A

Indicator Protocol Reference Sheet: 2	
Indicator	HIV Incidence in general population
Goal:	Reduce new HIV infections by at least 50% using combination prevention approaches
SDA:	N/A
Level of Indicator	Impact
Rationale/Purpose	The aim is to contain and reduce new HIV positive cases in the general population
Numerator	Number of new HIV positive cases among women age 15-49 years
Denominator	Number of known HIV positive cases among women age 15-49 years
Data collection frequency	Annual
Measurement Tool	Model based on ASSA and UNAIDS Spectrum Data
Method of measurement	SANAC will commission the UCT School of Public Health to develop a model for HIV incidence based on ASSA and Spectrum data which will then be published annually in July of each year.
Interpretation	The indicator is intended to monitor new cases of HIV infection in the general population. It monitors the incidence rate through the PMTCT programme among women age 15-49 years.
SR Responsible for Reporting	NDOH
Assumptions, Known Data Limitations and Significance:	The data collected is limited to women of reproductive ages who had an Antenatal visit during the current pregnancy.
Actions Taken or Planned to Address this Limitation:	N/A
Data Quality Control	Jurisdiction of the Research institute entrusted with this work.
Other relevant information	N/A

Indicator Protocol Reference Sheet: 3	
Indicator	HIV Prevalence Rate
Goal:	Reduce new HIV infections by at least 50% using combination prevention approaches
SDA:	N/A
Level of Indicator	Impact
Rationale/Purpose	The aim is to contain and reduce new HIV positive cases in the general population.
Numerator	Number of new HIV positive cases among women age 15-49 years
Denominator	Number of known HIV positive cases among women age 15-49 years
Data collection frequency	Annual
Measurement Tool	South African Antenatal HIV & Syphilis Prevalence Survey
Method of measurement	The South African Antenatal HIV & Syphilis Prevalence Survey is conducted annually and extrapolated to determine the prevalence of HIV prevalence in the country. Data on HIV prevalence will be reported every year when the report on ANC HIV survey is released. The target for HIV incidence for 2016 is 50% reduction in new HIV infections. Estimated Incidence rates are modelled periodically and will therefore be conducted then during NSP review process to determine the level of incidence reduction.
Interpretation	The indicator is intended to monitor new cases of HIV infection in the general population. Estimated Incidence rates are modelled periodically and will therefore be conducted then during NSP review process to determine the level of incidence reduction.
SR Responsible for Reporting	NDOH
Assumptions, Known Data Limitations and Significance:	The data collected is limited to women of reproductive ages who had an Antenatal visit during the current pregnancy.
Actions Taken or Planned to Address this Limitation:	N/A
Data Quality Control	Jurisdiction of the Research institute entrusted with this work.
Other relevant information	N/A

Indicator Protocol Reference Sheet: 4	
Indicator	AIDS related mortality
Goal:	Initiate at least 80% of eligible patients on antiretroviral treatment (ART), with 70% alive and on treatment five years after initiation
SDA:	N/A
Level of Indicator	Impact
Rationale/Purpose	The assumption is that HIV Positive people who are initiated on ART experience a prolonged lifespan. The intention is to measure the impact/success of ART programme in reducing the number of people who die from AIDS related causes.
Numerator	Total deaths as a result of AIDS related causes
Denominator	Total deaths
Data collection frequency	Annual
Measurement Tool	STATS SA Annual Report
Method of measurement	Results for this indicator will be obtained from the annual Statistics South Africa report
Interpretation	AIDS related mortality is a measure (rate) of the number of deaths that can be attributed to AIDS related morbidity in the general population scaled to the size of that population, per unit of time. It is expressed in units of deaths per 1,000 individuals per year.
SR Responsible for Reporting	NDOH
Assumptions, Known Data Limitations and Significance:	The indicator demonstrates the magnitude of HIV/AIDS burden in terms of its contribution to patterns of deaths in the country.
Actions Taken or Planned to Address this Limitation:	N/A
Data Quality Control	Data quality for this indicator depends on health facilities recording accurately the cause of death for each individual. The interpretation of the cause is also important. Additionally, the methods of data collection, analysis and reporting by Statistics South Africa (STATS SA) is important in quality control purposes.
Other relevant information	N/A

Indicator Protocol Reference Sheet: 5	
Indicator	Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy
Goal:	Initiate at least 80% of eligible patients on antiretroviral treatment (ART), with 70% alive and on treatment five years after initiation
SDA:	N/A
Level of Indicator	Impact
Rationale/Purpose	It measures progress in increasing survival among infected adults and children by maintaining them on antiretroviral therapy. One of the goals of any antiretroviral therapy programme is to increase survival among infected individuals. As antiretroviral therapy is scaled up in countries around the world, it is also important to understand why and how many people drop out of treatment programmes. These data can be used to demonstrate the effectiveness of those programmes and highlight obstacles to expanding and improving them.
Numerator	Number of adults and children who are still alive and on treatment at 12 months after initiating treatment
Denominator	Total number of adults and children who initiated antiretroviral therapy who were expected to achieve 12-month outcomes within the reporting period, including those who have died since starting antiretroviral therapy those who have stopped antiretroviral therapy and those recorded as lost to follow-up at month 12.
Data collection frequency	Data is collected from facility-based patient clinical stationery and captured on to the TIER.Net database. Quarterly reports are then compiled and aggregated for national totals. Data is reported 3 months in arrears as it is part of quarterly ART cohort data.
Measurement Tool	Program monitoring tools; ART registers/databases and cohort/group analysis forms.
Method of measurement	The numerator requires that adult and child patients must be alive and on ART at 12 months after their initiation of treatment. For a comprehensive understanding of survival, the following data must be collected: • Number of adults and children in the ART start-up groups initiating ART at 12 months prior to the end of the reporting period (denominator) • Number of adults and children still alive and on ART at 12 months after initiating treatment (numerator) The denominator is the total number of adults and children in the antiretroviral therapy start-up groups who initiated antiretroviral therapy at any point during the 12 months prior to the beginning of the reporting period, regardless of their 12-month outcome.
Interpretation	The numerator does not require patients to have been on antiretroviral therapy continuously for the 12-month period. Patients who may have missed one or two appointments or drug pick-ups, and temporarily stopped treatment during the 12 months since initiating treatment but are recorded as still being on treatment at month 12 are included in the numerator. On the

	contrary, those patients who have died, stopped treatment or been lost to follow-up at 12 months since starting treatment are not included in the numerator. For example, for those patients who started antiretroviral therapy in May 2009, if at any point during the period May 2009 to May 2010 these patients die, are lost to follow-up (and do not return), or stop treatment (and do not restart), then at month 12 (May 2010), they are not on antiretroviral therapy, and not included in the numerator. Conversely, a patient who started antiretroviral therapy in May 2009 and who missed an appointment in June 2009, but is recorded as on antiretroviral therapy in May 2010 (at month 12) is on antiretroviral therapy and will be included in the numerator. What is important is that the patient who has started antiretroviral therapy in May 2009 is recorded as being alive and on antiretroviral therapy after 12 months, regardless of what happens from May 2009 to May 2010. The denominator is the total number of adults and children in the antiretroviral therapy start-up groups who initiated antiretroviral therapy at any point during the 12 months prior to the beginning of the reporting period, regardless of their 12-month outcome. For example, for the reporting period January 1 to December 31 2009, this will include all patients who started antiretroviral therapy during the 12-month period from January 1 to December 31 2009. This includes all patients, both those on antiretroviral therapy as well as those who are dead, have stopped treatment or are lost to follow-up at month 12. At the facility level, the number of adults and children on antiretroviral therapy at 12 months includes patients who have transferred in at any point from initiation of treatment to the end of the 12-month period and excludes patients who have transferred out during this same period to reflect the net current cohort at each facility. In other words, at the facility level, patients who have transferred out will not be counted either in the numerator or the denominator. Similarly, patients who have transferred in will be counted in both the numerator and denominator. At the national level, the number of transferred-in patients should match the number of transferred-out patients. Therefore, the net current cohort (the patients whose outcomes the facility is currently responsible for recording—the number of patients in the start-up group plus any transfers in, minus any transfers out) at 12 months should equal the number in the start-up cohort group 12 months prior.
SR Responsible for Reporting	NDOH HIV/ AIDS Cluster
Assumptions, Known Data Limitations and Significance:	The denominator is the total number of adults and children in the (monthly) ART start-up groups who initiated ART at a point 12 months prior to the beginning of the reporting period, regardless of their 12-month outcome. The denominator may underestimate true "survival", since a proportion of those lost to follow-up are alive. The number of people alive and on ART (i.e. retention on ART) in a treatment cohort is captured here. The country is implementing the rollout of TIER.Net, not all ART facilities are able to generate and report on this indicator, reporting is possible where ART facilities have completed the implementation of TIER.Net.
Actions Taken or Planned to Address this Limitation:	Priority reporting is for aggregate survival reporting. If comprehensive cohort patient registries are available then it is encouraged for countries to track retention on treatment at 24, 36, and 48 months and yearly thereafter. This will enable comparison over time of survival on ART. As it stands, it is possible to identify whether survival at 12 months increases or decreases over time.

	However, it is not possible to attribute cause to these changes. For example, if survival at 12 months increases over time, this may reflect an improvement in care and treatment practices or earlier initiation of ART. The retention on antiretroviral therapy at 12 months therefore needs to be interpreted in view of the baseline characteristics of the cohort of patients at the start of antiretroviral therapy: mortality will be higher in sites where patients accessed antiretroviral therapy at a later stage of infection. Therefore, collection and reporting of survival over longer durations of treatment outcomes may provide a better picture of the long-term effectiveness of ART. A total of 3112 facilities were implementing TIER.Net by end of December 2014, of these 2156 were able to produce quarterly ART data which increases the number of health facilities reporting on the indicator. Global Fund is supporting efforts to enable all ART facilities to implement, record, report and manage ART data through TIER.Net.
Data Quality Control	The PR's M&E Officer(s) will verify the data reported at the SR level (i.e., data collection instruments described above) and interrogating the reliability of estimates and other calculations. A self-assessment will be conducted annually using the Routine Data Quality Assurance (RDQA) tool.
Other relevant information	Resource: UNAIDS Indicator Registry. UNAIDS: Geneva. Available at: http://www.indicatorregistry.org/node/860

Indicator Protocol Reference Sheet: 6	
Indicator	Mother to child transmission rate at 6 weeks (Percentage of infants born to HIV-infected mothers who are infected)
Goal:	Reducing transmission of HIV from mother to child to less than 2% at six weeks after birth and less than 5% at 18 months of age by 2016
SDA:	N/A
Level of Indicator	Impact
Rationale/Purpose	The indicator is a numerical estimate of the HIV prevalence among infant born to HIV positive mothers, using available data for the probabilities of mother-to-child-transmission (MTCT) for pregnant women receiving and not receiving antiretroviral, the weights being the proportions of women receiving and not receiving ARV, respectively.
Numerator	Infants born to HIV positive woman who were PCR tested for the first time around 6 weeks after birth. Babies PCR tested for the first time between 4 and 12 weeks must be included. Do NOT include repeat tests.
Denominator	Total live births to HIV positive woman
Data collection frequency	Monthly
Measurement Tool	Estimates based on programme coverage.
Method of measurement	The indicator is calculated by taking the weighted average of the probabilities of mother-to-child transmission for pregnant women receiving and not receiving HIV prophylaxis, the weights being the proportions of women receiving and not receiving various prophylactic regimes. Expressed as a simple mathematical formula: Indicator score = {T*(1-e) + (1-T)} * v, *where*: T = proportion of HIV-infected pregnant women provided with antiretroviral treatment v = MTCT rate in the absence of any treatment e = efficacy of treatment provided
Interpretation	In the absence of preventative interventions, infants born to, and breastfed by, HIV-infected women have roughly a one-in-three chance of acquiring infection themselves. This can happen during pregnancy, during labour and delivery, or after delivery through breastfeeding. The risk of MTCT can be reduced through the complementary approaches of antiretroviral prophylaxis for the mother, with or without prophylaxis to the infant, implementation of safe delivery practices, and use of safe alternatives to breastfeeding. Antiretroviral prophylaxis followed by exclusive breastfeeding may also reduce the risk of vertical transmission when breastfeeding is limited to the first six months.
SR Responsible for Reporting	NDOH MCH Cluster

Assumptions, Known Data Limitations and Significance:	The indicator focuses on the prevention of mother-to-child transmission (MTCT) of HIV through increased provision of antiretroviral drugs. Thus, the effect of breastfeeding on MTCT of HIV is ignored and the indicator may yield underestimates of true rates of mother-to-child transmission in countries where long periods of breastfeeding are common. Similarly, in countries where other forms of prevention of mother-to-child transmission of HIV (e.g. caesarean section) are widely practised, the indicator will typically provide overestimates of mother-to-child transmission. For these reasons, trends in this indicator may not reflect overall trends in mother-to-child transmission of HIV.
Actions Taken or Planned to Address this Limitation:	Countries should try to monitor the impact of PMTCT using actual data on the HIV status of infants born to HIV-infected women gathered during follow-up health care visits with these infants. Breastfeeding infants should be tested, with a virological test, 6 weeks after termination of breastfeeding practices in the given time frame.
Data Quality Control	The PR's M&E Officer(s) will verify the data reported at the SR level (i.e., data collection instruments described above) and interrogating the reliability of estimates and other calculations. A self-assessment will be conducted annually using the Routine Data Quality Assurance (RDQA) tool
Other relevant information	Resource: UNAIDS Indicator Registry. UNAIDS: Geneva. Available at: http://www.indicatorregistry.org/node/860

Indicator Protocol Reference Sheet : 7	
Indicator:	TB case registration rate (proxy TB incidence)
Strategic Objective:	2 and 3
SDA:	HIV and TB Case finding
Level of Indicator:	Impact
Rationale/Purpose	To reduce the number of TB incidence by 85% by 2016. A tuberculosis case is defined as a patient in whom tuberculosis has been bacteriologically confirmed or diagnosed by a clinician. Incidence of tuberculosis is the estimated number of new pulmonary, smear positive, and extra-pulmonary tuberculosis cases. Incidence includes patients with HIV.
Numerator	Total TB patients reported in a year (x 100 000).
Denominator	Total population in the same year.
Data collection frequency	Annual
Measurement Tool	WHO report
Method of measurement	Routine ETR.net data
Interpretation	Incidence of tuberculosis is the estimated number of new pulmonary, smear positive, and extra-pulmonary tuberculosis cases. Incidence includes patients with HIV. Early detection and diagnosis of TB cases is important to reduce number of TB infections.
SR Responsible for Reporting:	NDOH
Assumptions, Known Data Limitations and Significance:	Ensuring that all TB cases detected are put on TB treatment and are able to be identified within the public health system and the mining sector Availability of data of patients managed in the private sector (especially the mining community)
Actions Taken or Planned to Address this Limitation:	Strengthening the primary health care system and data management at DCS and mines
Data Quality Control	Data mop-up and verification Review of Quarterly reports, with feedback
Other relevant information	The NSP target for 2016, in line with the MDG targets, is to reduce TB incidence by 50% from 2011 baseline values, which according to the 2012 WHO TB Report were 993 / 100,000. TB case registration rate is used as a proxy for TB incidence reduction; however, TB case registration rate is a measurement of both case detection (the proportion of TB incidence that is detected) and TB incidence. The target for proportion of TB cases detected by 2016 is 85%. Thus, a case detection

	rate of 422 / 100,000 population is targeted (85% cases detected out of 496/100,000 TB incidence). Reduction is assumed to be linear over the 3 years (2012-2014) in between baseline and target. GF: The GF recommend to PR the use of Notification system as a measurement tool for TB incidence because "TB case notification rate" is a better measure of "TB incidence" than "TB Case registration rate". . Currently NDOH is using the "TB case registration rate" indicator as a proxy for "TB incidence". GF therefore suggested re wording of the indicator to "TB case notification rate" and advice NDOH to adopt the "notification rate" instead of "Case registration" PR: Current plans, including support from the Global Fund for data capturing, training, equipment, and integration of electronic reporting systems, are focused on strengthening of the TB case registration reporting. Thus, it is appropriate for the NDOH to maintain the TB case registration rate as the indicator. Future funding requests could take into account the Global Fund advice as to the notification rate and plan for the improvements necessary to the notification system.

Indicator Protocol Reference Sheet : 8	
Indicator:	TB mortality rate
Strategic Objective:	2 and 3
SDA:	HIV and TB Case finding
Level of Indicator:	Impact
Rationale/Purpose	To reduce the number of TB deaths to <5%.
Numerator	Number of TB patients that died during treatment
Denominator	Total number of TB patients registered
Data collection frequency	Annual
Measurement Tool	ETR.net
Method of measurement	Routine reporting
Interpretation	This indicator answers the question on how many confirmed TB cases and deaths are they? Estimated number of deaths due to TB in given time period. Expressed in this database as deaths per 100 000 population per year. Includes deaths from all forms of TB, and deaths from TB in people with HIV. Early detection and diagnosis of TB cases to reduce number of cases dying of TB related infections.
SR Responsible for Reporting:	NDOH
Assumptions, Known Data Limitations and Significance:	All TB cases are put on treatment and are cured.
Actions Taken or Planned to Address this Limitation:	Strengthening the health promotion and retention of care in the primary health care system.
Data Quality Control	Review of Quarterly reports, with feedback
Other relevant information	The NSP target for 2016, in line with the MDG targets, is to reduce TB mortality by 50% from 2011 baseline values, which according to the 2011 Stats SA mortality analysis was 140 / 100,000 in 2009. The TB case fatality rate is used as a proxy for this indicator, but 50% reduction would exceed the overall mortality reduction target as TB mortality includes persons who have not been detected and put onto treatment while case fatality includes only persons who have been detected, notified, and initiated on treatment. The current baseline of 2010 is at 6.4% CFR

	per annum, as reported in the WHO TB 2012. Given the baseline and historical rate of decline, we would expect the TB case fatality rate to be reduced to 4.8% by 2016, with a linear decline in the interim years (2012-2014 cohorts).

3.2 Outcome Indicators (IPRS: 1-2)

Indicator Protocol Reference Sheet: Number 1	
Indicator	TB treatment success rate (Percentage smear positive TB cases that are successfully treated) (cured or completed treatment)
Strategic Objective:	(2) Prevent new HIV, STI & TB infections 3) Sustain health and wellness among PLWHA and those affected by HIV/AIDS
SDA:	N/A
Level of Indicator:	Outcome
Rationale/Purpose:	Tuberculosis treatment success rate is the percentage of new, registered smear-positive (infectious) cases that were cured or in which a full course of treatment was completed under DOTS program. • New smear positive PTB cases that were cured as the proportion of all new smear positive PTB cases (including those moved in) • *moved in:* a client registered for treatment in one facility and moved to another facility within the same district • *cured:* laboratory confirmed negative after completing treatment
Numerator:	Total number of New sputum smear positive pulmonary TB (PTB) cases registered in a specified period that were cured plus the number that completed treatment
Denominator:	Total number of New sputum smear positive PTB cases registered in the same period
Data collection frequency:	Quarterly
Measurement Tool	TB registers
Method of measurement:	ETR.Net System
Interpretation	It is essential to prevent the spread of infection and drug resistance. This indicator helps to assess the implementation of the TB control programme and measures the program's capacity to retain patients through a complete course of chemotherapy with a favourable clinical result.
SR Responsible for Reporting	NDOH TB Cluster
Assumptions, Known Data Limitations and Significance:	When a patient is referred out to another unit, they are still included in the denominator of both units (one that referred out and one that receives the patient).
Actions Taken or Planned to Address this Limitation:	These numbers are usually too small to affect the rate.

Data Quality Control:	The TB Cluster, SRs and PR's M&E Officer(s) will verify the data reported at the SR level (i.e., data collection instruments described above) and interrogating the reliability of estimates and other calculations. A self-assessment will be conducted annually using the Routine Data Quality Assurance (RDQA) tool
Other relevant information:	N/A

Indicator Protocol Reference Sheet : 2	
Indicator:	MDR-TB Treatment success rate
Strategic Objective:	2 and 3
SDA:	MDR-TB
Level of Indicator:	Outcome
Rationale/Purpose	An increase in treatment success of 5 percentage points, as a result of a reduction in TB case fatality rate and additional 3.4 percentage point increase in TB treatment success to come as a result of improved retention in care and reduce treatment failure.
Numerator	Number of All MDR TB patients successfully treated
Denominator	Total number of All MDR TB patients initiated on treatment
Data collection frequency	Collection is done routinely, reporting is annual
Measurement Tool	Electronic Drug Resistance Register (EDR-web)
Method of measurement	Quarterly cohort analysis
Interpretation	MDR- tuberculosis treatment success rate is the percentage of all new MDR-tuberculosis cases registered and identified in the TB register as MDR- TB patients in a given year that successfully completed treatment (MDR-TB cases who have either cured or treatment completion outcome). Retention to care (Strengthened treatment supervision of DR-TB patients and prompt follow-up treatment interrupters).
SR Responsible for Reporting:	TB Cluster
Assumptions, Known Data Limitations and Significance:	The programme target for MDR-TB treatment success rate (proportion of MDR-TB cases who have either cured or treatment completion outcome) rate by 2016 is 60%. Baseline is 2010 cohort from Electronic Drug Resistance Register at 40%. Assuming an increase in treatment success of 3.3 percentage points 2012-2014 as a result of a reduction in TB case fatality rate and reduction in numbers lost to follow. Progress will be measured through quarterly analysis. . In order to increase MDR-TB success rate it is assumed that Bedaquiline and linezolid will be provided to 3000 individuals (MDR-TB, pre-XDR-TB and XDR-TB) between April 2015 and April 2016; and this should double within the next 2 years. Delamanid will also be introduced to pre and XDR-TB (100 to 200 patients). It is assumed that patient's education programme will be strengthened in order to decrease loss to follow. EDR Web data incompleteness has been a challenge although we strive to improve on this. EDR Web does not have ID numbers recorded in it. Slow awarding of TB drugs tender. Success rate is a critical indicator of programme

	performance.
Actions Taken or Planned to Address this Limitation:	Increase TB (MDR-TB) case finding and encourage patient's adherence and compliance to treatment.
Data Quality Control	Data quality audit Built-in quality control checks
Other relevant information	MDR-T B treatment duration is 24 months. During this period, a patient is expected to provide samples for sputum smear microscopy and for TB culture on a monthly basis. While smear microscopy results aa released within a day or two; TB culture results take up to 6 weeks hence the challenge in completing DR-TB data.

Indicator Protocol Reference Sheet: Number 4	
Indicator	Percentage of sex workers reporting the use of a condom during penetrative sex with their most recent client
Strategic Objective:	(1) Address social and structural drivers of HIV, STI and TB prevention, care and impact 3) Sustain health and wellness among PLWHA and those affected by HIV/AIDS
SDA:	N/A
Level of Indicator:	Outcome
Rationale/Purpose:	Unpack patterns of condom use during sexual encounter among sex workers and their clients
Numerator:	Number of sex workers reporting condom use during the recent sexual encounter
Denominator:	Total sample of sex workers
Data collection frequency:	CCM to indicate
Measurement Tool	Special surveys
Method of measurement:	Special surveys
Interpretation	Measures condom use during sexual encounter among sex workers and their clients

SR Responsible for Reporting	NDOH
Assumptions, Known Data Limitations and Significance:	Key populations are not easy to reach. This population do not open up easily about their line of business; hence it is difficult to get a precise number of Commercial Sex Workers in the country. Nevertheless, HIV prevention interventions are vital important in the endeavours to curb the spread of HIV/AIDS.
Actions Taken or Planned to Address this Limitation:	The responsibility to conduct this survey is entrusted to a specialized research entity (University of California and ANOVA).
Data Quality Control:	The SANAC M&E Officer(s) will verify the data reported at the SR level (i.e., data collection instruments described above) and interrogate the reliability of estimates and other calculations. A self-assessment will be conducted annually using the Routine Data Quality Assurance (RDQA) tool).
Other relevant information:	This survey will be done by The University of California San Francisco and ANOVA- called the Integrated Biomedical Behavioural Survey and will run from Sept to March every year- funded by CDC. CCM will update the targets by July 30th, 2014.

Indicator Protocol Reference Sheet: Number 5	
Indicator	Percentage of men reporting the use of a condom the last time they had anal sex with a male partner
Strategic Objective:	(1) Address social and structural drivers of HIV, STI and TB prevention, care and impact 3) Sustain health and wellness among PLWHA and those affected by HIV/AIDS
SDA:	N/A
Level of Indicator:	Outcome
Rationale/Purpose:	Contain and reduce the sexual transmission of HIV/AIDS among MSM
Numerator:	Number of MSM reporting condom use during the last sexual encounter with a male partner
Denominator:	MSM sample population
Data collection frequency:	CCM to indicate
Measurement Tool	Health and Behavioural Surveillance reports
Method of measurement:	SA National HIV Prevalence, Incidence and B&C Survey

Interpretation	CCM to indicate
SR Responsible for Reporting	NDOH
Assumptions, Known Data Limitations and Significance:	Key populations are not easy to reach. This population do not open up easily about their sexuality owing to stigmatization of homosexuality; hence it is difficult to get a precise number of Men who have sex with other Men in the country. Nevertheless, HIV prevention interventions are vital important in the endeavours to curb the spread of HIV/AIDS.
Actions Taken or Planned to Address this Limitation:	The responsibility to conduct this survey is entrusted to a specialized research entity (HSRC).
Data Quality Control:	The SANAC M&E Officer(s) will verify the data reported at the SR level (i.e., data collection instruments described above) and interrogate the reliability of estimates and other calculations. A self-assessment will be conducted annually using the Routine Data Quality Assurance (RDQA) tool
Other relevant information:	HSRC study was done in 2012 and will be repeated in 2015 so no targets will be set for Y 3 and Y 4 as the study will not be done in those years. However there will be a target for Y 5 which will be determined when the baseline from the study in 2012 becomes available. CCM will update the targets by July 30th, 2014.

Indicator Protocol Reference Sheet: Number 6	
Indicator	Percentage of pregnancies during the previous academic year amongst Grade 8-12 learners
Strategic Objective:	(1) Address social and structural drivers of HIV, STI and TB prevention, care and impact 3) Sustain health and wellness among PLWHA and those affected by HIV/AIDS.
SDA:	N/A
Level of Indicator:	Outcome
Rationale/Purpose:	To understand the patterns and magnitude of teenage pregnancy and monitor patterns of sexual transmission of HIV.
Numerator:	Number of pregnancies in the previous academic year among grade 8-12
Denominator:	Number of female learners in the previous academic year among grade 8-12
Data collection frequency:	CCM to indicate
Measurement Tool	Surveys
Method of measurement:	Survey Report

Interpretation	Teenage pregnancy is a proxy determinant of sexual risk behavior. It can be used to measure the level of unmet need of family planning as well as patterns of condom accessibility and use among adolescents.
SR Responsible for Reporting	NDOH
Assumptions, Known Data Limitations and Significance:	Assumption 10% drop by end Mar15 and another 10% drop by end Mar16
Actions Taken or Planned to Address this Limitation:	N/A
Data Quality Control:	The SANAC M&E Officer(s) will verify the data reported at the SR level (i.e., data collection instruments described above) and interrogating the reliability of estimates and other calculations. A self-assessment will be conducted annually using the Routine Data Quality Assurance (RDQA) tool
Other relevant information:	N/A

3.3 Output Indicators (IPRS: 1- 4)

Indicator Protocol Reference Sheet : Number 1	
Indicator:	Number and percentage of adults and children with advanced HIV Infection (currently) receiving antiretroviral therapy
Strategic Objective:	2) Prevent new HIV, STI & TB infections, 3) Sustain Health and Wellness among PLWHA and those affected by HIV/AIDS
SDA:	Antiretroviral therapy and monitoring
Level of Indicator:	Output
Rationale/Purpose	To assess progress towards providing antiretroviral combination therapy to all people with advanced HIV infection. As the HIV pandemic matures, increasing numbers of people are reaching advanced stages of HIV infection. Antiretroviral therapy has been shown to reduce mortality amongst those infected and efforts are being made to make it more affordable within low- and middle-income countries. Antiretroviral combination therapy should always be provided in conjunction with broader care and support services including counselling for family caregivers.
Numerator	Number of adults and children with advanced HIV infection who are currently receiving antiretroviral combination therapy in accordance with the nationally approved treatment protocol (or WHO/UNAIDS standards) at the end of the reporting period
Denominator	Estimated number of adults and children with advanced HIV infection
Data collection frequency	Data is collected from facility-based antiretroviral therapy registers and the Tier System. Monthly or quarterly reports are then compiled and aggregated for national totals.
Measurement Tool	Facility- based ART registers, Tier System.
Method of measurement	The numerator can be generated by counting the number of adults and children who received antiretroviral combination therapy at the end of the reporting period. The numerator should equal the number of adults and children with advanced HIV infection who ever started antiretroviral treatment minus those patients who are not currently on treatment prior to the end of the reporting period. Patients not currently on treatment at the end of the reporting period, in other words, those who are excluded from the numerator, are patients who died, stopped treatment or are lost to follow-up. The denominator is generated by estimating the number of people with advanced HIV infection requiring (in need of/ eligible for) antiretroviral therapy. This estimation must take into consideration a variety of factors including, but not limited to, the current numbers of people with HIV, the current number of patients on antiretroviral therapy, and the natural history of HIV from infection to enrolment on antiretroviral therapy.

	Denominator estimates are most often based on the latest data available from sentinel surveillance used with a HIV modelling programme such as Spectrum. For further information on estimates of HIV need and the use of Spectrum please refer to the UNAIDS/WHO Reference Group on Estimates, Modelling and Projections methodology.
Interpretation	Some patients pick up several months of antiretroviral drugs at one visit, which could include antiretroviral drugs received for the last months of the reporting period, but not be recorded as visits for the last months in the patient register. Efforts should be made to account for these patients, as they need to be included in the numerator. Antiretroviral therapy taken only for the purpose of prevention of mother-to-child transmission and post-exposure prophylaxis are not included in this indicator. HIV-infected pregnant women who are eligible for antiretroviral therapy and on antiretroviral therapy for their own treatment are included in this indicator. Patients receiving antiretroviral therapy in the private sector and public sector should be included in the numerator where data are available
SR Responsible for Reporting:	NDOH HIV/ AIDS Cluster
Assumptions, Known Data Limitations and Significance:	The proportion of people needing antiretroviral therapy varies with the stage of the HIV epidemic and the cumulative coverage and effectiveness of antiretroviral combination therapy among adults and children.
Actions Taken or Planned to Address this Limitation:	Need or eligibility for antiretroviral therapy should follow the WHO definitions for the diagnosis of advanced HIV (including AIDS) for adults and children
Data Quality Control	The PR's M&E Officer(s) will verify the data reported at the SR level (i.e., data collection instruments described above) and interrogating the reliability of estimates and other calculations. A self-assessment will be conducted annually using the Routine Data Quality Assurance (RDQA) tool
Other relevant information	Resource: UNAIDS Indicator Registry. UNAIDS: Geneva. Available at: http://www.indicatorregistry.org/node/649

Indicator Protocol Reference Sheet : Number 2	
Indicator:	Percentage of HIV positive antenatal client initiated on ART rate
Strategic Objective:	2) Prevent new HIV, STI & TB infections, 3) Sustain Health and Wellness among PLWHA and those affected by HIV/AIDS
SDA:	PMTCT
Level of Indicator:	Output
Rationale/Purpose	The goal of ART treatment is to reduce the patient's VL to an undetectable level and ensure that it remains undetectable, as well as to improve the immunological status with the CD4 count rising and remaining above the baseline. The purpose of initiating on ART all pregnant women who are diagnosed HIV positive is to avert mother to child transmission of HIV/AIDS delivery/birth. The measurement of this data is done to ensure the effectiveness of PMTCT programme.
Numerator	Number of HIV positive ANC clients enrolled on ART during the current pregnancy
Denominator	Number of HIV tested positive ANC clients during the current pregnancy
Data collection frequency	quarterly
Measurement Tool	Facility- based PMTCT registers, DHIS System.
Method of measurement	DHIS Quarterly Reports
Interpretation	Enrolment of HIV positive ANC clients on ART reduces the opportunities of mother to child transmission of HIV/AIDS during the process of birth/delivery. The South African antiretroviral treatment guidelines stipulate that all HIV-positive pregnant women should receive ART with appropriate counselling from their first antenatal visit regardless of gestational age. This indicator measures the proportion of all HIV positive women who are enrolled on ART during the current pregnancy.
SR Responsible for Reporting:	NDOH
Assumptions, Known Data Limitations and Significance:	There are noted data quality issues in terms of data capturing in certain provinces.

Actions Taken or Planned to Address this Limitation:	Capacity building will be conducted for those provinces that produce data of poor quality in this indicator
Data Quality Control	The M&E Directorate and PR M&E Officer(s) will verify the data reported at the SR level (i.e., data collection instruments described above). A self-assessment will be conducted annually using the Routine Data Quality Assurance (RDQA) tool
Other relevant information	The indicator measures the percentage of HIV positive antenatal clients who were initiated on ART during their current pregnancy. It is expected that the percentage of pregnant women initiated on treatment will always be high due to the fact that the eligibility criteria for ART treatment amongst HIV positive pregnant women has been removed from the policy guideline and all HIV positive pregnant women are initiated on ART regardless of their CD4 results. This indicator will be disaggregated by the number of ANC clients tested HIV positive which will serve as the denominator and those ANC clients who were initiated on treatment during the reporting period. The baseline of 81.6% for 2012 is based on the latest audited actual performance reported in the APP report. Data reported is actual for two months a projection of the third month as DHIS data is received at the NDOH 45 days after it has been reported from the source (health facilities)

Indicator Protocol Reference Sheet : Number 3	
Indicator:	Number of Pharmacovigilance sites reporting ARV adverse effects
Strategic Objective:	Sustain Health and Wellness among PLWHA and those affected by HIV/AIDS
SDA:	Pharmacovigilance
Level of Indicator:	Output
Rationale/Purpose	ART Pharmacovigilance (PV) Centers are responsible for: • promoting the reporting of adverse reactions; • collecting case reports of adverse reactions; • clinically evaluating case reports; • collating, analyzing and evaluating patterns of adverse reactions; *Adverse drug reactions cases reported* refers to any ARV Adverse effects identified before or during the current admission that has been recorded in the medical record. Any ADR that may influence future therapeutic decision making, whether it involves a prescription medicine (including vaccines), over-the-counter medicine or complementary medicine, should be documented. • This indicator measures the roll-out of all new ART Pharmacovigilance Centers/ Clusters
Numerator	Total number of ART Centers established
Denominator	Estimated number of ART PV centers in the country
Data collection frequency	Quarterly
Measurement Tool	ADR form
Method of measurement	Count of established centers
Interpretation	The indicator provide information on number of functional PV centers and assist in determining the PV service coverage
SR Responsible for Reporting:	NDOH- Pharmacovigilance Cluster
Assumptions, Known Data Limitations and Significance:	The indicator measures the number of functional PV centers and not the reported cases. The lack of communication infrastructure (internet, emails and fax machines) hinders data reporting process.
Actions Taken or Planned to Address this Limitation:	During national and provincial quarterly Pharmacovigilance meetings, number of reported cases reported from the established Centers will be discussed to give an indication of the magnitude of PV ADR cases. A feasibility assessment on using the web base reporting platform is currently

	underway.
Data Quality Control	The PR's M&E Officer(s) will verify the data reported at the SR level (i.e., data collection instruments described above) and interrogating the reliability of estimates and other calculations. A self-assessment will be conducted annually using the Routine Data Quality Assurance (RDQA) tool
Other relevant information	N/A

Indicator Protocol Reference Sheet : 4	
Indicator:	Proportion of TB/HIV co-infected client initiated on ART
Strategic Objective:	2 and 3
SDA:	HIV and TB Case Finding
Level of Indicator:	Output
Rationale/Purpose	Strengthen the integration between TB & HIV, in order to increase the proportion of TB/HIV initiated on ART.
Numerator	Number of TB/HIV co-infected clients initiated on ART
Denominator	Total number of clients co-infected with TB/HIV during the reporting period
Data collection frequency	Quarterly
Measurement Tool	Source: ETR.NET. Program Report (APP)
Method of measurement	ETR.NET quarterly reports
Interpretation	The indicator measures the number of patients who are both infected with TB and HIV and are initiated on ART treatment. According to the policy guideline, any person confirmed with TB and HIV should be initiated on treatment irrespective of the CD4 count.
SR Responsible for Reporting:	TB Unit
Assumptions, Known Data Limitations and Significance:	The indicator measures the number of patients who are both infected with TB and HIV and are initiated on ART treatment. The patients are initiated on ART treatment before or during TB treatment. TB entry point: A confirmed TB positive case tested HIV positive is initiated on ART treatment. HIV entry point: An HIV positive patient found to be TB positive is initiated on TB treatment. According to the policy guideline, any person confirmed with TB and HIV should be initiated on treatment irrespective of the CD4 count. The initial baseline of this indicator is 76.2% (APP). The programme aims to achieve performance target of 95% by period 5.
Actions Taken or Planned to Address this Limitation:	Strengthen integration between ETR.NET & TIER.NET
Data Quality Control	Quarterly data audit
Other relevant information	The indicator measures the number of patients who are both infected with TB and HIV and are initiated on ART treatment. The patients are initiated on ART treatment before or during TB treatment. TB entry point: A confirmed TB positive

	case tested HIV positive is initiated on ART treatment. HIV entry point: An HIV positive patient found to be TB positive is initiated on TB treatment. According to the policy guideline, any person confirmed with TB and HIV should be initiated on treatment irrespective of the CD4 count. The initial baseline of this indicator is 76.2% (APP). The programme aims to achieve performance target of 95% by period 5. DATA COLLECTION: As patients interact with the Health Workers, various data elements are collected into the approved data collection tools. These data elements include HIV status and treatment uptake for both TB and HIV. The data elements are then transferred to a register, which gets captured in the electronic TB register. Both TB and HIV Entry points are responsible to report co infection and inclusion in the ART rollout. The information is then reported as a percentage of all those co infected that are on ART at the end of the treatment of TB. This data is reported 3 months in arrears. Data is received 2 months after it has been reported by health facilities, in addition the TB cluster and provinces take an additional month to verify data reported.

Indicator Protocol Reference Sheet : 5	
Indicator:	Proportion of laboratory confirmed MDR-TB patients enrolled on second line treatment
Strategic Objective:	2 and 3
SDA:	MDR-TB
Level of Indicator:	Output
Rationale/Purpose	Ensure that 75% confirmed rifampicin resistant TB patients are initiated on treatment.
Numerator	Number of Lab diagnosed Rifampicin resistant TB patients initiated on treatment
Denominator	Total number of Lab diagnosed Rifampicin resistant TB patients
Data collection frequency	Data routinely collected Quarterly reported
Measurement Tool	EDR-Web
Method of measurement	EDR-Web Routine Reporting
Interpretation	The indicator measures how better are we closing the gap between number of RR-TB diagnosed and number of RR-TB initiated on treatment. Ideally, all diagnosed RR-TB are supposed to be initiated on treatment. Increasing proportion of those initiated on treatment among the diagnosed is an imperative.
SR Responsible for Reporting:	TB Cluster
Assumptions, Known Data Limitations and Significance:	A separate modelling exercise, the National TB Cost Model, estimated that with the roll-out of Xpert MTB/RIF testing at a national-scale, the number of MDR-TB cases newly diagnosed each year would increase from 10,085 to 15,531 by 2016. It was assumed to be a linear increase across the periods. Thus, initially the proportion of patients initiating MDR-TB treatment goes down (to 53% in 2013) as the number of cases diagnosed increased while capacity has not yet been created. Through this grant, capacity for decentralized initiation of MDR-TB treatment will be rapidly expanded to all 52 districts in SA. Thus, it is projected that by 2016, the national target of 75% treatment initiation for MDR-TB is achieved. A major limitation is that NHLS does not get patient's ID numbers. Number of RR-TB diagnosed by NHLS seem to be more of a reflection on number of tests done than number of people or treatment episode. It is difficult to be accurate on this in the absence of a unique identifier.
Actions Taken or Planned to Address this Limitation:	Patient's ID numbers to be collected on laboratory request forms and on NHLS register
Data Quality Control	Quarterly data audit

Other relevant information	The indicator measures the number of new multi-drug resistant TB (MDR-TB) initiated on second line treatment, as a proportion of the number of MDR-TB cases newly diagnosed in the year with laboratory confirmation. Baseline is annual figure of 5,643 initiated cases out of 10,085 diagnosed cases in 2011, as reported in the 2012 WHO Global TB Report. A separate modelling exercise, the National TB Cost Model, estimated that with the roll-out of Xpert MTB/RIF testing at a national-scale, the number of MDR-TB cases newly diagnosed each year would increase from 10,085 to 15,531 by 2016. It was assumed to be a linear increase across the periods. Thus, initially the proportion of patients initiating MDR-TB treatment goes down (to 53% in 2013) as the number of cases diagnosed increased while capacity has not yet been created. Through this grant, capacity for decentralized initiation of MDR-TB treatment will be rapidly expanded to all 52 districts in SA. Thus, it is projected that by 2016, the national target of 75% treatment initiation for MDR-TB is achieved. Assumed 10% increase in Periods10-11 from increased detection; additional 10% increase assumed in Periods 12-13 from programme increased access to MDR-TB treatment & linkages to MDR-TB treatment. This data is reported 3 months in arrears. Data is received 2 months after it has been reported by health facilities; in addition the TB cluster and provinces take an additional month to verify data reported.

Indicator Protocol Reference Sheet : 6	
Indicator:	Number of nurses trained in MDR TB initiation and treatment (NIMDR)
Strategic Objective:	2 and 3
SDA:	MDR-TB
Level of Indicator:	Output
Rationale/Purpose	MDR-TB treatment programme is doctor-driven. In order to meet the NSP target of decentralizing MDR-TB care to PHC level by 2016 it is important to capacitate nursing personnel to assist with the treatment initiation of MDR-TB in all districts and sub-districts. Initiation of treatment should happen at all facilities with or without capacity for patient hospitalization
Numerator	Number of nurses trained in MDR TB initiation and treatment (NIMDR)
Denominator	None
Data collection frequency	Quarterly
Measurement Tool	NDOH TB Cluster programme reports
Method of measurement	NDOH TB Cluster programme reports
Interpretation	Number need to increase in keeping with the target of at least 4 nurses per sub-district as well as 2 Master trainers/mentors per province. This indicator excludes nurses who are trained in the general management of MDR-TB patients that is not specifically focused on treatment and initiation.
SR Responsible for Reporting:	TB Cluster
Assumptions, Known Data Limitations and Significance:	Nurses who will be trained are the employees of the provincial government department of health. It is assumed that provinces will have sufficient professional nurses who are already NIMART trained, TB trained, trained in PHC that will receive additional MDR-TB training. Some provinces have chronic shortage of professional nurses.
Actions Taken or Planned to Address this Limitation:	Training will be linked to a defined MDR-TB services decentralization plan.
Data Quality Control	TB Programme staff (DRTH) to conduct site visits. Source documents: attendance registers
Other relevant information	Baseline is assumed to be 0, as NIMART training will be introduced through the GFATM grant. Training has not yet started. Only a pilot in which 3 people were trained was conducted. Training will commence during Period 10. This indicator

	includes the number of ward-level nurses trained in MDR-TB treatment and the master trainers. Training for both groups is the same however the master trainers will cascade the training and mentor the ward level nurses. The indicator is cumulative over a program term.

Indicator Protocol Reference Sheet : 7	
Indicator:	Number of inmates tested using the Xpert MTB/RIF
Strategic Objective:	2 and 3
SDA:	HIV and TB Case Finding
Level of Indicator:	Output
Rationale/Purpose	Correctional facilities constitute a high risk environment for TB transmission, therefore screening and testing for TB to decrease transmission and prevent TB is important. The Xpert MTB/RIF test exhibits high sensitivity and specificity for detecting pulmonary TB disease. It is considered the most effective way of diagnosing TB in patients.
Numerator	Number of inmates tested using the Xpert MTB/RIF
Denominator	None
Data collection frequency	Quarterly
Measurement Tool	NHLS CDW
Method of measurement	-TB Cluster Quarterly actual against targets
Interpretation	In line with the new TB case finding guideline for correctional services facilities. All new inmates symptomatic for TB are tested with Xpert MTB/RIF at admission. All existing inmates symptomatic for TB are tested with Xpert MTB/RIF twice a year. All inmates symptomatic for TB on exit are tested with Xpert MTB/RIF
SR Responsible for Reporting:	TB Cluster
Assumptions, Known Data Limitations and Significance:	Assumption is that 25% of all inmates will be symptomatic for TB based on digital Chest X-ray or symptom screening.
Actions Taken or Planned to Address this Limitation:	This assumption will be updated based on data collected on the first year of implementation

Data Quality Control	Inbuilt data checks are already in place in NHLS CDW
Other relevant information	Baseline data is an annual figure from the NHLS data warehouse and represents specimens tested. The figure represents the baseline of poor TB case detection within correctional facilities as well as limited roll-out of Xpert MTB/RIF. Full national coverage of Xpert MTB/RIF will be achieved by start of grant period. Staffing for increased TB/HIV grant period is included in both the Right to Care and NDOH grants from the GFATM. At any given point in time, the correctional services population of inmate is 153 000 on average. On average, 30 000 inmates are admitted annually and 20 000 inmates exit. According to national TB/HIV guidelines for correctional services, inmate should be screened for TB upon entry to correctional facility, 2 x annually, if there is an outbreak within the cell, and upon release. A rate of 25% of inmates screened having TB symptoms was assumed based upon results of the Right to Care implementation in correctional facilities during Phase I of the GFATM grant. A rate of 10% of inmates who are asymptomatic for TB yet who have an X-ray suggestive of TB during screening at admission, annually while incarcerated, and at release from correctional facilities was added to this in order to arrive at the estimates indicated. Modeling done within the National TB Cost Model. All Xpert MTB/RIF performed by NHLS are funded through the grant to the NDOH TB Programme and thus are included in this target, whether the staff at the site are supported under Right to Care or NDOH. Additionally, Xpert MTB/RIF performed at POC level within selected Correctional Facilities under Right to Care will be included in this aggregated reporting for the national programme. The indicator is cumulative over a program term

Indicator Protocol Reference Sheet : 8	
Indicator:	Number of community members screened for TB by mobile units in peri-mine communities
Strategic Objective:	1- 3
SDA:	High Risk Groups: Mining Sector
Level of Indicator:	Output
Rationale/Purpose	Peri-mining communities are not only underserved, but also high risk group. There are 41 810 cases of active TB in South African mines every year. It is eight percent of the national total, and one percent of the population. It is the highest incidence of TB in any working population in the world. It affects 500 000 mineworkers, their 230 000 partners, and 700 000 children. The NSP stipulates that they should receive TB and HIV screening twice a year to early detection of TB cases.
Numerator	Number of community members screened for TB by mobile units in peri-mine communities
Denominator	None
Data collection frequency	Quarterly
Measurement Tool	NDOH TB Cluster programme reports
Method of measurement	NDOH TB Cluster programme reports
Interpretation	The provision of mobile units to reach peri-mining communities with TB screening services is part of the government's provider initiated approach to health service delivery. It removes barriers to diagnosis and promoting early case detection in the peri-mining communities who are vulnerable and susceptible to contracting TB because of their proximity to the mines which pose a great risk to TB infection.
SR Responsible for Reporting:	TB Cluster
Assumptions, Known Data Limitations and Significance:	Making sure that the TB patients identified through these mobile units activities are linked to routine surveillance, and are able to be identified within the public health system
Actions Taken or Planned to Address this Limitation:	Strengthen data linkages between mobile unit activities and routine surveillance
Data Quality Control	Review of Quarterly reports, with feedback
Other relevant	Members of communities surrounding mines will be offered TB symptom screening through mobile testing units. TB tests serving community sites (e.g. schools,

information	shopping malls, taxi ranks, grant disbursement points or other community areas). It is projected that about 426,240 of 997,103 peri-mine community members will be screened for TB. The estimated population of the peri mine communities is disaggregated by district in the target assumption. Persons with symptoms suggesting TB will be tested for TB using Xpert MTB/RIF or referred to nearest facility for TB diagnosis as appropriate. Provider-initiated HIV counselling and testing for all persons agreeing to a TB screening will also be offered. The indicator is cumulative over a program term.

Indicator Protocol Reference Sheet : 9	
Indicator:	Number of community members referred for HIV counselling and testing by mobile units in peri-mine communities
Strategic Objective:	1- 3
SDA:	High Risk Groups: Mining Sector
Level of Indicator:	Output
Rationale/Purpose	Peri-mining communities are not only underserved, but also high risk group, The NSP stipulates that they should receive TB and HIV screening twice a year for early detection of TB and HIV cases.
Numerator	Number of community members referred for HIV counselling and testing by mobile units in peri-mine communities
Denominator	None
Data collection frequency	Quarterly
Measurement Tool	NDOH TB Cluster programme reports
Method of measurement	NDOH TB Cluster programme reports
Interpretation	Number of community members referred for HIV counselling and are part of clients offered HCT and not tested on site in per-mining communities. This indicator measures the number of community members who are referred to another health facility for HCT purposes.
SR Responsible for Reporting:	TB Cluster
Assumptions, Known Data Limitations and Significance:	Making sure that the TB/HIV patients identified through these mobile units activities are linked to routine surveillance, and are able to be identified within the public health system
Actions Taken or Planned to Address this Limitation:	Strengthen data linkages between mobile unit activities and routine surveillance
Data Quality Control	Review of Quarterly reports, with feedback
Other relevant information	Members of communities surrounding mines offered TB symptom screening through mobile testing units will be referred for HIV Testing at the nearest health facility or site. HIV testing serving community sites (e.g. schools, shopping malls, taxi ranks, grant disbursement points, or other community areas). It is projected that a total of 383,616 peri-mine community members will be referred for HIV testing, this represents 90% of clients screened for TB. The National HIV testing uptake is >90%, it is therefore assumed that as Provider Initiated Counseling and

	Testing (PICT) is offered to community members, 90% of them will take up an HIV test at a referral facility or site. The estimated population of the peri mine communities is disaggregated by district in the target assumption. The indicator is cumulative over a program term.

Indicator Protocol Reference Sheet : 10	
Indicator:	Percentage of controlled mines that screen miners at least once a year
Strategic Objective:	1 to 3
SDA:	High Risk Groups: Mining Sector
Level of Indicator:	Output
Rationale/Purpose	To ensure compliance of mining employers' to the TB compliance framework by conducting multi-disciplinary supervision visits to the large mines.
Numerator	Number of controlled mines with evidence of screening miners at least once a year visited during the reporting period
Denominator	Total number of controlled mines expected to be visited per quarter which screen miners at least once a year
Data collection frequency	Quarterly
Measurement Tool	NDOH TB Cluster programme reports
Method of measurement	Program reports
Interpretation	Compliance of mine employers with the TB/HIV control and management framework will result in breaking the chain of TB transmission. All controlled mines are expected to screen their employees for TB at least once every year. This indicator measures both compliance and activities targeted at early diagnosis and treatment of TB among mine workers.
SR Responsible for Reporting:	TB Cluster
Assumptions, Known Data Limitations and Significance:	Development of a standardised tool in line with the framework to conduct the assessments. The standardised tool will be designed to allow assessment of other risk factors e.g. Silicosis
Actions Taken or Planned to Address this Limitation:	The standardised tool will be developed with the involvement of occupational health experts

Data Quality Control	Review of Quarterly reports, with feedback
Other relevant information	Currently, there is no existing staff within DOH to conduct the inspection. Therefore the baseline is 0. There are 246 controlled mines that are targeted by this program. The target assumptions are based on the fact that the first 6 months will be dedicated to preparations and training of inspectors. A proportion of mines will be assessed to determine compliance with the prescripts of the compliance framework and progress will be measured by this indicator. The indicator is cumulative over a program term

Management Indicators

Indicator Protocol Reference Sheet: #	
Indicator	Status of conditions precedent (CPs) and Time Bound Actions
Strategic Objective:	Management
SDA:	N/A
Level of Indicator	Management Indicator
Rationale/Purpose	This indicator is intended to alert the PMU to any outstanding management issues that could affect future disbursements and ratings of the grant.
Numerator	N/A
Denominator	N/A
Data collection frequency	Quarterly
Measurement Tool	PR records; grant programmatic reports.
Method of measurement	Number, cumulative to the dashboard reporting period. Number of fulfilled CPs and/or TBAs plus unfulfilled CPs and/or TBAs should equal the total number set by the Global Fund on the grant
Interpretation	Number of conditions precedent (CPs) and time-bound actions (TBAs) fulfilled or unfulfilled. Within the "Unfulfilled" category, distinguish between those CPs and TBAs whose deadline has not passed and those for which the deadline has passed.
SR Responsible for Reporting	PMU
Assumptions, Known Data Limitations and Significance:	N/A
Actions Taken or Planned to Address this Limitation:	N/A
Data Quality Control	Review of Quarterly reports, with feedback
Other relevant information	N/A

Indicator Protocol Reference Sheet: #	
Indicator	Status of key PR management positions
Strategic Objective:	Management
SDA:	N/A
Level of Indicator	Management Indicator
Rationale/Purpose	A decision must be made about the number of PR management positions that are considered key to grant implementation. Thus, the total number of key positions that are planned for the grant will have to be decided.
Numerator	N/A
Denominator	N/A
Data collection frequency	Quarterly
Measurement Tool	PR records
Method of measurement	Number, in current reporting period
Interpretation	Number of PR grant management positions planned, currently filled or vacant. Full-time equivalents of the managerial positions that are on the organizational chart (or otherwise planned) and directly responsible for ensuring grant implementation at the PR, and lead sub-recipients (if necessary). This will include new hires and current staff who are assigned to work on the grant's management, as well as any staff seconded from other divisions or partner organizations.
SR Responsible for Reporting	PMU
Assumptions, Known Data Limitations and Significance:	N/A
Actions Taken or Planned to Address this Limitation:	N/A
Data Quality Control	Review of Quarterly reports, with feedback
Other relevant information	N/A

Indicator Protocol Reference Sheet: #	
Indicator	Progress on contractual agreements with sub-recipients
Strategic Objective:	Management
SDA:	N/A
Level of Indicator	Management Indicator
Rationale/Purpose	The expected number of days for disbursement to and reporting from sub-recipients and sub-sub-recipients will have to be defined in consultation with the PR.
Numerator	• Total number of potential sub-recipients identified by the PR for the phase. • Assessed: Total number of potential sub-recipients assessed by the PR to determine whether they qualify to function as sub-recipients for the grant. • Approved: Total number of sub-recipients that have been approved. • Signed: Total number of sub-recipients that have signed agreements/contracts with the PR under the grant.
Denominator	Total number of potential sub-recipients identified by the PR for the phase.
Data collection frequency	Quarterly
Measurement Tool	PR records; sub-agreements/memorandums of understanding; CCM records.
Method of measurement	Number, cumulative to the reporting period. A sub-recipient is an institution or program with its own work plan, budget and programmatic targets.
Interpretation	Identified: Total number of potential sub-recipients identified by the PR for the phase. Assessed: Total number of potential sub-recipients assessed by the PR to determine whether they qualify to function as sub-recipients for the grant. Approved: Total number of sub-recipients that have been approved. Signed: Total number of sub-recipients that have signed agreements/contracts with the PR under the grant. Receiving funding: Total number of sub-recipients that are getting funds and/or supplies from the PR. Numbers of sub-recipients identified, assessed, approved, signed, and receiving funding are cumulative for the phase, with the following exceptions: If a sub-recipient does not need new approval in Phase 2, then approval in Phase 1 is counted. If a sub-recipient was signed in a previous phase but is not working in the current phase, that sub-recipient is no longer counted in Identified, Assessed, Approved.
SR Responsible for Reporting	PMU
Assumptions, Known Data Limitations and Significance:	N/A

Actions Taken or Planned to Address this Limitation:	N/A
Data Quality Control	Review of Quarterly reports, with feedback
Other relevant information	N/A

Indicator Protocol Reference Sheet: #	
Indicator	Number of complete reports received on time
Strategic Objective:	Management
SDA:	N/A
Level of Indicator	Management Indicator
Rationale/Purpose	Reliable and timely health information is a critical component in health system development. Collection of relevant data and its related analysis to provide necessary evidence for assessing the development and performance of health systems at national and sub-national levels is a major responsibility of the PMU.
Numerator	Number of complete reports received on time
Denominator	Number of complete reports expected to be received on time
Data collection frequency	Quarterly
Measurement Tool	PR and sub-recipient records
Method of measurement	Number of reports received. The figure reflects only the period of reporting; it is not cumulative.
Interpretation	The total number of periodic reports with up-to-date financial, management and programmatic data received by the PR from sub-recipients and by sub-recipients from the sub-sub-recipients by the expected date. A “complete” report is one that contains all the data that the PR requires for the PU/DR. The expected date has been set by the PR in the M&E manual.
SR Responsible for Reporting	PMU
Assumptions, Known Data Limitations and Significance:	N/A
Actions Taken or Planned to Address this Limitation:	N/A
Data Quality Control	Review of Quarterly reports, with feedback
Other relevant information	N/A

Indicator Protocol Reference Sheet: #	
Indicator	Budget and procurement of health products, health equipment, medicines and pharmaceuticals
Strategic Objective:	Management
SDA:	N/A
Level of Indicator	Management Indicator
Rationale/Purpose	The purposes of this indicator is to support the timely procurement of quality-assured health products in adequate quantities; attain cost efficiencies in procurement and supply management activities; ensure the reliability and security of distribution systems; encourage appropriate use of health products; and enable the monitoring of all procurement and supply management activities.
Numerator	Budget and procurement of health products, health equipment, medicines and pharmaceuticals
Denominator	N/A
Data collection frequency	Quarterly
Measurement Tool	Grant agreement approved budget (for categories 4 and 5 of Enhanced Finance Reporting in current phase); and PR financial data (for expenditures), and/or Procurement and Supply Management unit (for orders placed and funding committed or obligated).
Method of measurement	ZAR
Interpretation	The budget approved for the current phase of the grant for the purchase of health products and equipment and pharmaceuticals and medicines (categories 4 and 5 in the new Enhanced Financial Report), and the cumulative amounts of financial obligations and expenditures up to the dashboard reporting period. Budget approved: Total approved budget for purchases (categories 4 and 5) for the entire phase of the grant. It does not include the amounts for fees, management, operational costs, etc. Cumulative obligations: Total of all order(s) placed and monies committed for these purchases by the PR up to and including the dashboard reporting period. Ideally, by the end of the phase, budget should equal obligations. Cumulative expenditure: Total of actual expenditures on category 4 and 5 up to and including the dashboard reporting period (whether paid by PR or authorized to be paid by another entity such as the Global Fund). Note: Category 6 of the Enhanced Financial Reporting will not be considered as part of the budget for pharmaceuticals. Category 6 has several expenditures that are difficult to disaggregate or quantify, such as warehousing costs, distribution costs (particularly

	when distribution is done by ministries of health), and others that are related to operational costs of the procurement and supply management component
SR Responsible for Reporting	PMU
Assumptions, Known Data Limitations and Significance:	N/A
Actions Taken or Planned to Address this Limitation:	N/A
Data Quality Control	Review of Quarterly reports, with feedback
Other relevant information	N/A

Indicator Protocol Reference Sheet: #	
Indicator	Difference between current and safety stock
Strategic Objective:	Management
SDA:	N/A
Level of Indicator	Management Indicator
Rationale/Purpose	This indicator is associated with the supply of priority health products and pharmaceuticals. The current and safety stock of the four most important or critical health products and pharmaceuticals will be tracked on the management page of the dashboard. Such products could be essential drugs or products whose supply is challenging.
Numerator	N/A
Denominator	N/A
Data collection frequency	Monthly
Measurement Tool	Standard treatment guidelines, PR records, Warehouse Data
Method of measurement	The table will show the difference in months in colors (number of months): RED: when the difference is negative or 0, showing that months of existing stock are lower than or equal to what has been established as months of safety stock YELLOW: when there is more than the level of safety stock (>0) but less than 3 months (+3) GREEN: when the difference is between 3 and 18 months. VIOLET: When the difference shows that the level above the safety stock is greater than or equal to the number of months determined by country as indicating a potential overstock problem.
Interpretation	The difference between the current stock of a specific product of a particular dose (medicine in single, fixed-dose combination, diagnostic kits, etc.), expressed in monthly needs (number of months of treatment available) for all patients in the program, and the safety or buffer stock (in months) established by the disease program, warehouse system or essential drugs program
SR Responsible for Reporting	PMU
Assumptions, Known Data Limitations and Significance:	N/A

Actions Taken or Planned to Address this Limitation:	N/A
Data Quality Control	Review of Quarterly reports, with feedback
Other relevant information	N/A