Arkangelo Ali Association Implementation in collaboration with the National TB, Leprosy and Buruli Ulcer Program

Guide to Implementing Tuberculosis Prevention and treatment in South Sudan with limited resource envelop 2015 - 2019

August 2015 edition

Introduction

Even in the most affluent countries tuberculosis disease exists. It is now common knowledge and scientifically explained that people in less well-off countries and themselves less well-off have substantially shorter life span than those in well off countries. Resource allocation for tuberculosis treatment and control, just like any other public health pandemics and epidemics are getting scarce as humanity advance in this early stages of the first century of the third millennium. Conflict prone and less endowed countries such as South Sudan will continue to struggle with funding for tuberculosis interventions that currently hinges majorly on Global Fund for AIDS, Tuberculosis and Malaria (GFATM) funding from contributions from well-endowed countries and percentage from the USAID funding under "Challenge TB" that is mainly Technical Assistance (TA) and health systems strengthening.

It is noteworthy that AAA is not yet a recipient of USAID funding but its staff and facilities benefit greatly from the TA. Arkangelo Ali Association (AAA) previously implemented interventions with resources from GFATM, CIDA funded TB REACH and occasional supplementation from Friends of AAA. The CIDA funded TB REACH was a community approach for enhanced active case finding implanted 2013 – 2015 and effectively ended on June 30, 2015 leaving AAA with only GFATM funds. Thus, the impetus for a robust guide to implementation strategies without disruptions to services in the context of dwindling funding to the organization. This implementation and monitoring guide has been prepared by Arkangelo Ali Association (AAA) as a normative guidance for its TB interventions implementation currently in fifteen counties within five states namely Western Bahr el Ghazal, Northern Bahr el Ghazal, Warrap, Lakes and Western Equatoria in South Sudan. The implementation in the AAA coverage area is based on its size and capacity, the current roles of AAA in community-based TB activities the South Sudan, the country's TB interventions strategic plan revised in 2014 for 2015-2019 period and on the principles of single national TB monitoring and evaluation system. This guide is dynamic and will be revised regularly with increased funding opportunities.

This guide will be useful to the TB Officers and AAA M&E structure to ensure continuity of service and provision of as close as possible to universal access to TB care (clearly ambitious in the context of a newly independent country such as South Sudan) as one of the social determinants of health.

Acronyms

AAA	Arkangelo Ali Association
CHD	County Health Department
DOT	Directly Observed Therapy
DOTS	Directly Observed Treatment Short Course
DQA	Data Quality Assurance
GFATM	Global Fund to fight AIDS, Tuberculosis and Malaria
HFN	High False Negative
HFP	High False Positive
HMIS	Health Management Information Systems
M&E	Monitoring and Evaluation
NTLBP	National TB Leprosy and Buruli Ulcer Control Program
OPD	Outpatient Department
PHC	Primary Health Care
PHCC	Primary Health Care Center
PHCU	Primary Health Care Unit
RoSS	Republic of South Sudan
TB	Tuberculosis
TBIC	Tuberculosis Infection Control
TBMU	Tuberculosis Management Unit

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Contents

1.0. AAA approach to TB interventions

AAA implements TB prevention and treatment in 15 counties in 5 states in South Sudan. These interventions are based on the 2015 – 2019 revised National Strategic Plan. Tuberculosis case finding is largely passive in South Sudan. AAA has been implementing both passive and enhanced active case finding utilizing community structures both administrative and Home Health Promoters (HHPs). Outreaches have been conducted to the general community, schools and congregate settings such as prisons, military barracks, IDP camps, cattle camps, refugee/returnees' camps and fishing camps. The revised strategic plan emphasizes community approach to both case finding and case holding. There are challenges to implementing community based approach to TB care with minimal resources as is the current situation. However, AAA will endeavor to implement TB services as previously done and with the existing community (mobile and HHPs) and static health system structures according to the approved health care delivery in South Sudan while prudently utilizing the available funds.

Decentralization and DOTS expansion

AAA will continue to utilize the static TBMUs, satellite laboratories and conduct community TB outreaches with a mission to provide universal TB services and a vision of universal access to TB services. Currently AAA operates in 13 TBMUs and 20 satellite laboratories/DOT centres in 5 States. AAA will continue to expand TBMU, diagnostic and DOT centres based on geographical access and easing of conflicts and in strict collaboration with the South Sudan NTLPB. The TA and supportive supervision of these centres will be done by the NTLPB staff from all levels of National, State and CHD. Additionally, AAA will ensure adequate knowledge transfer to staff at all facilities through supportive supervision, mentorship and on-site visits by the Health coordinator, M&E officer and the Public Health Specialist; as well as good TB care practice by the staff.

TB data recording, collection, reporting and capacity development:

The AAA M&E system in collaboration with the NTLBP will continue to provide tailor-made TB services intervention strategies and M&E training to meet the unique needs of staff at each level of the system. These will include modular training within a group setting, one-on-one mentoring of staff during site visits, and exchange programs for cross-pollination and practical learning.

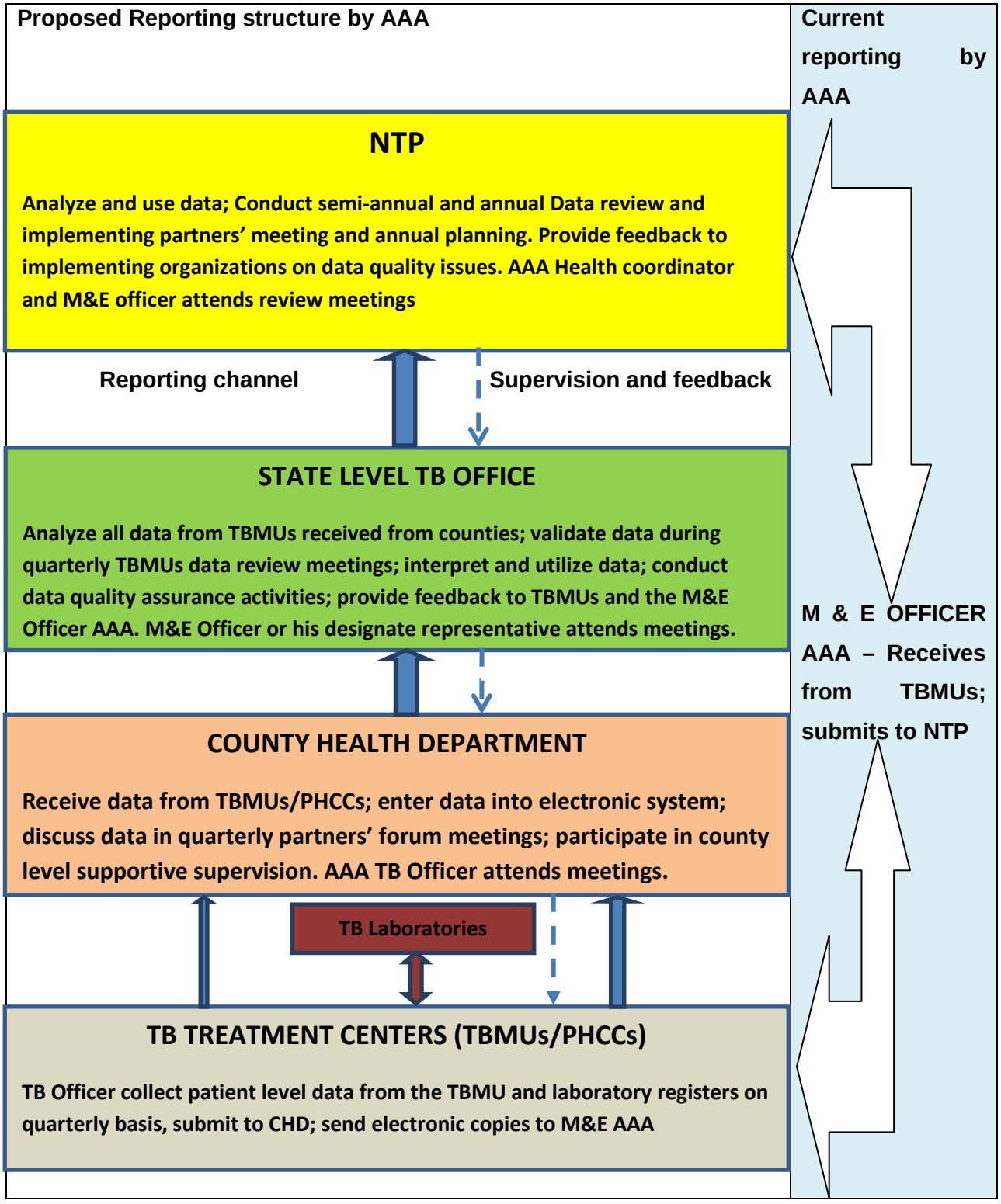
Currently there is inadequate human resources both in numbers and capacity as well as a high rate of staff turnover in South Sudan both in government system and the NGOs. AAA will retain all its staff that are expatriates, local staff in the TBMUs and the HHPs. These will receive both tailor-made trainings and the NTLBP trainings that will utilize the standard NTLBP approved training modules, available local resources within South Sudan and consultancies for high level trainings.

Proposed Data collection and management:

Linkage to the national HMIS; paper and electronic system, promoting data use. Figure I below shows the flow of data from the facilities to the national level, the roles of staff at each level, and the proposed tools that will be employed by AAA in line with the National Program at each level.

AAA conforms to the National Tuberculosis Control Program reporting format and has in every basic management unit a Tuberculosis Basic Management Unit Register. All TB case finding record, laboratory activities and treatment outcomes data are entered in this register. On a quarterly basis, the TB Officer collects data and enters it into a quarterly report for treatment outcome and case finding. Currently this report bypasses the county and State levels and sent to the NTLBP due to inherent capacity gaps. AAA proposes to provide capacity building at the various levels in its coverage areas and have all the quarterly report is submitted to the County Medical Office at the CHD which intern forwards the report to the State Ministry of Health and finally the Central Unit. Copies of the reports will then be submitted to the AAA headquarters that will provide routine supportive supervision to strengthen reporting systems. Feedback on data consistencies, quality and analysis should follow in the reverse manner.

Figure 1: Proposed and current reporting structure AAA



2.0. Roles and responsibilities at various levels

The organization AAA shall file reports for all levels of implementation. The roles and responsibilities narrated here below shall be summarized at end of every quarter and submitted to AAA headquarter for reference. All field level activities shall be summarized by the TB Officer while those of the AAA headquarter level shall be summarized by the M&E Officer. In spite of dwindling resources, AAA shall continue to collaborate with the NTP, implementing international and national NGOs/CSOs and State and County governments on community-based approaches that support four main areas of TB work namely:

• **Early TB case finding:** identifying people who might have TB or are especially vulnerable to TB both in the facility as passive case finding and in the community through HHPs as active case finding and referring them to the TBMU or safely transporting their sputum for diagnosis;
• **TB treatment support:** making sure that people who need treatment receive it through community DOT, complete the full course of treatment and get regular check-ups as recommended for TB treatment;
• **TB prevention:** educating people in the health facilities and in the community on how to stop infectious TB from passing from one person to another and on how to reduce the risk factors that assist the spread of the disease; and
• **Addressing social determinants that contribute to TB through collaboration with other state and non-state actors**: poverty, poor living conditions, poor nutrition, hygiene and sanitation, and crowding.

1. The Field level for implementation

AAA as implementing organization

AAA will continue to collaborate with the NTP on policy and guidelines development and promote adherence to these documents. Training of AAA staff shall be conducted by the NTLBP like for any other implementing organizations. AAA shall develop current strategies short term training programs as well as constantly provide repeat on-site training of the NTLBP modules for capacity building and regular updates to staff. This shall be conducted on-site by the TB Officer, the M&E Officer and Public Health Specialist/consultant during supervision visits and will not attract significant costs.

The Home Health Promoters (HHPs)

AAA has implemented community TB through existing community structures. TB education and tracing of persons interrupting TB treatment has been done by the HHPs, previously referred to as TB Mobilizers. The funding support for this level is inconsistent as current donors have no funds for them. AAA will continue to utilize the HHPs as previously done and the TB officer or his/her designated

experienced CHW, TB nurse or laboratory staff will be charged with their supervision and reporting of activities. The HHPs will not be expressly employed by the AAA and will receive incentives for services rendered i.e. results based payments.

Their roles shall include but not limited to:

- Community TB education in local administrators' meetings, local community courts, schools, markets, churches and many other social gathering.
- Attend updates and trainings as conducted by the TB officers or their designated officers.
- Attend meetings scheduled by the TB officers from time to time.
- Record and report all their activities as assigned by the TB officer or his/her designated officer.
- Conduct door-to-door visits for TB education, contact tracing, TB screening, DOT supervision and treatment support, collection and safe transportation of sputum, tracing of persons interrupting treatment and make referrals to TBMUs of persons with presumptive TB.
- Home- based visits of households affected by HIV for healthy living education and TB screening.
- Sensitization in maternal and child health clinics for TB education, TB screening and referral of presumptive pediatric TB
- Conduct social and community mobilization for massive TB education and TB screening.
- Participate in community activities for TB education and screening.
- Keeping records of all community based activities and making monthly, quarterly and annual reports and present the reports during feedback meetings with the health staff at the TBMU.
- NB: Any available incentives to the HHPs shall be result oriented whereby no payments shall be done if no activities or reports of activities and assignments are produced.

- *Health Workers :*

The health workers in this context shall be all local TB nurses and CHWs. These shall be RoSS employees where practically possible. Whenever funds allow, AAA shall employ on short-term contracts and salary allocation shall not exceed that of the government. These staff shall conduct routine PHCC activities and additionally provide TB services such as:

- Passive TB case finding through history taking and examination of persons presenting to the TBMU with presumptive symptoms of TB.

- Work hand in hand with the TB Officer to coordinate clinical and laboratory activities to ensure prompt and accurate diagnosis of TB.
- Keep records of TB case finding through complete and timely registration and updating of TBMU registers and patient record cards.
- Conduct regular and routine patient reviews during TB clinics for refills and any other attendances for medical reviews during TB treatment to ensure adherence to treatment and that all follow up examinations for the patient are done and recorded.
- Conduct individual and group TB education to TB patients to promote adherence to treatment.
- Conduct TB screening for contact invitation cases and refer to laboratory for prompt diagnosis.
- Work closely with the TB officer to learn report writing and analysis for identifying what is not working well and may require added efforts.
- Identifying treatment interrupters from the TBMU registers and engaging HHPs in tracing those lost to follow up to return them to treatment.
- Attend community TB screening as scheduled by the NTP, AAA and/or any other organization to support patient reviews and clinical diagnosis of TB among presumptive TB cases. These shall be service need and allowances shall only be provided if available.
- Attend update meetings and trainings organized by the NTP and AAA at the TBMU or any other venue as may be determined. These shall be learning sessions and allowances shall only be provided if available.
- Supervise and train the HHPs and treatment supporters on TB education and treatment.

- *Laboratory staffs :*

DOTS relies on smear microscopy for diagnosis, categorization of patients and assessment of treatment progress. AAA in collaboration with the NTP shall continue to provide the population within its catchment area with functioning laboratories and easy access to high quality smear microscopy services for accurate TB diagnosis as the highest priority. AAA has previously engaged microscopists trained on the job. These staff are experienced enough and will continue to serve alongside the better trained and qualified laboratory staff now being employed by the RoSS government under the county governments. AAA will continue to collaborate with county governments for placement of these qualified cadre and AAA will provide incentive top up whenever available. The laboratory staff responsibilities shall include but not limited to:

- Patient education on quality sputum production

- Smear microscopy examination and recording or results
- Provision of results to patients and clinicians for prompt treatment initiation
- Identifying primary defaulters from the laboratory registers and engaging HHPs in tracing the defaulters to initiate treatment.
- Work hand in hand with the TB Officer, other implementing organizations and the county government to organize and conduct community TB education and screening as scheduled by the NTP, AAA and/or any other organization for easy access and prompt TB diagnosis. These shall be service need and allowances shall only be provided if available.
- Attend update meetings and trainings organized by the NTP and AAA at the TBMU or any other venue as may be determined. These shall be learning and knowledge transfer sessions and allowances shall only be provided if available.
- Identify training needs and gaps and design on-job training modules for other laboratory staff to improve smear microscopy. These shall be learning and knowledge transfer sessions and allowances shall only be provided if available.
- Train HHPs form inaccessible and hard-to-reach areas on sputum collection, safe storage, smear preparation and safe transportation of slides to nearest diagnostic centres and relaying of reports to confirmed TB patients to report for TB treatment initiation.
- Liaise with State level and National Reference Laboratory for MDR TB surveillance through collection and safe transportation for culture and DST.
- Ensure laboratory proficiency and efficiency through conducting routine internal quality control (IQC) and participating in External Quality Assessment (EQA) for quality improvement (QI). Proper slides storage shall be required for adequate fulfillment of this requirement.

- *The TBMU/DOT centres :*

In South Sudan, like in many other countries, TBMUs are either standalone but at the level of a Hospital, a PHCC, a RoSS PHCC, RoSS PHCU and occasionally by private practitioners. However, the reporting TBMU is a county level PHCC and all other facilities below this level reports through the existing TBMUs. A TBMU is involved in microscopic TB diagnosis and treatment. The staff in the RoSS PHCC are county level government employees and AAA will only provide TA and incentives for outreach activities when funding available and the staff will have been informed beforehand. In the revised NSP 2015-2019 the NTLBP proposes expansion of TBMUs in every county and this will involve existing RoSS PHCC/CUs. The role of AAA staff in this context will therefore be capacity building, mentoring and supportive supervision. This may require collaboration and sharing of resources with other health implementing

partners and the CHD for efficiency and cost effectiveness. It is understood that the NTLBP will conduct supportive supervision and therefore that by the TB Officer shall be complementary and dependent on availability of funds.

- *The TB Officers*

The TB officer is the local representative of AAA at the county level. It is the responsibility of each TB officer to know and understand the county level operations and staff and should be a member of the County Health Department (CHD) management and County Health Forum teams. There exist either a standalone TBMU or within a PHCC as well as other DOT centres and satellite laboratories. The South Sudan Policy guidelines of 2010 indicates there should be a County TB coordinator but this has not been effectively implemented. The TB officers' role shall be:

- Implementation of the NTLPB activities at the county level in collaboration with the CHD.
- Where there is a RoSS County TB coordinator, the TB officer due to their experience shall mentor the county coordinator and facilitate transition to RoSS as and when required by the South Sudan NTLBP.
- Conduct supportive supervision in collaboration with the CHD for the tuberculosis intervention activities in the county. This may require collaboration and sharing of resources with other health implementing partners and the CHD for efficiency and cost effectiveness. It is understood that the NTLBP will conduct supportive supervision and therefore that by the TB Officer shall be complementary.
- Attend County level Health Forum meetings and update members on the burden of TB in the county and interventions implemented according to the NTLBP policy and strategic plans.
- Meeting with CHD for updates and mentoring on TB interventions and AAA implementation strategies
- Community mobilization and conduction of community activities such as TB education and screening within available resources. This may require collaboration and sharing of resources with other health implementing partners for efficiency and cost effectiveness.
- Engage Public Private Mix (PPM) to identify and refer presumptive TB
- Engage organized forces (military, police, etc) to identify and refer presumptive TB
- Engage congregates settings (IDP/Returnees, Prisons, Schools, etc) to identify and refer presumptive TB

- Maintenance of TBMU registers, DOT and satellite laboratory records and community activities records.
- Collection, aggregation and analysis of TB data at County level and compilation of the reports and forwarding of the same to the CHD, State and AAA M&E.
- Provide feedback on TB reports, EQA and activities to facilities, staff and HHPs in the county. For cost effectiveness, the TB officer shall schedule a quarterly satellite laboratories in-charges, DOT centres in-charges and the HHPs meeting at the main TBMUs. All feedback discussions and report compilations are completed during such meetings. The staff shall bring to the meeting the TBMU and laboratory registers for validation and report compilation and synchronizing and updating especially for the transfers treatment outcomes and refers treatment initiation. This will save travel costs for the TB officer to visit every facility.
- Provide training and mentoring to the CHD, TBMU, PPM and satellite laboratory staff. This will be complementary to the NTLBP modular trainings.
- All TB officers should appoint a local staff for capacity building and mentoring on TBMU management for transition.
- Work closely with the State and County level hospitals and ministry to integrate TB services into other programs such as MNCH, reproductive health and HIV programs and primary health care (PHC) in general. There are no adequate funds for parallel or silo programs and to be effective all PHC activities must be integrated for sustainability.

2. The AAA management level for implementation support

- *The M&E officer*

The M&E Officer in AAA is a senior officer with experience in laboratory services and M&E. He/she shall be responsible for:

- Review and validation of data submitted by the field staff
- Report compilation and submission of validated data to the NTLBP and donors
- Review of TBMU registers for accuracy, data manipulation and validation of previous reports
- Liaison with NTP and donor M&E
- Meeting with CHD and State levels for updates on TB interventions and AAA implementation strategies

- Routine capacity building and on-site mentoring during in-country supportive supervision. Field supervision visits shall be limited to once per quarter for every feasible TBMU until such time as the funding will improve. Visits to the Satellite and DOT centres shall only be conducted by the M&E officer if conveniently sited or on a need basis; this shall therefore be solely the responsibility of the TB Officer.

The Health Coordinator

The Health coordinator is the AAA representative in all health interventions and link with NTP management. He shall be responsible for:

- Attend high level meetings at the MoH, NTLBP and Donors.
- Sign commitment documents at such high level meetings as may be delegated by the Director.
- Conduct in-country field visits at least twice a year to selected counties for both administrative and personalized employer-employee relations. During such meetings, representation of TBMUs, satellite laboratories and DOT centres may use local transportation to the main TBMU to meet the coordinator as schedule or on a need basis.
- Constantly consult with the Public Health Specialist and consultant for assignment as may be delegated by the Director.
- Review all consultant reports and validate before final submission.
- Summarize all quarterly activities for all levels into a maximum of two pages and file

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The Public Health Specialist/Consultant

The Public Health Specialist/consultant will continue to support AAA to develop on-site training modules on most current implementation strategies. His other responsibilities will be:

- Conduct supportive supervision at least twice a year to the main county TBMU level. During such visits the representative staff from other satellite sites shall meet the consultant at the main TBMU for a one day meeting and updates.
- Provision of TA to all staff in the TBMU and design mentoring indicators to be assigned to the M&E Officer
- Conduct Data verification, data quality assessment on all recording and reporting tools

- Develop training modules based on current WHO acknowledged TB implementation strategies
- Conduct training with the developed modules and assign others to the M&E officer
- Support AAA through development of new implementation strategies for inclusion in proposal writing
- Ensure alignment to NTP strategies and adherence to policy and guidelines through supportive supervision and capacity building.

3. The government level for political commitment

The NTLBP

The NTLBP is the technical arm of the RoSS MoH and responsible for all policy and guidelines for TB interventions implementations. The NTLBP is functional at the national and State levels. The county level is not yet functional and AAA will collaborate with the National level to provide capacity building to the county level on implementing and supervising TB intervention activities. Other roles of the NTLBP according to the existing policy and guidelines are:

- Make policy and guidelines available
- Planning and coordination of program activities at all levels
- Monitor and evaluate implementation through supportive supervision to all levels of implementation and organizations and submit regular reporting to WHO regional office and provision of feedback to TBMUs and all levels
- Ensuring uninterrupted drugs and other supplies availability
- Quality assurance for diagnosis and treatment through laboratory EQA, development and standardization of training modules, standardizing policy and guidelines and ensuring adherence and development of standard operating procedures (SoPs)
- Coordination of all implementing partners at all levels

3.0. Capacity building plan

Capacity-building aims to improve the ability of a person, group, organization or system to meet objectives or to perform better. For TB intervention activities, this means ensuring that all have the

abilities, skills and resources to plan, implement and scale up their engagement. AAA will develop and review annually Capacity-building plan to include training, supervision, mentoring and adaptation of practices based on learning from experience or new evidence on what works. From our experience, this is likely to be needed in the following key areas:

- human resources: ensuring that sufficient people are involved, with the skills and abilities for technical, organizational, leadership and guidance tasks;
- financial resources: in collaboration with the NTP and other bilateral and multilateral donors, AAA will ensuring that sufficient funding is available to start up and sustain activities;
- material resources: in collaboration with the health system strengthening structures, AAA will ensuring that adequate infrastructure, information and commodities are available, e.g. tools are availed and places to work are maintained and renovated;
- systems development and strengthening: ensuring that systems are in place to support activities, including but not limited to; community support and care, TB referral, diagnosis and treatment and organizational systems; and
- knowledge-sharing: ensuring that data are collected, that good practices and lessons learnt are documented and shared in local, regional and international forums and conferences,

AAA understands clearly that capacity-building is an ongoing cycle. The AAA approach to capacity-building will depend on the national and local context. The capacity building plan will be part of AAA annual work plan meant to**:** strengthen systems and the organization, improve skills and performance of AAA staff and the county level in its operation area, and support scaling-up of activities when demand increases or in response to the South Sudan TB NSP as and when revised.

4.0. The M&E function in AAA: synergies with the NTP

The reporting of TB interventions in South Sudan is largely paper-based due to poor infrastructure and low funding levels. AAA will work collaboratively with the NTP and other stakeholders to introduce an electronic web based TB data collection system at TBMUs and at all reporting and data aggregation levels in South Sudan. In this implementation, AAA will ensure complementarity with the South Sudan HMIS. All staff at the TBMUs, county and State Health Departments will be mentored on this initiative. AAA currently does not have adequate funding for this massive and costly adventure that is currently approved by WHO.

5.0. Concepts and definitions in the AAA M&E

AAA will base all its M&E activities on acknowledged conventional concepts and definitions. Monitoring and evaluation provides the mechanism for answering questions about the performance and effectiveness of any project or program. Monitoring and evaluation are aimed at measuring and collecting information on what is being done and what changes are happening over time in response to certain activities. M&E are important for a number of reasons:

• providing information on progress in implementation;

• assessing the quality and effectiveness of a program or activity; and

• reporting to the NTP, donors, and community representatives on what has been achieved, any barriers or blocks to implementation and lessons learnt.

These questions are usually answered through the use of a number of SMART indicators with corresponding targets which indicate the magnitude and direction of any change that may have occurred during program implementation. The selected indicators should be clear, easy to understand and SMART. They will help in tracking how the program is progressing with what it wants to achieve. AAA has tabulated the selected indicators in Annex 1 and included in Annex 2: the revised NSP 2015 – 2019 indicators and Annex 3: the NTP M&E framework for the NSP.

Monitoring

This is defined as the routine collection of data in order to determine if the project is on track, i.e. if activities are being implemented as planned, and to count the immediate outputs of specific interventions. Program monitoring can therefore serve to identify gaps/weaknesses in program implementation and involves the collection and use of routine HMIS and program data on the project's inputs, processes, and outputs.

- Inputs refer to the resources invested into the project, and may include for example, staff, money, time, buildings, commodities and supplies.

- Processes are the activities that are carried out by the project staff in order to achieve the stated objectives. Examples of processes for a TB control program may include activities such as the training of staff, provision of services such as TB education in schools, TB screening in congregate setting, quality assurance activities, development of guidelines and policies, and the printing of tools and forms for recording and reporting of information.

- Outputs are the immediate results or achievements that are seen as a result of services offered or the program processes. These generally fall into two broad categories namely, number of persons who

accessed the services provided by the project of program and the number of persons trained. Examples of outputs are trained staff, community members reached with information materials, and persons who were screened for tuberculosis.

Evaluation

This is the systematic assessment of an ongoing or completed project to determine its effectiveness, identify factors that may have contributed to the achievement of results, and provide insights into possible actions that may be necessary to improve performance. Generally, evaluations are undertaken to improve performance on ongoing projects, assess their effect and impact, and inform decisions about future programs. Project evaluation can be either external or internal and generally involves the collection of data on the program's effectiveness or its outcomes and impact.

Outcomes are the short or long-term results that have been achieved by the program. Outcomes may be changes knowledge, case notification rates in different states and counties; levels of access to TB related services, and outcomes of patients who received anti-tuberculosis treatment. In the context of TB control programs outcomes can be measured wither through the use of routine data or special surveys.

Impact is often classified as a higher form of outcome and refers to changes at the population level. It refers to the superior goal of the overall national program. Impact seen at the population level may be due not only to interventions of any given project but may also be a reflection of changes that have been made though natural events as well as the effects of other projects. It is usually the result of the sum of a number of different interventions.

Insert your review notes here for future revisions

Annex 1: AAA Implementation indicators

The following indicators and outcomes have been set based on the revised South Sudan National Strategic Plan (NSP) 2015 - 2019

Table 1: High priority AAA indicators

Activity	Indicator	Frequency	Quarter of the year	Target	Milestone by Year 2015-19					Responsible person	Source of funds	Means of verification/ data source
					15	16	17	18	19			
1. Capacity building to AAA and CHD staff												
1.1 Training of Home Health Promoters and/or TB Mobilizers	Number of HHP to be trained	Once a year	Q 3 Q4		X					TB officers	GFATM TB Reach MoH	Training reports
1.2 Sensitization community leaders and community theatre groups	Number community leaders/theatre sensitized	Once a year	Q 1- Q 4		x	x	x	x	x	TB Officers	GFATM TB Reach MoH	Sensitization report Signed attendance
1.3 Sensitization of HHP on TB screening and community TB	Number HHP/TB Mobilizers sensitized	Once a year	Q 1 – Q 2		x	x	x	x	x	TB Officers	GFATM TB Reach MoH	Sensitization report Signed attendance
1.4 Sensitization of HTC/VCT counselors and TB screening and community TB	Number HTC/VCT counselors sensitized	Alternate years	Q 1 – Q 2			x		x		TB Officers	GFATM TB Reach MoH	Sensitization report Signed

												attendance
1.5 Refresher AFB microscopy for laboratory staff	Number of Lab Tec/Ass refreshed	Half yearly	Q 3		x	x	x	x	x	RoSS Regional Lab Tech	GFATM TB Reach MoH	Training reports Signed attendance
1.6 Training of TB Officers and TBMU staff on Community TB and ENGAGE TB implementation	Number of staff trained	Alternate years	Q 2 – Q 3			x		x		AAA Health Coordinator	GFATM TB Reach MoH	Training reports Signed attendance
1.7 Training of TB Officers and TBMU staff on TB HIV	Number of staff trained	Alternate years	Q 1 Q 4		x		x		x	AAA Health Coordinator	GFATM TB Reach MoH	Training reports Signed attendance
1.8 Training of TB Officers and TBMU staff on Infection Prevention Control	Number of staff trained	Alternate years	Q 1 Q 4			x		x		AAA Health Coordinator	GFATM TB Reach MoH	Training reports Signed attendance
1.9 Training and orientation of CHD staff on Integration and M&E skills to support TBMUs	Number of CHD staff trained	Annual	Q 4		X		x		x	AAA Health Coordinator	GFATM TB Reach MoH	Training reports Signed attendance
1.10 Develop scientific paper for dissemination in 45th International Lung Health Conference	Number of conferences attended with	Annual	Q 4		x	x	x	x	x	AAA Health Coordinator	GFATM TB Reach	Paper presented, Conference

	presentations										MoH	booklet
2. Out Reaches												
2.1 Conduct TB out reaches to underserved populations	Number of out reaches conducted	Monthly	Q1 – Q4		x	x	x	x	x	TB officers,	GFATM TB Reach MoH	Out reaches reports TB Outreach registers
2.2 Conduct laboratory quality assurance (EQA) visits to TBMUs	Number of quality assurance visits carried out	Quarterly	Q1 - Q4		x	x	x	x	x	M&E Officer	GFATM TB Reach MoH	Supervision report
2.3 Supportive M&E visits to TBMUs	Number of M&E visits done	Quarterly	Q1 – Q4		x	x	x	x	x	M&E Officer	GFATM TB Reach MoH	M&E supervision reports
2.4 Conduct Door to Door TB screening of contacts of TB patients	Number of people screened	Daily	Q 1 – Q 4		x	x	x	x	x	TB Officers	GFATM TB Reach MoH	Quarterly reports, TB contact screening register
2.5 Conduct out reaches to hard-to-reach areas and congregate settings	Number of out reaches carried out	Quarterly	Q 1 – Q 4		x	x	x	x	x	TB Officers	GFATM TB Reach MoH	Quarterly reports
2.6 Conduct feedback meetings and TB education to TB Ambassadors,	Number of feedback meetings	Monthly	Q 1 – Q 4		x	x	x	x	x	TB Officers	GFATM	Quarterly

TB Clubs	carried out										TB Reach MoH	reports
2.7 Conduct TB education in schools	Number of schools TB education done	Quarterly	Q 1 – Q 4		x	x	x	x	x	TB Officers	GFATM TB Reach MoH	Schools TB education report
3. Procurement to facilitate TB mobilization and health promotion and expansion of DOT coverage												
3.1 Purchase of Motorbikes	Number of motorbikes	Once a year	Q 3 - Q4		x					Procurement Officer	GFATM TB Reach MoH	LPO, invoice, payment receipts
3.2 Procurement of bicycles to facilitate TB mobilizers community activities	Number of bicycles purchased	Once a year	Q 3 - Q4		x		x		x	Procurement Officer	GFATM TB Reach MoH	LPO, invoice, payment receipts
3.3 Purchase of IPAD and smart phones to facilitate timely reporting	Number of IPAD and Smart phones purchased	Once a year	Q 2 - Q3		x		x			Procurement Officer, TB officer, TB Coordinator, Finance Officer	GFATM TB Reach MoH	LPO, invoice, payment receipts
3.4 Purchase of branded bags, umbrella, T-shirts to promote visibility and	Number of assorted items (branded bags,	Annual	Q 1		x	x	x	x	x	Procurement Officer, TB officer, TB	GFATM	LPO,

health messaging	umbrella, T-shirts)		Q 3							Coordinator, Finance Officer	TB Reach MoH	invoice, payment receipts
3.5 Develop and revise health promotion materials for radio and other communications channels materials	Number of radio spots and messages developed	Once a year	Q 1		x	x	x	x	x	AAA Health coordinator	GFATM TB Reach MoH	Quarterly reports, LPOs, VCD recorded materials and prints
3.6 Conduct radio programs through live talk shows and dramatized ads to promote behavior change	Number of talk shows and dramatized series aired	Yearly	Q1		x	x	x	x	x	AAA Health Coordinator	GFATM TB Reach MoH	Media reports, invoices, payment receipts
3.7 Support activities for commemoration of World TB Day	Number of counties supported for WTBD activities	Yearly	Q 1		x	x	x	x	x	AAA Health Coordinator	GFATM TB Reach MoH	Activity reports
3.8 Expand coverage for DOT to existing PHCs	Number of TBMUs initiated among existing PHCCs in coverage area	Annual	Q 1 – Q 4		x	x	x	x	x	AAA Health coordinator	GFATM TB Reach MoH	NTP quarterly/ Annual reports
3.9 Support to ensure functionality of expanded TBMUs	Number of New TBMUs with minor renovations and refurbishments	Annual	Q 1 – Q 4		x	x	x	x	x	AAA Health Coordinator	GFATM TB Reach	NTP quarterly/ Annual

	conducted										MoH	reports
3.10 Submit Sputum samples from among retreatment patients for DST	Number of sputum samples submitted for DST and culture among bac+ confirmed retreatment patients registered in the quarter	Annual	Q 1 – Q 4		x	x	x	x	x	Lab Tech	GFATM TB Reach MoH	NTP quarterly/ Annual reports
3.11 Increase the number of notified TB cases in coverage area from 2877 in 2014 to at least 5754 in 2019	Number of TB cases ALL forms notified to the National authority (NTP) in the quarter	Annual	Q 1 – Q 4		x	x	x	x	x	TB Officers	GFATM TB Reach MoH	NTP quarterly/ Annual reports
3.12 To sustain the treatment success rate of bacteriologically confirmed TB cases above 90% each year up to 2019	Percentage of SS+/bac+ (N+ and R+) patients successfully treated among registered TB patients in quarter	Annual	Q 1 – Q 4		x	x	x	x	x	TB Officers	GFATM TB Reach MoH	NTP quarterly/ Annual reports
3.13 To achieve and sustain treatment success rate of 85% among ALL TB cases	Percentage of TB patients ALL types successfully treated among registered ALL types TB patients in quarter	Annual	Q 1 – Q 4		x	x	x	x	x	TB Officers	GFATM TB Reach MoH	NTP quarterly/ Annual reports

4. Staff Establishment												
4.1 Laboratory and Health Workers to support short term implementation (Mobile TB officers on relieving duties, CHD staff for incentives and consultants)	Number of staffs recruited	continuous	Q 1 – Q 4		x	x	x	x	x	Director AAA		Interview form, recommendation from CHD and in charge of PHCC
OTHER AAA SUPPORTING PROGRAMS												
Leprosy Control Program												
1. Capacity building												
1.1 training of Leprosy volunteers/assistants on Leprosy prevention and treatment interventions	Number of staff trained	Alternate years	Q 1 – Q 4		x		x		x	AAA Health Coordinator	GLRA	Training report Signed attendance list
1.2 Supportive supervision and mentorship to Leprosy assistants	Number of supervisions conducted	Quarterly	Q 1 – Q 4		x	x	x	x	x	AAA Health Coordinator	GLRA	Supervision reports
1.3 Training of Leprosy assistants on Occupational therapy and activities of daily living	Number of leprosy assistants trained	Annual	Q 1 – Q 4		x	x	x	x	x	AAA Health Coordinator	GLRA	Training reports Signed Attendance list
2. Primary health care and Surgical Interventions												

2.1 Routine and emergency reconstruction/rehabilitation of deformities for Persons Affected with Leprosy (PALs)	Number of PAL benefitted from surgical	Half yearly	Q 1 Q 4		x	x	x	x	x	AAA Health Coordinator	GLRA Friends of AAA	Activity report
2.2 Elective surgery to correct deformities and facilitate activities of daily living (ADL)	Number of patients screened and benefitted from surgical mission	Half yearly	Q 1 Q 4		x	x	x	x	x	AAA Health Coordinator	GLRA Friends of AAA	Surgical team activity report
3. Out reaches for active case search and mop up towards elimination of leprosy												
Leprosy screening in remote areas and contacts of newly diagnosed and active leprosy disease.	Number of out reaches carried out	Monthly	Q 1 – Q 4		x	x	x	x	x	Leprosy Assistant	GLRA Friends of AAA	Out reaches reports
Prevention and health promotions activities in Primary health care												
Health education	Number of people health educated on basics for leprosy prevention	Daily	Q 1 – Q 4		x	x	x	x	x	Leprosy assistant	MoH Friends of AAA	Health education diary
Distribution of ITNs to pregnant and lactating mothers	Number of ITNs distributed to pregnant and lactating mothers	weekly	Q 1 – Q 4		x	x	x	x	x	Officer i/c PHCC/U	MoH Friends of AAA	Distribution report
Provision of Mebendazole to	Number of children de-	Daily	Q 1 – Q 4		x	x	x	x	x	Officer i/c	MoH	Monthly epidemiologic

children	wormed									PHCC/U	Friends of AAA	al report
Curative services for PHCC/Us												
Provision of diagnostic and treatment services to outpatient and in-patients at PHCC/U	Number of people treated	Daily	Q 1 – Q 4		x	x	x	x	x	PHCC i/c	MoH Friends of AAA	Epidemiological report
Provision of high energy food for malnourished children	Number of malnourished children benefitting from nutrition program	Daily	Q 1 – Q 4		x	x	x	x	x	Nutritionist	MoH Friends of AAA	Nutrition activity report
Immunization of children under 5 years	Number of children receiving immunization	Monthly	Q 1 – Q 4		x	x	x	x	x	EPI officer	MoH Friends of AAA	EPI report
Provision of ANC to all pregnant mothers	Number of pregnant mothers attending ANC	Monthly	Q 1 – Q 4		x	x	x	x	x	Midwife, nurses	MoH Friends of AAA	ANC report
Rehabilitation/construction of	Number of building rehabilitated/const	Annual	Q 1		x	x	x	x	x	Finance	MoH	Building

health provision service area	ruction		Q 4							Manager	Friends of AAA	report
Provision of Emergency Obstetric services (EmONC).	Number of pregnant mothers benefitted from Caesarian section	Daily	Q 1 – Q 4		x	x	x	x	x	Obstetrician	MoH Friends of AAA	Quarterly Maternal & reproductive health reports
Capacity building												
On job training for health staff on PHC and EmONC	Number of staff benefitted on job training	Monthly	Q 1 – Q 4							Obstetrician	MoH Friends of AAA	Training and Mentorship report, Signed attendance list
Training of health staff on current practices on anaesthesiology	Number of staff attending short course training in local or regional institutes	Annual	Q 4 – Q 1		x		x		x	AAA Health coordinator	MoH Friends of AAA	Training report, Copies of certificate of attendance

Annex 2: High priority NTP Strategic Plan indicators

The following indicators for South Sudan TB program implementations were selected from the NSP in a consultative process.

Objective	Outcome Indicator	Baseline and year	Milestones by Year				
			2015	2016	2017	2018	2019
To increase the number of notified TB cases to at least 24,000 in 2019.	Case notification rate of all forms of TB per 100,000 population - bacteriologically confirmed plus clinically diagnosed, new and relapse cases (disaggregated by age <15, 15+, sex and HIV status)	78 (2012)	105	112	119	123	141
1. To increase the treatment success rate of bacteriologically confirmed TB cases from 72% in 2012 to at least 85% by 2019.	Treatment success rate - bacteriologically confirmed new TB cases (disaggregated by age <15, 15+ and sex)	72.2% (2012)	80.0%	82.0%	85.0%	85.0%	85.0%
2. To achieve a treatment success rate of at least 75% among enrolled Multi Drug Resistant TB (MDR-TB) patients by	Notification of RR-TB and/or MDR-TB cases- Percentage of notified cases of bacteriologically confirmed, drug resistant RR-TB and/or MDR-TB as a proportion of the estimated number of						

2019.	RR-TB and/or MDR-TB cases among notified TB cases who are put on second line treatment	0% (2014)	5%	9%	15%	20%	25%
3. To reduce death rate during TB treatment in TB/HIV co-infected patients from 11% to less than 5% by 2017.	Death rate in TB/HIV patients on TB treatment	11% (2012	9%	7%	5%	5%	5%
4. To strengthen overall NTP program management capacity to achieve at least 80% of program targets by 2019.	Program targets achieved	No (2014)	Yes	Yes	Yes	Yes	Yes

Annex 3: The NTP Monitoring and evaluation framework for the NSP in South Sudan

	Indicators	Definition	Baseline/ Year	Target	Data Source	Frequency	Responsible	Frequency of Reporting
Goal: To contribute towards the reduction of TB prevalence from 257/100,000 (WHO estimate 2012) to 180/100,000 (30%) by 2030								
Objective 1: To increase the number of notified TB cases to at least 24,000 in 2019.								
	Case notification rate							
1.1.	Number and proportion of labs with 100% concordance at EQA	Numerator: Number of labs with 100% concordance Denominator: Total number of labs participating in EQA	19 (98%) 2014	200 (100%)	EQA reports	Quarterly	Program officers	Quarterly
1.2.	Number and proportion of private hospitals and clinics providing TB diagnostics	Numerator: Number of private hospitals and clinics providing periodic reports Denominator: Number of private hospitals and clinics validated for TB activities	100%	0%	Quarterly reports	Quarterly	Program officers	Quarterly
1.3.	Number and proportion of presumptive TB cases referred for diagnosis from high-risk and hard-to-reach populations	Numerator: Number of presumptive TB cases referred for diagnosis from high-risk and hard-to-reach populations Denominator: All presumptive TB cases	n/a	34,472 (10%)	Quarterly reports	Quarterly	Program officers	Quarterly
1.4.	Number and proportion of children enrolled on TB treatment	Numerator: Number of children enrolled on TB treatment Denominator: Number of all forms of TB	24%	10%	Quarterly reports	Quarterly	Program officer	Quarterly
1.5	Number of new TB patients (all forms) referred by community health workers or community volunteers to health facility for diagnosis and notified in BMU in notification period	Numerator: Number of all forms of TB referred by CHWs or community mobilizers Denominator: Number of all forms of TB notified			Quarterly reports	Quarterly	Program officer	Quarterly
1.6.	Number of health facilities with integrated TB	Numerator: Number of health facilities with integrated TB	N/A	200	Annual report	Annually	NTP manager	Annually

	Indicators	Definition	Baseline/ Year	Target	Data Source	Frequency	Responsible	Frequency of Reporting
	activities	services Denominator: All health facilities		(100%)				
Objective 2: To increase treatment success rate of bacteriologically confirmed TB cases from 72% in 2012 to at least 85% by 2017								
2	Treatment success rate (TSR)	Numerator: Number of all new TB patients who are cured or who have completed treatment Denominator: Number of new patients enrolled on treatment	72.2%	85%	Annual report	Annually	NTP manager	Annually
2.1.	Number and proportion of health facilities providing quality anti-TB treatment	Numerator: Number of health facilities providing quality TB treatment Denominator: Total number of health facilities providing TB services	100	200 (100%)	Annual Report	Annually	NTP manager	Annually
2.2.	Number of TBMU visited where anti-TB drugs are present out of total number of BMU visited	Numerator: Number of TBMU where anti-TB drugs are present Denominator: Total number of TBMU visited	100%	100%	Quarterly reports	Quarterly	Program officer	Quarterly
2.3.	Number and proportion of new TB patients (all forms) under supervision of community TB mobilizers who successfully complete TB treatment	Numerator: Number of new TB patients under supervision who were successfully treated Denominator: Total patients on treatment under supervision of mobilizers	N/A	90%	Quarterly reports	Quarterly	Program officer	Quarterly
Objective 3: To achieve a treatment success rate of at least 75% among enrolled MDR-TB patients by 2019								
3.	MDR-TB TSR	Numerator: Number of MDR-TB patients cured or who have completed treatment Denominator: Total number of	N/A	75%	Quarterly reports	Quarterly	Program Officer	Quarterly

	Indicators	Definition	Baseline/ Year	Target	Data Source	Frequency	Responsible	Frequency of Reporting
		MDR-TB patients						
3.1.	Number and proportion of laboratory-confirmed cases of MDR-TB identified among new cases and re-treatment cases	Numerator: Number of confirmed MDR-TB patients Denominator: Total number of new and re-treatment cases tested for MDR-TB	15/235 (6.4%)	457/5131 (8.9%)	Quarterly reports	Quarterly	Program Officer	Quarterly
3.2.	Number and proportion of DR-TB cases put on treatment among the notified cases	Numerator: Number of DR-TB patients enrolled on treatment Denominator: Total number of confirmed DR-TB patients	n/a	320 (70%)	Quarterly reports	Quarterly	Program Officer	Quarterly
3.3.	Number of MDR-TB patients who are provided with support throughout the treatment period	Numerator: Number of MDR-TB provided with support Denominator: Total number of MDR-TB patients	N/A	457 (100%)	Quarterly reports	Quarterly	Program Officer	Quarterly
Objective 4: To reduce death rate during treatment among TB/HIV co-infected patients from 11% to less than 5% by 2017								
4.	Death rate among TB/HIV patients	Numerator: Number of TB-HIV co-infected patients who die during treatment Denominator: Total number of TB-HIV co-infected patients during the cohort period	11%	Less than 5%	Quarterly reports	Quarterly	Program Officer	Quarterly
4.1.	Number and proportion of functional TB/HIV coordination bodies at national, state, and county levels	Numerator: Number of functional TB/HIV coordination bodies Denominator: Total number of TB/HIV coordinating bodies formed	1	90 (100%)	Meeting minutes	Quarterly	Program Officer	Quarterly
4.2.	Number of PLHIV who were screened for TB in HIV care or treatment settings	Numerator: Number of PLHIV who were screened for TB	N/A	22,750 (100%)	Pre-ART and ART registers Screening	Quarterly	HIV program	Quarterly

	Indicators	Definition	Baseline/ Year	Target	Data Source	Frequency	Responsible	Frequency of Reporting
		Denominator: Total number of PLHIV			tool			
4.3.	Number and proportion of TB and HIV sites with operational infection control plans in place	Numerator: Number of health facilities implementing TB infection control plan Denominator: Total number of health facilities with TB infection control plan	N/A	200 (100%)	Supervisory reports	Quarterly	Program officer	Quarterly
4.4.	All (100%) of HIV positive TB patients will be enrolled on ART by 2019	Numerator: Number of HIV positive TB patients enrolled on ART Denominator: Total number of HIV positive TB patients	N/A	100%	TBMU registers Quarterly reports	Quarterly	Program officers	Quarterly
Objective 5: To strengthen overall NTP program management capacity to achieve at least 80% of program targets								
5.	Program targets achieved	Yes/No	No	Yes	Annual reports	Annually	NTP Program manager	Annually
5.1.	Availability of core NTP policy documents, manuals, and periodic reports	Yes/No	No	Yes	Annual reports	Annually	NTP Program manager	Annually
5.2.	Number and proportion of key NTP staff positions filled as in organogram (12 central, ten state, 79 county, and five CRL)	Numerator: Number of key NTP positions filled by national staff Denominator: Total number of key NTP position as described in NTP human resources development plan	18	106	Annual reports	Annually	NTP Program manager	Annually
5.3.	NTP budget allocated for operations to implement DOTs as required by annual plan	Numerator: Total amount of funds allocated for DOTS in previous years NTP budget Denominator: Total amount of funds budgeted for DOTs in	N/A	80%	Annual reports	Annually	NTP Program manager	Annually

	Indicators	Definition	Baseline/ Year	Target	Data Source	Frequency	Responsible	Frequency of Reporting
		previous year as in annual plan						
5.4.	Number of supervisory visits performed during specified period out of planned supervisory visits using supervisory check list	Numerator: Number of supervisory visits performed during specified time Denominator: Total number of planned supervisory visits during specified period of time		100%	Supervisory reports	Quarterly	Program officers	Quarterly
5.5.	Number and proportion of health facilities that submit case finding and treatment outcome reports to the NTP quarterly	Numerator: Number of health facilities submitting timely reports Denominator: Total number of health facilities providing TB services	75%	100%	Quarterly reports	Quarterly	Program officers	Quarterly
5.6.	Proportion of funding from government for annual plan of activities out of total budget required for full implementation of annual plan of activities	Numerator: Total annual government allocation for TB implementation Denominator: Total implementation amount as in annual plan	5%	15%	Annual report	Annually	NTP manager	Annually
5.7.	Number of stock-out days of first line drugs in a given period at all levels	Numerator: Total number of stock out days for all FLDs x100 Denominator: 365 x Number of FLDs	N/A	0%	Storage facility individual drug stock cards	Quarterly	Program officer	Quarterly