THE REPUBLIC OF UGANDA

MINISTRY OF HEALTH

NATIONAL TUBERCULOSIS AND LEPROSY CONTROL PROGRAM

QUALITY IMPROVEMENT MANUAL FOR TB CARE SERVICES

March 2017

FOREWORD

Tuberculosis remains a major global health problem, especially in low income countries including Uganda. The situation has worsened in the last three decades due to the HIV epidemic. According to the Global TB report for 2016, there were 10.4 million new TB cases in 2015 and 1.4 million TB deaths. An additional 400,000 deaths were among TB/HIV co-infected patients.

While the health sector has managed to achieve a 50% reduction in new Tuberculosis infections due to scale up of appropriate diagnostics, availability of anti-TB drugs and other community initiatives, the recent TB prevalence survey found a higher TB burden than was previously estimated. Over 40,000 TB cases are missed each year and there is growing emergence of multi drug resistant TB which is driving mortality and costs associated with TB control.

Additionally, the NTLP in 2016 reported cure rates of 51% and treatment success rate (TSR) of 79% for Pulmonary bacteriologically confirmed (PBC) TB cases, which is still below the WHO targets of 75% and 85% respectively.

This calls for intensified efforts to find the missing TB cases and adequately respond to the expanded TB/HIV epidemic. The NTLP strategic plan (2015/16-2019/20) outlines key strategic interventions to improve TB care and achieve the national and WHO targets for TB control. There are however challenges in implementation of these interventions and monitoring, affecting quality of TB care.

The quality improvement manual for TB care provides a systematic approach to improve implementation and monitoring of TB care services as through capacity building and involvement of health providers solving gaps in TB care. This approach combines mentorship of service providers in TB management and application of continuous quality improvement approaches to address gaps identified in TB care.

The manual targets health facility providers as the primary users and is useful for TB managers and supervisors at the national, regional and district level to implement and monitor TB care services.

It is my sincere hope that use of the quality improvement manual for TB care services and the tools provided will improve the quality of TB care offered to patients.

Prof Anthony Mbonye
Director General of Health Services, MOH

ACKNOWLEDGEMENTS

The quality improvement manual for TB care services was developed by the Ministry of Health National Tuberculosis and Leprosy control Program (NTLP), with technical support from the TRACK TB project.

The development of the quality improvement manual for TB care was led by Dr. Aldo Burua under the leadership of the Program Manager NTLP/MOH. The writing team at the NTLP/MOH included Dr. Mugabe Frank, Dr. Aldo Burua, Dr. Mary Mudiope, Dr. Mabumba Eldard and Dr. Moorine Sekadde.

The following officers from the NTLP/MOH reviewed and provided invaluable input in the development of the document: Dr Stavia Turyahabwe, Dr George Upenytho, Dr Ebony Quinto, Dr Claudio Mara, Dr Simon Muchuro, Ekaru Stephen, Hawa Nakato, Alfred Etwom and Faith Mirimo. In addition, we acknowledge the contribution of Peter Awongo and Raymond Asiimwe from the NTRL/MOH in the development of the TB quality improvement manual.

The following Officers from the implementing partners are appreciated for their contribution in the development of the manual: Dr Kenneth Mutesasira from TRACK TB project, Dr Connie Namajji, Dr Herbert Kisamba and Martin Muhire from USAID-ASSIST project, Victoria Nakiganda and Hawa Nakato from UHSC.

We also wish to appreciate Dr. Sarah Byakika, Dr. Martin Sendyona and Dr. Benson Tumwesigye of the Quality Assurance Department/MOH as well as members of the MOH Supervision, Monitoring, Evaluation and Research Technical Working Group for the suggestions and inputs made in to the document.

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ACRONYMS AND ABBREVIATIONS

AIC:	AIDS Information Center
AIDS:	Acquired Immune Deficiency Syndrome
DOTS:	Directly Observed Therapy
DTU:	Diagnostic and Treatment Unit
HIV:	Human Immunodeficiency Virus
ICF:	Intensified Case Finding
KCCA:	Kampala Capital City Authority
MDR-TB:	Multi Drug Resistant TB
MOH:	Ministry of Health
NTLP:	National TB and Leprosy control Program
PDSA:	Plan Do Study Act
QAD:	Quality Assurance Department
QI:	Quality Improvement
SOP:	Standard Operating Procedure
USAID:	United States Agency for International Development
WHO:	World Health Organization

1.0 Introduction

1.1 Background

Tuberculosis (TB) remains a disease of great public health concern in Uganda. The country is one of the 30 high TB/HIV burden countries in the world. The prevalence of TB estimated in the recently concluded National TB prevalence survey is almost two times higher than had previously been estimated (253 compared to 161 per 100,000 population).

The national TB and Leprosy strategic plan (2015/16-2019/20) guides the NTLP and partners on priority focus areas so as to achieve the national and international targets for TB and leprosy control. The country has however faced challenges in attaining the set targets in the last 5 years, as TB notifications have stagnated and the treatment outcomes sub-optimal. A total of 42,320 incident TB cases (new and relapse) were notified in 2016. The TB treatment success rate (TSR) for the 2015 cohort of new bacteriologically confirmed TB patients was 79% and the cure rate 51%, which is below the 85% and 75% respective WHO targets.

In line with the health sector development goal of attaining a good standard of health for all people in Uganda, the NTLP strategic plan emphasizes improvement in the quality, efficiency and effectiveness of delivering TB services at all levels of the health system.

Reports however indicate gaps in the quality of TB care as key performance targets are not met in TB case finding and treatment outcomes. This is attributed to inadequate health provider capacity in TB diagnosis and management and poor monitoring of TB care services. There has been minimal involvement of the health providers in solving their own gaps in performance and furthermore, TB control is faced with the inherent challenge of few, poorly motivated and less qualified staff delivering TB care services.

The NTLP identified the need for a more systematic approach for TB support supervision at the districts and health facilities by employing a combination of mentorship of service providers in TB management and application of continuous quality improvement approaches to address gaps in performance, to improve the quality of TB care.

1.2 How to use the QI manual

The Quality improvement manual for TB care was developed for use by the health care worker, supervisors and managers of TB services at national, regional, district and health facility levels. It is used to guide mentorship of health care workers in TB management and conducting quality improvement coaching of health care teams to identify gaps in care and improve quality of TB care.

A facility mentorship tool has been developed for conducting facility performance assessment in standards of TB care and provide just-in-time mentorship of the health providers in areas of weaknesses and build competencies of the service providers in TB management.

The gaps in TB care are further analyzed in a team setting to understand the root causes of the problem, develop possible solutions and initiate improvement projects to address the gaps using continuous quality improvement approach. Tools like the documentation journal, TB care process flow charts and indicators for monitoring quality of TB care have been developed for the users of the TB Q.I manual.

2.1 Purpose of the quality improvement manual

The purpose of the manual is to build capacity of the NTLP, district and health facility providers to implement quality improvement interventions in TB care and monitor the implementation at health facilities, so as to improve the quality of TB care and outcomes of TB patients.

2.2 Objectives

- Empower health providers with knowledge and skills in TB management through on-job mentoring and coaching
- Build capacity of health facility teams to implement continuous quality improvement initiatives in TB care, document improvement efforts and share lessons learnt for spread of best practices in the health care system
- Strengthen capacity of the NTLP, districts and partners to support and monitor implementation of quality improvement initiatives in TB care at health facilities.

3.0 Interventions

The Quality Improvement manual for TB care services entails mentorship of health providers in TB management and application of continuous quality improvement approaches. The approach is in line with the MOH QI framework that focuses on improving the content of TB care as defined by standards and application of continuous quality improvement initiatives to address gaps in the processes of TB care.

3.1 Mentorship of health facilities in TB care

To build capacity of health providers in TB care, the NTLP developed a facility mentorship checklist. The tool assesses the facility performance on key standards of TB care, adapted from the international standards of TB care.

Five (5) performance areas on TB care have been identified for routine facility assessment and mentorship. These include;

- TB case management
- Management of TB laboratory services
- TB infection control
- Management of TB logistics
- TB information management

The facility mentorship tool assesses the level of attainment of the required standards of TB care. During the assessment, just-in-time mentorship of the health providers is carried out, focusing on addressing the gaps in knowledge and skills in TB management. The on-site mentorships target multi-disciplinary teams at the health facility, including nurses and clinicians in OPD, TB and HIV clinics, laboratory staff as well as MCH/FP clinics.

The performance of the facilities is monitored over the subsequent visits by scoring attainment of the TB care standards during each visit and monitoring improvement over time. The performance of the facilities can be plotted using a spidograph, as illustrated in figure 1.

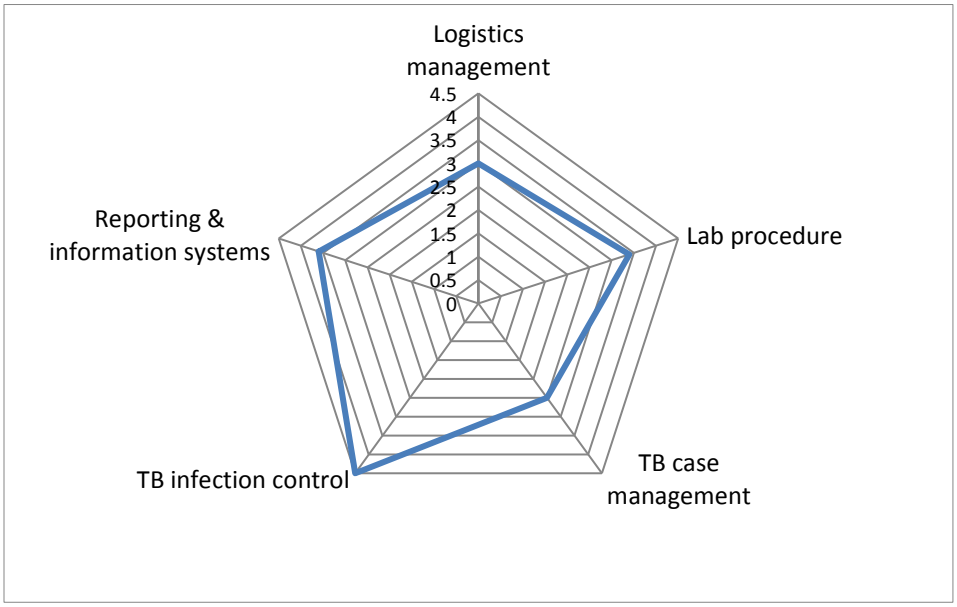

Figure 1: Proposed TB management spidograph

Adapted from the Supervision, Performance Assessment and Recognition Strategy (SPARS) implemented by Uganda Health Supply Chain (UHSC) project

3.2 Application of continuous quality improvement to address gaps in TB care

Following the facility assessment of performance in TB care, health providers review their performance in a team setting and analyze the gaps in TB care to understand the root causes and implement possible solutions (changes) to address the gaps.

Continuous quality improvement (CQI) methodology is an ongoing process that draws on multiple knowledge of the situation e.g. using the facility assessment reports, observations and data reviews. It employs tools for analysis e.g. flow charts, fish-bone analysis and run charts to identify and design strategies to address the gaps.

The Ministry of Health Quality Improvement framework and strategic plan (2010/11-2014/15) recommends implementation of quality improvement to incorporate the 5S methodology as a fundamental background to continuous quality improvement. 5S (Sort; Set; Shine; Standardize; and Sustain) is a philosophy that aims at organizing the work environment, improve efficiency and

eliminate waste. Other QI initiatives like the improvement collaborative(IC) approach are then applied to improve the processes of TB care**.** The IC approach brings together large network of facility teams working together on a common objective to achieve significant improvements in health care through shared learning and intentional spread methods.

Continuous Quality improvement is a science that uses the QI model to improve the quality of care. The model determines what to improve, identifies strategies for measurement and tests changes for improvement using the Plan-Do-Study-Act (PDSA) cycle of learning. This is shown in figure 2.

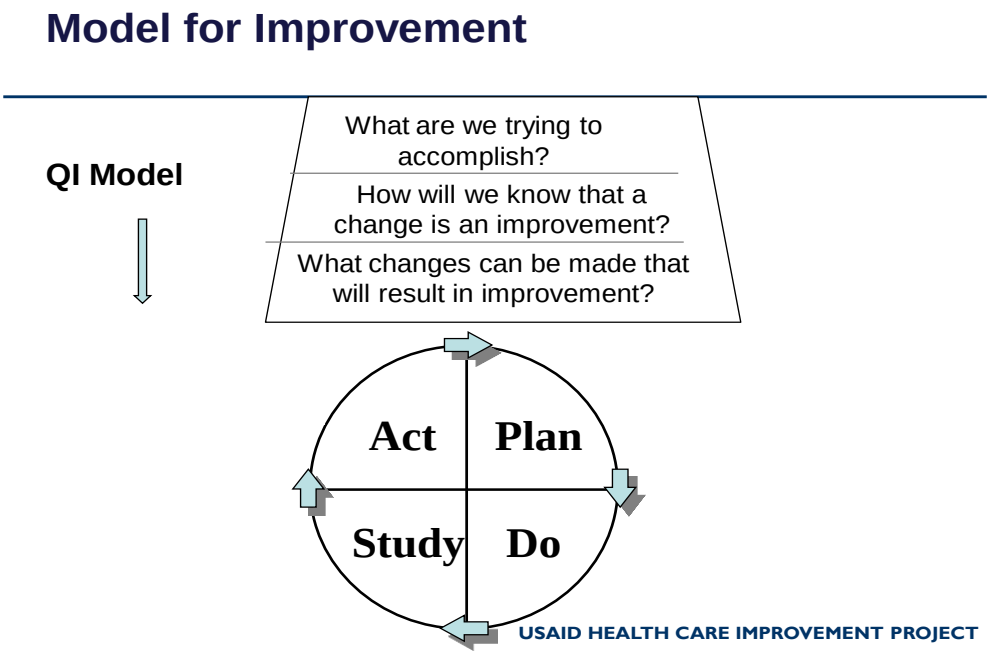

Fig 2: Model for improvement adapted from USAID-Health Care Improvement Project, University Research Co.LLC

The NTLP will adopt the QI model to improve the quality of TB care at health facilities. This will require deliberate efforts to build capacity of the health care providers at the various levels from the central unit, regions, districts and health facilities in application of the QI concepts and tools through training, mentoring and coaching.

Steps to integrate quality improvement in TB care

In order to integrate continuous quality improvement in TB control, the NTLP will establish quality improvement initiatives for TB care at the various levels at NTLP central unit, regions, districts and health facilities. The initiatives will include the following;

1. Identify standards of TB care, including national indicators to assess the standards and monitor performance of the health facilities.
2. Develop a QI training package and tools for TB care, to train health care providers at the various levels in quality improvement methodology

3. Revitalize the district and facility quality improvement teams comprising of health providers involved in TB care delivery
4. Conduct regular supervision and mentorship to assess performance of the health facilities and support the facility teams to implement QI projects to address gaps in TB care.
5. Provide tools and monitor implementation of quality improvement activities in TB care
6. Support the documentation of quality improvement efforts in a QI journal and share lessons learnt for spread across the health care system

Interventions for quality of TB care

Interventions for quality TB care will be derived from priority interventions for TB control as outlined in the health sector development plan and NTLP strategic plan (2015/16-2019/20)

The priority interventions include;

- Improve TB case detection and treatment initiation of all diagnosed TB patients
- Improve access to and utilization of quality laboratory services for TB diagnosis
- Ensure proper management of TB patients while on treatment through DOTs and monitoring for treatment response
- Integrate TB care and prevention services into NCD and MCH services
- Scale-up implementation of the one-stop model for co-infected TB patients
- Support the provision of ICF and IPT services in HIV care settings
- Implement TB infection control (TB IC) practices in all DTUs
- Ensure early detection and improve DR-TB patient management

Standards and indicators for quality of TB care have been developed to measure the process and outcomes of TB care. These indicators are aligned to the indicators in the HSDP. The list of indicators and data sources is shown in annex 1.

4.0 Implementation arrangements

Implementation of the quality improvement initiatives in TB care will follow the already established QI structures in the country. The MOH/QAD set up regional, district and health facility QI teams to coordinate implementation of QI activities in health care.

The NTLP will adopt the structures and strategies in the national QI framework and strategic plan, ensuring alignment to the TB context.

National level:

The NTLP at the national level works closely with the QAD through membership of the NTLP QI officer on the National QI Coordination Committee. The NTLP QI officer participates in the quarterly national QI coordination committee meetings, provides updates/ reports on QI implementation in TB care and ensures that QI is integrated in the NTLP TB control activities.

The NTLP central unit will provide technical oversight in implementation of QI in TB care at the national level, develop QI training materials and tools and build capacity of health providers in QI through quality improvement training, coaching and mentoring.

In collaboration with MOH/QAD and USAID ASSIST project, capacity of the NTLP central unit team, regional TB and leprosy focal persons and the implementing partners in the regions will be built in quality improvement through training in QI approaches and tools, joint coaching and mentoring and participation in QI learning sessions to share experiences and lessons learnt in QI implementation.

Regional level:

The MOH/QAD established regional QI teams responsible for monitoring quality improvement activities in health care. The NTLP will train the regional TB and leprosy focal persons (RTLPs) in quality improvement and ensure that they are part of the MOH regional QI teams. The RTLPs will provide technical support for implementation of QI in TB care, at the region.

District level:

Similarly, district QI teams have been established in all districts, responsible for coordinating QI activities in health care at the district. The district TB and leprosy supervisor (DTLS) will be part of the district QI team. The other members on the district QI team include the district HIV focal person, district laboratory focal person and the district biostatistician.

With support of the implementing partners, the district QI team will be trained in quality improvement for TB care. They will be responsible for providing technical support in implementation of quality improvement activities in TB care at the health facilities, compile/ share with the district health team reports of QI implementation at the facilities and follow up issues in TB care that need to be addressed.

Health facility level:

Implementation of QI activities in TB care at health facilities will be integrated in the already existing QI team action plans. There are a number facilities with established QI teams but their composition needs to be reviewed to ensure that the TB clinic staff are part of the team.

The QI teams will be re-vitalized in facilities where they have been in-active or a new one formed, where the facility QI team is non-existent ensuring that the TB care providers are part of the team.

In large health facilities like hospitals where the membership of the hospital quality improvement team is rather large, small work improvement teams will be formed for TB care services, targeting TB providers in TB & HIV clinics, OPD, MCH/FP and the lab.

These will report from time to time, to the larger facility QI team

The roles of the facility QI team will be to:

- Conduct regular meetings to review performance, allow for active participation and generate change ideas to improve.
- Through team approach, review and analyze data to identify gaps in performance, discuss and prioritize which problems are within their means to fix and address them
- Develop action plans to track issues identified during the mentorship and QI coaching sessions targeting gaps identified and proposed actions
- Strengthen linkages with the community aspects of TB care through engagement of the community linkage facilitators
- Document lessons learnt from implementation to inform decision making at the facility.
- Share emerging best practices through peer learning sessions and other district as well as national forums to enhance spread of best practices across facilities.

4.1 Implementation plan for quality improvement in TB care

The roll out and implementation of the TB quality improvement intervention at the districts and health facilities will target the established TB support supervision and mentorship activities of the NTLP central unit, regional teams, districts and the implementing partners.

Efforts will be made to build capacity of the TB providers at the various levels from the central unit, regions, districts and health facilities in quality improvement for TB care through training, mentoring/coaching and provision of tools.

The following activities will be undertaken to roll out implementation of quality improvement interventions in TB care services;

- Disseminate the quality improvement manual for TB care and tools to the districts, health facilities and other stakeholders
- Conduct national training of trainers for NTLP central unit team, RTLPs and the implementing partners in quality improvement methodology using the 5 days QI training curriculum of the MOH/QAD
- Work in collaboration with the regional partners to conduct training of district QI teams and health facilities in quality improvement methods and tools.
- Conduct support supervision and mentorship visits by NTLP and RTLPs to districts and health facilities to support implementation of QI in TB care
- Support documentation and reporting of QI efforts, including QI projects and dashboards in TB care for monitoring performance
- Organize peer learning sessions for collaborative teams at health facility level to share best practices and lessons learned in QI for TB care
- Support districts and health facilities to regularly report on QI implementation in TB care and submit dashboards on QI performance to the NTLP and partners

5.0 Monitoring implementation of quality improvement interventions in TB care

Implementation of quality improvement interventions in TB care will be monitored by tracking indicators that measure the uptake of TB care services. The data will be compiled in form of a dashboard showing progress in performance and improvement of the individual region, district or health facility in selected TB quality of care process/ output indicators (figure 3).

Facilities that meet the set targets (>90% score) are shaded green and those that score 60-89% are shaded yellow while those that score <59% for the above indicators are shaded red. The latter two categories and those with no data will be prioritized for targeted mentorship to improve their performance.

Other aspects of implementation like capacity building through trainings and mentorship/ coaching and availability of inputs like medicines, supplies and tools will be monitored using indicators in the NTLP M&E framework

Dashboard illustrating facility performance in quality of TB care indicators

	2014			2015				
FACILITY	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**
Facility 1	60%	100%	67%	100%	100%	100%	100%	100%
Facility 2	80%	79%	83%	93%	100%	100%	100%	100%
Facility 3	78%	75%	91%	92%	100%	47%	100%	100%
Facility 4	100%	80%	75%	73%	100%	92%	100%	60%
Facility 5	67%	50%	50%	67%	60%	100%	100%	60%
Facility 6	82%	82%	71%	73%	100%	75%	100%	69%
Facility 7	77%	67%	81%	86%	86%	52%	71%	100%
Facility 8	80%	54%	6%	86%	83%	88%	88%	100%
Facility 9	89%	57%	61%	100%	100%	100%	46%	100%
Facility 10	43%	100%	100%	100%	100%	100%	100%	0%

Figure 3: Proportion of PBC-TB cases with a follow up smear done at end of 6 months of treatment

6.0 Rewarding and recognition of best performing health facilities

Performance of the health facilities will be monitored for attainment of the TB care standards tracked using the facility TB quality of care indicators and dashboard. Best performing facilities will be identified using a composite of indicators including consistency in achieving scores >90% (green) on agreed number of TB quality of care indicators and meeting targets for TB service delivery indicators like TB case detection rate and treatment outcomes. The best performing facilities will be recognized and given a modest reward in an award ceremony at various forums like district, regional or national level meetings. This is aimed at motivating the facility and district teams to even work harder and maintain a high level of performance.

7.0 References

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2. Ministry of Health. 2015. National TB and Leprosy control program strategic plan (2014/15-2019/20). published by MOH, 2015.
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4. USAID Health Care Improvement Project. 2008. The Improvement Collaborative: An Approach to Rapidly Improve Health Care and Scale Up Quality Services. Published by the USAID Health Care Improvement Project. Bethesda, MD: University Research Co., LLC (URC).
5. World Health Organization 2014. Global Tuberculosis report 2014. Published by WHO Geneva, Switzerland 2014.

8.0 List of annexes

8.1 Standards and indicators for monitoring quality of TB care

Standard of TB care	Indicator	Target	Data source
Intensified TB case finding among patients with presumptive TB and contacts of confirmed TB patients	• % of OPD, HIV & MCH clinic attendances screened for active TB	100%	ICF form, OPD register, HIV/ART card, ANC register
	• % of presumptive TB cases that are examined for TB in the laboratory	100%	Presumptive TB & laboratory TB register
	• % contacts of PBC-TB patients who are screened for active TB	100%	Unit TB register, contact tracing form & register
	• TB case detection rate	85%	Unit TB register
Initiate diagnosed TB patients on DOT's	• % of diagnosed TB patients who are on Directly Observed Treatment (DOTs)	100%	Unit TB register
Monitor TB patients registered in care, for treatment response	• % of new PBC-TB cases enrolled in care 2 months ago that had a follow up smear done at the end of two months	100%	Unit TB & lab register
	• % of new PBC-TB cases enrolled in care 5 months ago that had a follow up smear done at the end of five months	100%	Unit TB & lab register
	• % of new PBC-TB cases enrolled in care 6 months ago that had a follow up smear done at the end of six months	100%	Unit TB & lab register
Integrated TB/HIV co-management	• % of TB patients registered in care with known HIV status	100%	Unit TB register, pre-ART & ART register
	• % of TB/HIV co-infected patients registered in care, that are on cotrimoxazole prophylactic therapy	100%	Unit TB register, pre-ART & ART register
	• % of TB/HIV co-infected patients registered in care, that are on ART	100%	Unit TB register, pre-ART & ART register
Provision of Isoniazid Preventive Therapy to eligible HIV patients and HIV negative children under five years, who are contacts of PBC-TB patients	• % of children under five years who are contacts of PBC TB cases that are screened for active TB	100%	Unit TB register
	• % of under five year contacts of PBC TB cases that are eligible for IPT and received it.	100%	Unit TB register & IPT register
	• % of HIV patients newly enrolled in care who were screened for active TB	100%	HIV/ART care card, pre-ART & ART register
	• % of HIV patients with no signs and symptoms of TB eligible for IPT who were given IPT	100%	HIV/ART care card, pre-ART, ART register & IPT register

8.2 Standards and indicators for quality MDR TB management

Standard of TB care	Indicator	Target	Data source
Surveillance of MDR TB among risk groups	Prop of retreatment TB cases who have a Genexpert test or DST done	100%	Susceptible TB register
Patient enrollment	Prop of patients diagnosed with Rif resistant TB in the last month, who are enrolled on 2nd line TB treatment	100%	laboratory register and MDR TB register
Baseline investigations	Proportion of newly enrolled MDR TB patients with baseline investigations (culture & DST) done	100%	MDR TB register and/ or patient charts
Adherence on 2nd line TB treatment	Prop of MDR TB patients who are adhering on 2nd line TB treatment	100%	DR TB unit register and/ or patient treatment card
Monthly sputum smear and culture monitoring	Prop of MDR TB patients started on 2nd line treatment with monthly sputum smear and culture done	100%	DR TB unit register and/ or patient treatment card
Contact investigation	Prop of MDR-TB patients registered for treatment in the last quarter whose contacts were traced and screened for TB	100%	MDR TB register/ patient file and/or contact tracing form
MDR TB/HIV co-management	Prop of MDR-TB/HIV co-infected patients registered for treatment that are receiving ART	100%	DR TB unit register and/ or patient treatment card
Nutritional assessment for MDR-TB patients	Prop of MDR-TB patients who are assessed for nutritional status using weight and MUAC	100%	DR TB unit register and/ or patient treatment card
Monitoring MDR TB patients on 2nd line TB treatment for adverse events	Prop of DR TB patients registered on 2nd line treatment in the last quarter monitored for adverse events	100%	Patient treatment card

8.3 Health facility performance assessment and mentorship tool

NATIONAL TB AND LEPROSY CONTROL PROGRAM

HEALTH FACILITY PERFORMANCE ASSESSMENT AND MENTORSHIP TOOL

District:		Region	
Health Facility:		Level of care:	
Date of Visit:			

NAMES OF MENTORS

#	Name	Designation	Contact/Phone No.
1.			
2.			
3.			
4.			
5			

NAMES OF PERSONS MENTORED

#	Name	Gender (F/M)	Designation	Contact/Phone No.
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

SUSCEPTIBLE TUBERCULOSIS MANAGEMENT

1)	TB screening and diagnosis	Score 1, 0 or NA	Comments
a)	Are patients routinely screened for active TB at the various care entry points (OPD, HIV & MCH clinic) Verify the following: • Health education is routinely carried out on TB at all care points • Triaging is done & separation of coughing patients at the outpatients clinic (Look for presence of cough monitors, IEC materials on TB symptoms displayed)		
b)	Are intensified TB case finding tools available for TB screening in OPD, HIV and MCH clinics? Verify the following: • ICF forms/guide, or revised OPD register available at OPD, HIV and MCH clinics? • Presumptive TB register is filled and updated Score 1 if both are present otherwise, score 0		
	How many patients attended OPD, HIV and MCH clinic in the last month		
	How many were screened for active TB		
	Number of presumptive TB cases identified in OPD, HIV and MCH clinic, in the last month		
	Number of presumptive TB cases examined in the lab (microscopy, genexpert or culture)		
	Number of confirmed TB cases in the lab		
c)	Is contact tracing of infectious TB cases (PBC) done Check if records of symptomatic contacts is updated in the unit TB register Score 1 if yes otherwise, score 0		
	Number of PBC-TB cases registered for treatment in the last month		
	Number of contacts of PBC-TB cases registered in the last month		
	Number of contacts screened for TB		
	Number found with active TB		
d)	The facility has algorithm for diagnosis of TB in children. Verify availability and use of algorithm Score 1 if yes otherwise, score 0		
	Number of children screened for TB		
	Number of children 0-14 years diagnosed with TB in the last month?		

e)	The facility has algorithms for diagnosis of TB, including other forms of TB like PCD & EPTB. Verify availability and use of the TB diagnostic algorithm Score 1 if yes otherwise, score 0		
	Number of PCD & EPTB cases were diagnosed in the last month?		
	Sum of 1a) to 1e)		
	Total Score: The sum of 1a) to 1e) above divided by 5 Sum (a-d)/5*100%		
2)	**TB case management**	**Score 1, 0 or NA**	**Comments**
a)	Are SOPs and clinical guidelines for TB management available at the facility? (NTLP manual, SOPs, etc.)		
b)	Do prescribers adhere to the standard treatment guidelines for TB management Review a sample of 5 patients in the unit register. For each category of patient, assess appropriateness of regimen (Cat 1 & Cat 2)		
c)	Are TB patients registered in care on DOT? (Availability Rx supporter with contact information)		
	How many patients were registered for TB treatment?		
	How many registered TB patients are on DOT?		
d)	Are TB patients registered on treatment monitored for treatment response? • Check in the unit TB register and verify if TB patients got sputum smears done at the end of 2, 5 and 6 months		
	Number of new PBC TB cases who started treatment 2 months ago and completed intensive phase of treatment by end of last month		
	Number who had sputum smear done		
	Number of new PBC TB cases on treatment who completed 5 months treatment by end of last month		
	Number who had sputum smear done at the end of 5 months		
	Number of new PBC TB cases on treatment who completed 6 months treatment by end of last month?		
	Number who had sputum smear done at the end of 6 months		
	Sum of 2a) – 2d):		
	Score: The sum of 2a) to 2d) above divided by 4		

3)	TB/HIV co-infection management	Score 1, 0 or NA	Comments
a)	Are SOPs & guidelines available for providing TB/HIV services at TB & HIV care points (TB/HIV guidelines, ART/PMTCT guidelines, IPT guidelines, etc.) Score 1 if yes otherwise, score 0		
b)	Are TB/HIV co-infected patients provided services at the same point of care (one-stop shop) • Presumptive and confirmed TB patients are tested for HIV and the status updated in the presumptive & TB unit register • HIV patients are screened for TB and the TB status is updated in the pre-ART/ART register Score 1 if yes otherwise, score 0		
	Number of TB patients registered for treatment in the last month who are co-infected with HIV?		
	Number of TB/HIV co-infected patients who received CPT		
	Number of TB/HIV co-infected patients who received ART		
c)	Is the facility providing Isoniazid Preventive Therapy to eligible clients in care? • Verify if IPT is provided to eligible PLHIV and children <5 years who are contacts of TB patients Score 1 if yes otherwise, score 0		
	Number of HIV clients newly enrolled in care eligible for IPT who received it in the last month		
	Number of children <5 years who are contacts of TB patients eligible for IPT who received it in the last month		
	Sum of 3a) to 3c)		
	Score: The sum of 3a) to 3c) above divided by 3		

DRUG RESISTANT TUBERCULOSIS MANAGEMENT

1a)	**MDR TB case finding**	**Score 1, 0 or NA**	**Comment**
	Verify if presumptive TB patients are tested with GeneXpert ***Check in the laboratory TB register if presumptive TB patients are tested with Genexpert. If Genexpert machine is not on-site, verify if samples are referred to the nearest Genexpert facility***		
	No. of samples tested using Genexpert last quarter?		
	Number of MTB cases detected in the last quarter		
	Number of MTB cases that are Rifampcin resistant?		
1b)	**MDR TB surveillance among risk groups**	**Score 1, 0 or NA**	**Comment**
	Verify if previously treated TB patients registered in care are tested using Genexpert? ***Check in the unit TB register if previously treated TB patients have Genexpert test result***		
	Number of previously treated patients registered for treatment during the last quarter		
	Number of previously treated TB patients registered during the last quarter that had a GeneXpert test		
	Number of Rifampcin resistant cases identified		
2)	**MDR TB patient enrolment on 2nd line TB treatment**	**Score 1, 0 or NA**	**Comment**
	Check the lab register and MDR TB register to verify if all diagnosed Rif Resistant TB cases were registered and started on 2nd line TB treatment		
	Number of Rifampcin Resistant TB cases registered in the last quarter		
	Number of RR TB cases registered in the last quarter who were started on 2nd line TB treatment		
3)	**Baseline Culture and DST**	**Score 1, 0 or NA**	**Comment**
	MDR TB patients started on 2nd line TB treatment get baseline culture and DST done ***Check in the MDR TB register and/ or patient charts and verify if patients started on treatment 6 months ago have baseline culture & DST results***		
	Number of DR-TB patients started on 2nd line treatment in the quarter before last quarter		
	Number of DR-TB patients started on 2nd line treatment in the quarter before last quarter that have sputum culture/DST results available and recorded		

4)	**Adherence of MDR-TB patients on second line TB treatment**	**Score 1, 0 or NA**	**Comment**
	Are MDR TB patients registered and active in care receiving treatment under DOT? *Check the DR TB unit register or treatment card at treatment facility/ FUF to verify if patient is adhering to treatment (misses doses for <7 days in a month)*		
	Number of MDR-TB patients registered on treatment in the last quarter		
	Number of MDR-TB patients registered on treatment in the last quarter that are adhering to their treatment		
5)	**Monthly sputum culture monitoring**	**Score 1, 0 or NA**	**Comment**
	Are MDR TB patients on treatment monitored through monthly sputum cultures? ***Check the MDR TB unit register and/ or sputum referral register and verify receipt of culture results***		
	Number of MDR-TB patients registered on 2nd line treatment in the quarter before the last quarter		
	Number of MDR-TB patients registered on 2nd line treatment in the quarter before the last quarter that have monthly sputum culture results available		
6)	**Contact tracing**	**Score 1, 0 or NA**	**Comment**
	Are contacts of MDR TB patients registered on treatment traced and investigated for TB? ***Check the MDR TB register/ patient file and/or contact tracing form and verify if close contacts of MDR TB patients were traced and evaluated for TB***		
	Number of MDR-TB patients registered for treatment in the last quarter		
	Number of MDR-TB patients registered for treatment in the last quarter whose contacts were traced and screened for TB		
7)	**MDR-TB/HIV co-infected patients on ART**	**Score 1, 0 or NA**	**Comment**
	Are MDR-TB/HIV co-infected patients registered on treatment receiving ART alongside the 2nd line treatment regimen? ***Check in the MDR TB register or patient charts to verify if the co-infected patients are receiving ART***		
	Total number of active MDR-TB/HIV co-infected patients on 2nd line treatment in the last quarter		
	Number of MDR-TB/HIV co-infected patients registered for treatment in the last quarter that are receiving ART		

8)	**Nutritional assessment for MDR-TB patients**	**Score 1, 0 or NA**	**Comment**
	Are MDR TB patients on treatment assessed for nutritional status during each clinic visit? ***Check the MDR TB unit register and/ or patient treatment charts to verify if the patient MUAC or weight was taken & recorded***		
	Total number of MDR-TB patients active on 2nd line treatment in the last quarter		
	Number of MDR-TB patients with a recorded weight and MUAC assessment during the last quarter		
9)	**Monitoring MDR TB patients on 2nd line TB treatment for adverse events**	**Score 1, 0 or NA**	**Comment**
	Are MDR TB patients monitored for adverse events **Check individual patient charts & verify if patients were assessed for adverse events, recorded & reported to NDA**		
	Number of DR TB patients registered on 2nd line treatment in the last quarter		
	Number of DR TB patients registered on 2nd line treatment in the last quarter monitored for adverse events		
10)	**Interim & final DR-TB treatment outcomes**	**Score 1, 0 or NA**	**Comment**
	Are MDR TB patients on treatment assigned interim and final treatment outcomes at the end of 6 months and 20 months of treatment ***Check the DR TB register and verify if MDR TB patients have recorded interim & final treatment outcomes at the end of 6, and 20 months of treatment.***		
	Number of MDR TB patients registered on 2nd line treatment 6 months ago		
	Number of MDR TB patients registered on 2nd line treatment 6 months ago who converted at the end of intensive phase of treatment		
	Number of MDR TB patients registered on 2nd line treatment 20 months ago		
	Number of MDR TB patients registered on 2nd line treatment 20 months ago who are cured at the end of treatment		

INFECTION CONTROL PRACTICES

	Assessment of TB infection control practices	Score 1, 0 or NA	Comments
a)	Does the facility have a TB IC committee? If yes, are the members trained in TB IC Score 1 if both present , score 0		
b)	Does the facility have a TB infection control plan in place? (verify and note components of the plan) Score 1 if both present , score 0		
c)	Does the facility routinely carry out TB risk assessment? Score 1 if both present , score 0		
d)	Is the waiting area well ventilated (spacious with open windows or open area) Score 1 if both present , score 0		
e)	Patients are provided with masks at waiting place Score 1 if both present , score 0		
	Sum a) - e)		
	Score: The sum of a) to e) above divided by 5		

TB REPORTING AND INFORMATION SYSTEM

	Component to be assessed in TB reporting	Score 1, 0 or NA	Comments
a)	Are the recommended NTLP tools available and used (Patient card, presumptive TB register, laboratory TB register and TB unit register)		
b)	Are the NTLP tools properly completed and accurately filled?		
c)	Was the HMIS quarterly report (HMIS 106a) made for the previous Qtr (Verify accuracy & completeness)		
d)	Timeliness of submission of reports - Was the quarterly report submitted on time (within 7 days of the next month of reporting period) - Was the drug order and report form submitted within NMS order schedule		
e)	Accuracy of TB order forms (compare the stock card and the order form for the previous order) Ending balance in the order form agrees with stock card balance on hand)		
	Sum a) - e)		
	Score: The sum of a) to e) above divided by 5		

ASSESSMENT OF LABORATORY SERVICES

	Component to be assessed	Score 1, 0 or NA	Comments
	Work environment		
a)	Is the laboratory space clean and well organized? (clean working space, running water & waste disposal bins)		
b)	Is personnel protective equipment readily available and used routinely (surgical mask, N95 masks, gloves, lab coats, goggles)		
	Waste management		
c)	Waste properly segregated in containers & no mingling of infectious and non-infectious waste (color coded bins), functional disposal pit available		
	Sample processing		
d)	Are the following equipment & supplies available? Surgical mask, functional microscopes, genexpert, lab reagents & supplies		
e)	Sputum samples are collected in a designated area (sputum booth) and away from others		
f)	Does the facility have access to Genexpert services? Genexpert machine available on site, or samples are referred elsewhere		
	Number of samples tested using genexpert in the last month? (disaggregate by category) i.e. retreatment case, children <14 years, HIV positive		
	Number of samples tested found to be Rifampcin resistant?		
	Number of RR cases diagnosed last month, successfully linked for MDR treatment?		
	Quality management system		
g)	Is external quality assurance performed for TB tests? • Are slides kept for external quality control?		
h)	Does facility receive timely feedback? (results received with in the first month of the next quarter) • Corrective action taken where high error rate?		
	Sum of a) to h)		
	Score: The sum of a) to h) above divided by 8		

LOGISTICS MANAGEMENT

Availability and correct use of stock cards, stock books etc. (Pick on any 5 products of choice)

Name of Item	Y/N/NA	Comments/Remarks	Action Taken
1. Availability on the day of visit			
2. Stock card availability			
3. Is the stock card correctly filled?			
4. Does physical count agree with stock card balance?			
5. Is the stock book correctly used?			
6. Is AMC the same as recorded? ±10%			

CONTINOUS QUALITY IMPROVEMENT

	Assessment of quality improvement initiatives in TB care	Score 1, 0 or NA	Comments
a)	Does the facility have a TB QI committee? If yes, are the members trained in CQI? Score 1 if both present , score 0		
b)	Does the facility have access to the National CQI Framework Score 1 if yes otherwise, score 0		
c)	Does the facility routinely conduct CQI meetings? (Verify from the minutes on file). Score 1 if yes otherwise, score 0		
d)	Is the facility implementing any QI projects at the moment? Score 1 if yes otherwise, score 0		
e)	Is TB among the QI projects currently being implemented at the facility? Score 1 if yes otherwise, score 0		
	Sum a) - e)		
	Score: The sum of a) to e) above divided by 5		

CONSTRAINTS & LESSONS LEARNT

(Challenges encountered by the facility team in providing TB care services)

_____

_____

_____

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NEXT STEPS

a) Facility team

_____

_____

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Note: leave a copy of the filled action plan form at the facility

b) NTLP, RPMT, districts and partners

_____

_____

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_____

_____

_____

Summary of quality improvement projects in TB care

Gap identified in TB care	Reasons for the gap	Possible solutions/ changes tested	Comment

NB: Fill a documentation journal for each QI project and leave behind a copy at the health facility

END

Report format

NATIONAL TB AND LEPROSY CONTROL PROGRAM

HEALTH FACILITY PERFORMANCE ASSESSMENT AND MENTORSHIP REPORT

SUBMITTED BY: 1 …… **POSITION:** ……

2. …… ……

DATE REPORT SUBMITTED: ……

PLACE(S) VISITED: 1…… **DATE(S):** ……

2……

3……

A] TRIP OBJECTIVES:

1-
2-
3-
4-
5-

B] ISSUES IDENTIFIED DURING THE VISIT REQUIRING FOLLOW UP:

1-
2-
3-
4-
5-

C] SUMMARY OF ACTIVITIES CARRIED OUT

D] SUMMARY OF OBSERVATION (ACHIEVEMENTS, CONSTRAINTS & LESSONS LEARNT)

E] SUMMRAY OF FOLLOW UP ACTIONS RECOMMENDED:

PERSONS MET & CONTACTS (NAMES, POSITION, TELEPHONE & E-MAIL)

NAME POSITION TELEPHONE NO. E-MAIL CONTACT

AREAS OF IMPROVEMENT:

Problem/issue	Recommended Action	Who	When

SIGNATURE OF TRAVELLER: …… DATE: ……

SIGNATURE OF SUPERVISOR: ..... DATE: .....

DISTRIBUTION OF REPORT

1. **OFFICE OF THE PROGRAM MANAGER (Accountability & Trip Report)**
2. **HEAD OF COORDINATION OFFICE (Accountability & Trip Report for action)**
3. **FINANCE OFFICE (Accountability & Trip Report)**

8.4 Quality Improvement documentation journal

IMPROVEMENT OBJECTIVE

Documentation Journal for QI activities

Name of the Facility _____ **District:** _____ **Region:** _____

Team Leader: _____**Team Members:** _____

_____

Start Date for Improvement Project: _____ **End date:** _____

Improvement Objective: **1.** _____ _____ _____	**Indicator for the Objective:**

Description of Problem:
Briefly describe the problem being addressed and gaps between the current situation and your improvement objectives. State the differences between the MoH standard of care and the current practices. Also describe some of the challenges with the current situation.

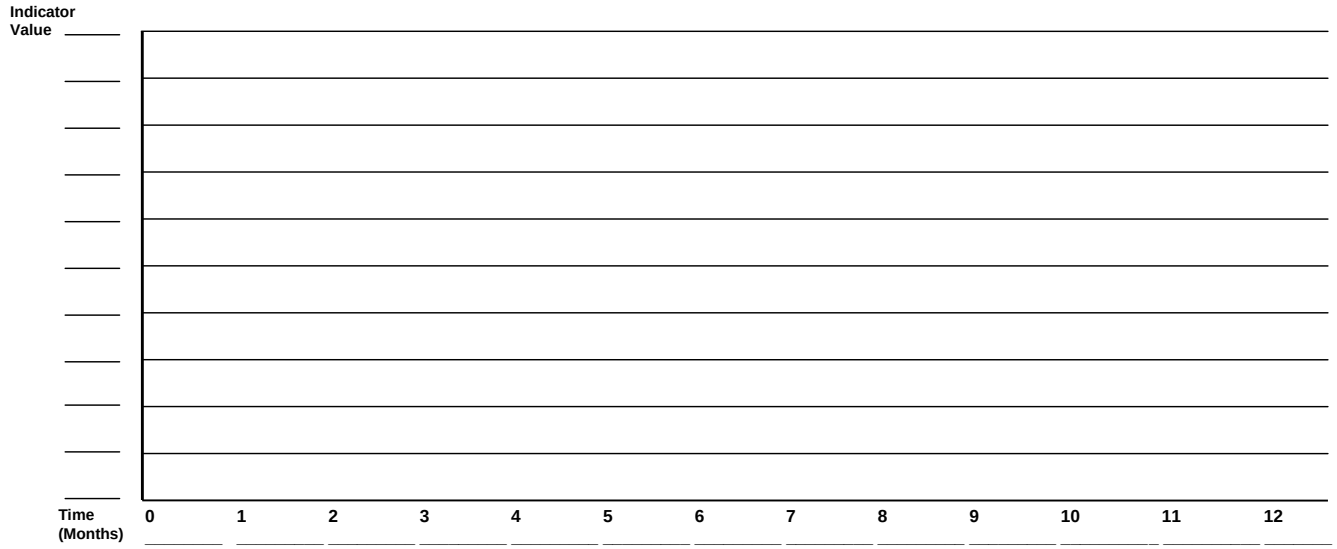
Part 2: *Changes Worksheet* – QI Team Activities: Please list below the changes that the team has tried out in order to achieve the improvement objective. Write all changes, whether effective or not. Also note when it was started and when it ended (where applicable) to enable you annotate the results.

Planned and Tested Changes: In the space below, list all of the changes that you are implementing to address the improvement objective. Use 1-2 sentences to briefly describe the tested change.	**Start Date:** DD/MM/YY	**End Date** (if applicable) DD/MM/YY	Was there any **improvement registered?** (Yes/No)	**Comments:** Note here any potential reasons why the change did or did not yield improvement; also indicate any change in indicator value observed related to this change.
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				

Part 3: *Graph Template* – Annotated Results:

- Use the graph below to document your progress. Indicate the value of the numerator and denominator.

TITTLE: _____



Numerator													
Denominator													
%													

Numerator													
Denominator													
%													

***Notes on the Indicator*:** Write down any additional comments you may have on the performance of indicators. Write anything derived from the changes worksheet and the graph template that might explain the performance trends of the improvement objective.

_____ _____

_____ _____

_____ _____

_____ _____

***Notes on Other Observed Effects (lessons learnt)*:** Please write here any effects (positive or negative) you are *currently* observing as a result of the quality improvement effort such as comments from patients, changes in your performance or motivation, improved efficiency or the survival story of a sick patient. You may use your notes to tell the complete story at the next learning session(s).

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____