EPTS OpenMRS

Reports Requirements
Indicator Specification Document
TB_PREV

Version 1.4

Version

Date	Version	Description	Author
January 9, 2019	1.0	Document structure and content updated	Lalitha Moodley
February 15, 2019	1.1	Update of content based on requirements gathering session	Lalitha Moodley
February 15, 2019	1.2	Overall revision	Pinki Meggi Zainabe Dadá
February 28, 2019	1.3	Update of content based on requirements gathering meeting on 22nd February, 2019. Revised the structure and summarized the content.	Pinki Meggi
March 13, 2019	1.4	Update of content based on feedback from FGH	Lalitha Moodley

Approvals and Sign-off

Approvals Panel

Version	Approver	Approved by	Date
1.4	CDC		

Approvals Panel

The Approver signatures signify that this document has been reviewed and satisfies the project governance, business and system needs.

Document Title: EPTS OpenMRS Indicator Specification and Requirements – TB_PREV

Year: 2019

Authors Signature

Version	Authors	Approved by	Date
1.4	Jembi Health Systems		
	FGH		

Authors

The Authors signatures represent the EPTS Requirements Gathering Group composed by two CDC Partners, Jembi Health Systems (HIS Partner) and FGH (Clinical Partner) and signify that this document is complete and that, to the best of their knowledge, it adequately addresses the document's intended purpose and scope and it is accurate.

Contents

1 Introduction

1.1 Purpose

The purpose of this document is to capture the requirements and specifications for the PEPFAR MER **TB_PREV** Indicator. This indicator is reported from the EPTS OpenMRS system in use by PEPFAR Clinical partners to capture patient level data in retrospective mode at the Health Facilities.

1.2 Scope

This document explains the indicator definition and defines the functional and technical requirements for generating the indicator in an OpenMRS Report. The link to test scenario documents is also included.

The indicator definition is based on the PEPFAR MER (Monitoring, Evaluation and Reporting) Indicator Reference Guide specified below in 1.3 References.

1.3 References

MER 2.3 Indicator Reference Guide

2 Indicator Report Definition

2.1 Description (from MER 2.3)

The TB_PREV indicator reports the proportion of ART patients who completed a standard course of TB preventive treatment within the semiannual reporting period.

Note: In Mozambique the Preventive Treatment for PLHIV without active tuberculosis consists of the continuous administration of Isoniazid (INH) for 6 months. Other alternatives such as Isoniazid + Rifampicin are not currently being used in Mozambique. Therefore, TB Preventive Treatment corresponds to a 6-months course of Preventive Treatment with Isoniazid (IPT).

2.2 Denominator (from MER 2.3)

The TB_PREV **denominator** indicates the number of ART patients who started IPT during the previous period and who are expected to complete the course during the semiannual reporting period.

The denominator can be generated by counting the total number of patients who are scheduled to complete a course of TB preventive therapy in the semiannual reporting period.

2.3 Numerator (from MER 2.3)

The TB_PREV **numerator** indicates the number of ART patients who completed a 6-month course of TB Preventive Treatment during the semiannual reporting period.

The numerator can be generated by counting the number of PLHIV on ART who are documented as having received at least six months of IPT or have completed another standard course of TB preventive therapy during the semiannual reporting period.

2.4 Indicator Report Level and Frequency

TB_PREV is an indicator collected and reported at the level of the Health Facility. TB_PREV is reported at each semiannual (every 6 months) reporting cycle (H1, H2, which are also considered as S1 and S2).
PEPFAR partners are required to report every six months, in the following periods:
- S1 September 21st - March 20th
- S2 March 21st - September 20th

2.5 Indicator Report Primary Sources (from MER 2.3)

TB_PREV indicator should be collected from:
- ART Registers or
- TB screening registers (presumptive TB) or
- IPT registers.

2.6 Disaggregation

The TB_PREV **numerator** and **denominator** should be reported disaggregated:

- **Age / Sex by type of Preventive TB Treatment (IPT) by ART start (Required):**
  - o IPT by newly enrolled on ART: <15 F/M, 15+ F/M, Unknown Age F/M
  - o IPT by previously enrolled on ART: <15 F/M, 15+ F/M, Unknown Age F/M
  - o Alternative TPT regimen by newly enrolled on ART: <15 F/M, 15+ F/M, Unknown Age F/M
  - o Alternative TPT regimen by previously enrolled on ART: <15 F/M, 15+ F/M, Unknown Age F/M Denominator
    - ■ *Note:* **not possible to disaggregate by alternative TPT, this details are not possible to collect currently**

Age represents an individual's age at the **end of the reporting period** or when last seen at the facility. For example, a 14-year-old child will be counted as currently receiving treatment in the <15 age category at the end of reporting period "A". During reporting period "B" the child turns age 15 and so at the end of this reporting period the child will be counted under the 15+ age category.

Disaggregate descriptions & definitions

- IPT/Newly enrolled on ART: Among those who completed 6 months of IPT, the patients who started IPT and ART in the previous reporting period.
- IPT/Previously enrolled on ART: Among those who completed 6 months of IPT, the patients who started IPT in the previous reporting period, but who started ART prior to the previous reporting period (i.e., patients who were on ART prior to the reporting period when they started IPT).
- Alternative TPT regimen/Newly enrolled on ART: Among those who completed an alternative regimen (e.g., 3-month INH and rifapentine), the patients who started the regimen and ART in the current or the previous reporting period.
- Alternative TPT/Previously enrolled on ART: Among those who completed an alternative regimen (e.g., 3-month INH and rifapentine), the patients who started the regimen in the current or the previous reporting period, but started ART prior to previous reporting period.

2.7 Report Output
The report output for TB_PREV indicator can be found as attachment or [here](#)

3 Requirements Definition

3.1 Key Assumptions

The key assumptions for TB_PREV indicator and related to EPTS OpenMRS are the following:

1. All patients captured in the OpenMRS system are HIV positive.
2. All patients captured in the OpenMRS system are on antiretroviral treatment (ART).
3. All patients on ART program are enrolled in SERVIÇO TARV-TRATAMENTO.
4. All patients must be officially enrolled on ART Service at end of reporting period on specified health facility. Officially enrolment mean
    a) have "Processo Clinico Parte A" registered in health facility or
    b) has been enrolled in "SERVICO TARV – CUIDADO" program in health facility or
    c) has been enrolled in "SERVICO TARV – TRATAMENTO" as "Transferred in" in health facility.
5. All patients on ART might or not be screened for TB in some time.
6. Patients are considered as started the Preventive Treatment with Isoniazid (IPT) (Denominator) if
    o In Patient Clinical Record of ART - Ficha de Seguimento, "Profilaxia com INH – TPI" has a Start Date (Data de Início) within previous reporting period(6months).

Outros Diagnósticos										
	Rastreio de ITS (Tem sintomas sugestivas para ITS)?	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N
	Rastreio de TB (Tem sintomas sugestivas para TB)?	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N
Infecções Oportunistas	Resultado da Investigação para TB de BK e/ou RX? (POS/NEG)	□POS □NEG	□POS □NEG	□POS □NEG	□POS □NEG	□POS □NEG	□POS □NEG	□POS □NEG	□POS □NEG	□POS □NEG
	Tratamento de TB (veja Cartão de TB) Data de Início:_____ Data de Fim:	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N
	Profilaxia com Cotrimoxazol - TPC Data de Início:	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N
	Profilaxia com INH - TPI Data de Início:_____ ; Data de Fim:	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N	□S □N

7. Patients are considered to have completed the Preventive Treatment with Isoniazid (IPT) 6 months' course (Numerator) if
    o In Patient Clinical Record of ART - Ficha de Seguimento, "Profilaxia com INH – TPI" has a Start Date (Data de Início) within previous reporting period and End Date within reporting period end date and at least 180 days apart between the start date and end date.
    o In case there is no ITP End Date, check for number of "S" (Yes) (consultation) over a 7-month period from IPT Start Date and there must be at least 6 "S" during this period.

8. All transferred-out patients during reporting period should be removed from Denominator except if the patient is in the Numerator. i.e. has completed the IPT.

9. The PEPFAR MER Reports in OpenMRS are named "PEPFAR MER 2.3 Quarterly" report for
quarterly reporting (Q1, Q2, Q3, Q4), "PEPFAR MER 2.3 Semi-Annual" report for semi-annual
reporting (S1, S2), and "PEPFAR MER 2.3 Annual", report for annual (APR) reporting.

3.2 Report Properties

Property	Description
Name	"PEPFAR MER 2.3 Semi-Annual"
Indicator Name	TB_PREV Indicator (Denominator and Numerator)
Description	The TB_PREV indicator reports the proportion of ART patients who completed a standard course of TB preventive treatment within the semiannual reporting period.
Parameters	Location: <Health Facility> Date Range: ● S1: September 21st - March 20th ● S2: March 21st - September 20th
Report Output	Attached

3.3 Report Functional Requirements

Requirement #	Category/ Functional Area	Requirement
TB_PREV_FR1	Reports	The system will generate the TB_PREV indicator report under "PEPFAR MER 2.3 Semi-Annual" for selected reporting period (start and end date) and specific location (health facility) with Denominator and Numerator.

TB_PREV_FR2	Indicator denominator: Patients on ART who started IPT during previous reporting period(6 months).	The system will generate the TB_PREV indicator **denominator** as the number of patients on ART who started IPT during the previous period and who are expected to complete the course during the semiannual reporting period as following:
		
		● Include all patients who have in "Patient Clinical Record of ART - Ficha de Seguimento (adults and children)"
		  o "Profilaxia com INH – TPI"
		  o Start Date (Data de Início) within previous reporting period.
		● Exclude all patients on ART who were transferred out during the previous and current reporting periods except patients who completed the IPT during the reporting period (Numerator – TB_PREV_FR3).

TB_PREV_FR3	Indicator numerator: Patients on ART who completed IPT during the reporting period	The system will generate the TB_PREV indicator **numerator** as the number of patients on ART who started IPT in the previous reporting period (Denominator – TB_PREV_FR2) and completed a course of IPT during the reporting period as following:
		● Include all patients who in "Patient Clinical Record of ART - Ficha de Seguimento (adults and children)" have:
		  o "Profilaxia com INH – TPI"
		  o Start Date (Data de Início) during **previous reporting period**.
		  o End Date (Data de Fim) by **end of reporting period and at least 180 days apart between the start date and end date.**
		● If there is no end date
		  o check for number of "S" (Yes) over a 7-month period from IPT start Date and there must be at least 6 "S"

		during this period.

TB_PREV_F R4	Indicator Disaggregatio n- denominator	The system will generate the TB_PREV indicator **denominator** with following disaggregation:
		
		 All ART patients who are expected to complete TB preventive treatment (**TB_PREV_FR2**)
		
		 ● By TB Preventative Treatment Type
		   o IPT by New on ART
		     ■ Sex (M/F)
		     ■ Age (<15, 15+, unknown age)
		   o IPT by Previously on ART
		     ■ Sex (M/F)
		     ■ Age (<15, 15+, unknown age)
		   o Alternate TPT Regime by New on ART – empty fields
		     ■ Sex (M/F)
		     ■ Age (<15, 15+, unknown age)
		   o Alternate TPT Regime by Previously on ART – empty fields
		     ■ Sex (M/F)
		     ■ Age (<15, 15+, unknown age)

TB_PREV_F R5	Indicator Disaggregatio n- numerator	The system will generate the TB_PREV indicator **numerator** with following disaggregation:
		
		 All ART patients who completed TB preventive treatment (**TB_PREV_FR3**):
		
		 ● By TB Preventive Treatment Type
		   o IPT by New on ART
		     ■ Sex (M/F)
		     ■ Age (<15, 15+, unknown age)
		   o IPT by Previously on ART
		     ■ Sex (M/F)
		     ■ Age (<15, 15+, unknown age)
		   o Alternate TPT Regime by New on ART – empty fields
		     ■ Sex (M/F)
		     ■ Age (<15, 15+, unknown age)
		   o Alternate TPT Regime by Previously on ART – empty fields
		     ■ Sex (M/F)
		     ■ Age (<15, 15+, unknown age)

TB_PREV_F R6	Disaggregatio n- Patients New on ART	The system will identify patients New on ART (denominator and numerator), as those who initiated the treatment during the **previous reporting** as following: ● All patients who have initiated the drugs (ARV PLAN = START DRUGS) during the pharmacy or clinical visits during the **previous reporting** period; ● All patients who have the first historical start drugs date set during the **previous reporting** period in Pharmacy Tool (FILA) or Clinical tools (Ficha de Seguimento Adulto and Ficha de Seguimento Pediatria) independently of having been transferred in to another health facility; ● All patients enrolled in ART Program during the **previous reporting** period. Ensure that the ART start date is truly the first occurrence in the **previous reporting** period. This is to guard against situations of patients that for some reason have more than one ART start date registered in the system.
TB_PREV_F R7	Disaggregatio n-	The system will identify patients who were already on ART (denominator and numerator) as following:

	Patients Previously on ART	● All patients who have initiated the drugs (ARV PLAN = START DRUGS) at the pharmacy or clinical visits by end of **previous reporting** period. ● All patients who have historical start drugs date set in in Pharmacy (FILA) or Clinical forms (Ficha de Seguimento Adulto and Ficha de Seguimento Pediatria) by end of **previous reporting** period. ● All patients enrolled in ART Program by end of **previous reporting** period. ● All patients who have picked up drugs by end of **previous reporting** period. Excluding ● Patients newly enrolled on ART (TB_PREV_FR6)
TB_PREV_F R8	Patients Disaggregation- Sex	The system will identify patients sex disaggregation as per information registered in the patient record as male or as female.
TB_PREV_F R9	Patients Disaggregation- Age	The system will identify patients age disaggregation as following: ● Patients with birth date information registered in the system should be calculated the age of the patient at the end date of reporting period (reporting end date minus birthdate / 365). Patients without birth date information should be considered in unknown age.

TB_PREV_F R10	Reporting Period	The user will enter as input parameters the "reporting start date" and "reporting end date". The "reporting start date" is defined by the beginning of the correspondent semiannual reporting period. The "reporting end date" is defined by the end of the reporting period.
		        S1 September 21st - March 20th
		           S2 March 21st - September 20th
		
		The previous reporting period is 6 months prior the entered reporting period:
		
		● The "previous reporting start date" = "reporting start date" – 6 months;
		● The "previous reporting end date" = "reporting end date" – 6 months;

4 Testing Scenarios

To be included

5 Annexures
TB_PREV Indicator Guideline extract from MER 2.3 Guidance

TB_PREV

Description:	Proportion of ART patients who completed a standard course of TB preventive therapy within the semiannual reporting period	
Numerator:	Number of ART patients who completed a course of TB preventive therapy during the reporting period (for continuous IPT programs, this includes the patients who have completed the first 6 months of isoniazid preventive therapy (IPT))	The numerator can be generated by counting the number of PLHIV on ART who are documented as having received at least six months of IPT or have completed another standard course of TB preventive therapy.
Denominator:	Number of ART patients who are expected to complete a course of TB preventive therapy during the reporting period (for programs using continuous IPT, this includes only the patients who are scheduled to complete the first 6 months of therapy)	The denominator can be generated by counting the total number of patients who are scheduled to complete a course of TB preventive therapy (or at least 6 months of IPT for those who are on a prolonged or continuous regimen) in the semiannual reporting period.
Indicator changes (MER 2.0 v2.2 to v2.3):	• Numerator disaggregates have been changed to capture Age/Sex by Type of TB preventive therapy (TPT) by ART Start. • Denominator disaggregates have been changed to capture Age/Sex by Type of TB preventive therapy (TPT) by ART Start.	
Reporting level:	Facility	
Reporting frequency:	Semi-Annually	
How to use:	This indicator measures the performance of HIV programs in scaling up TB preventive therapy, with the goal of preventing progression to active TB disease among PLHIV and decreasing ongoing TB transmission in this population. As part of a cascade from TX_CURR to TB screening (captured in TX_TB), this indicator will inform programs on the pace of scale-up, and the proportion will allow for monitoring of cohorts through completion of therapy. Disaggregates on type of therapy will inform programs on their relative use of different regimens, and the timing of ART will allow the clinical cascade to focus on those who are newly entering care, which will better demonstrate program performance, particularly in countries that have already provided TB preventive therapy for many of their PLHIV in care.	
How to collect:	The numerator can be generated by counting the number of PLHIV on ART who are documented as having received at least six months of IPT or have completed another standard course of TB preventive therapy. This should include the patients who completed a shorter alternative course, such as 3 months of isoniazid and rifapentine (3HP), as well as those who are on prolonged or continuous IPT who have completed their first 6 months of therapy during the semiannual reporting period. Importantly, programs should ensure that patients on continuous therapy are counted only once, and not repeated in future calculations. The denominator can be generated by counting the total number of patients who are scheduled to complete a course of TB preventive therapy (or at least 6 months of IPT for those who are on a prolonged or continuous regimen) in the semiannual reporting period. **For IPT:** • Patients who are taking a standard 6-month course of IPT would be expected to complete therapy if they started IPT in the previous reporting period; therefore, all patients who started IPT at any time in the previous 6-month reporting period (i.e., the 6 months before the start of the current reporting period) should be included in the denominator. The few patients who start and complete IPT in the same reporting would also be included. • Patients who are taking prolonged (9- or 12-month) or continuous IPT would also be expected to complete the first 6 months of IPT if they started IPT in the previous	

65

13