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Monitoring, Evaluation, and Reporting (MER) Guidance (v.2.4): TB and HIV

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Video Outline

1) **Section 1:** Overview of the technical area.

2) **Section 2:** Indicator changes in MER 2.4.

3) **Section 3:** Review of definitions and how to review this data.

4) **Section 4:** Overview of guiding narrative questions
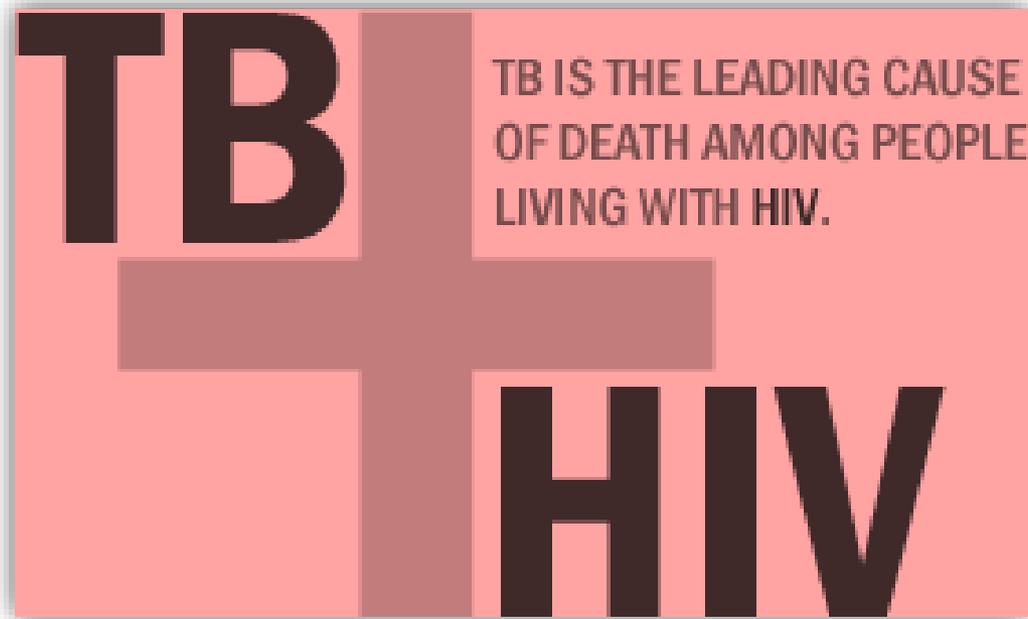
5) **Section 5:** Additional Resources and Acknowledgments

Please note: FY20 DATIM data entry screens are currently in development. Additional training materials on data entry requirements are forthcoming.

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Section 1:
Overview of the technical area

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Why is this topic important?

TB IS THE LEADING CAUSE OF DEATH AMONG PEOPLE LIVING WITH HIV.

How does TB fit into 95-95-95?

95% diagnosed

95% on treatment

95% virally suppressed

1. Do all TB patients know their HIV status?

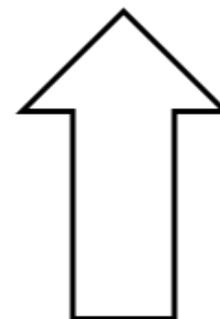** Are persons with TB symptoms being identified and tested for HIV?

2. Are all TB patients who are HIV-positive on ART?

3. Are all ART patients being routinely screened for TB? And based on the result, initiating TB preventive therapy or TB treatment?

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Overview of TB/HIV Indicators

TB_STAT Num.
TB_STAT Den.

&

TB_STAT_POS
TB_ART Num.

Program Area Group	Indicator Name	Numerator or Denominator	Definition
Knowing HIV Status	**TB_STAT**	Numerator	# of new and relapsed TB cases with documented HIV status
		Denominator	total # of new and relapsed TB cases
On ART	**TB_ART**	Numerator	# of TB cases with documented HIV-positive status who start or continue ART

Overview of TB/HIV Indicators

TX_TB Num.
TX_TB Den.

&

TB_PREV Num.
TB_PREV Den.

Program Area Group	Indicator Name	Numerator or Denominator	Definition
On ART	**TX_TB**	Numerator	# of ART patients who were started on TB treatment during the semiannual reporting period
		Denominator	# of ART patients who were screened for TB at least once during the semiannual reporting period
Prevention	**TB_PREV**	Numerator	Among those who started a course of TPT in the **previous** reporting period, the number that completed a full course of therapy (for continuous IPT programs, this includes the patients who have completed the first 6 months of isoniazid preventive therapy (IPT), or any other standard course of TPT such as 3 mo. of weekly isoniazid and rifapentine or 3-HP)
		Denominator	# of ART patients who were initiated on any course of TPT during the **previous** reporting period

TB/HIV Patient Flow
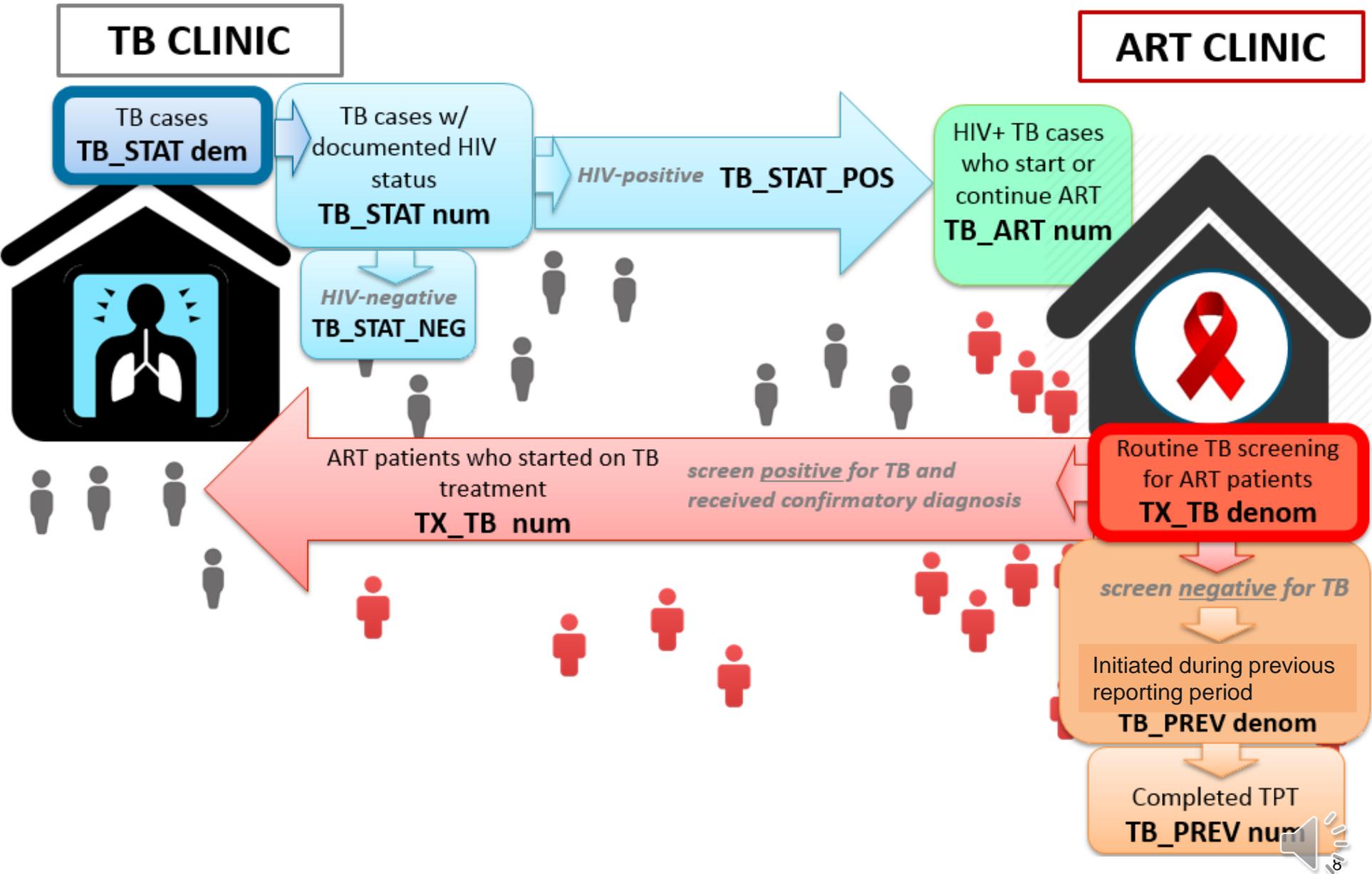
Section 2:

Indicator changes in MER 2.4

4 changes

to TB_PREV only

4 changes

to TB_PREV

1	Definition has been slightly revised
2	Disaggregates, regimen type removed
3	Added a narrative question on regimen type
4	Changed the APR calculation to sum over time (ie. Q2 + Q4 = APR)

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- Revision to TB_PREV **Denominator**

MER 2.3	MER 2.4
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)	Number of ART patients who were initiated on any course of TPT during the **previous** reporting period

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- Revision to TB_PREV **Numerator**

MER 2.3

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))

MER 2.4

Among those who started a course of TPT in the **previous** reporting period, <u>the number that completed a full course of therapy</u> (for continuous IPT programs, this includes the patients who have completed the first 6 months of isoniazid preventive therapy (IPT), or any other standard course of TPT such as 3 months of weekly isoniazid and rifapentine, or 3-HP)

- TB_PREV disaggregates, **regimen type removed**

MER 2.3

Disaggregate Groups	Disaggregates
Age/Sex by Type of TB Preventive Therapy (TPT) by ART Start: [Required]	• IPT by newly enrolled on ART: <15 F, 15+ F, Unknown age F, <15 M, 15+ M, Unknown age M • IPT by previously enrolled on ART: <15 F, 15+ F, Unknown age F, <15 M, 15+ M, Unknown age M • Alternative TPT regimen by newly enrolled on ART: <15 F, 15+ F, Unknown age F, <15 M, 15+ M, Unknown age M • Alternative TPT regiment by previously enrolled on ART: <15 F, 15+ F, Unknown age F, <15 M, 15+ M, Unknown age M

MER 2.4

Disaggregate Groups	Disaggregates
Age/Sex by ART Start: [Required]	• Newly enrolled on ART: <15 F/M, 15+ F/M, Unknown Age F/M • Previously enrolled on ART: <15 F/M, 15+ F/M, Unknown Age F/M

- TB_PREV, **added a narrative question** on regimen type

Guiding narrative questions:	1. Roughly what proportion of all PLHIV on treatment have already completed TB preventive therapy prior to this reporting period?
	2. If TB preventive therapy was not provided to all PLHIV in care, what are the main reasons for limited scale-up?
	3. Roughly what proportion of patients who received TPT were treated with the 6-month isoniazid regimen?
	4. What proportion of patients who completed TPT received IPT, 3-HP or an alternative TPT regimen (e.g. 3-month INH, rifampentine, 1-HP)?

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- TB_PREV, **changed APR calculation**

MER 2.3	MER 2.4
TB_PREV was not summed over time e.g. Q4 = APR	TB_PREV is summed over time e.g. Q2 + Q4 = APR

Section 3:

Review of Definitions

and

How to Review this Data

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Numerator, Denominator, and Disaggregations by Indicator: MER 2.4

TB_STAT Den.

- reported quarterly at facilities

Denominator:	Disaggregate Groups	Disaggregates
Total number of new and relapsed TB cases, during the reporting period.	Age/Sex	<1 F, <1 M, 1-4 F, 1-4 M, 5-9 F, 5-9 M, 10-14 F, 10-14 M, 15-19 F, 15-19 M, 20-24 F, 20-24 M, 25-29 F, 25-29 M, 30-34 F, 30-34 M, 35-39 F, 35-39 M, 40-44 F, 40-44 M, 45-49 F, 45-49 M, 50+ F, 50+ M, Unknown age F, Unknown age M

TB_STAT Num.

- reported quarterly at facilities

Numerator:	Disaggregate Groups	Disaggregates
Number of new and relapse TB cases with documented HIV test results, during the reporting period.	Age/Sex/Result [Required]	• Known Positives: <1 F, <1 M, 1-4 F, 1-4 M, 5-9 F, 5-9 M, 10-14 F, 10-14 M, 15-19 F, 15-19 M, 20-24 F, 20-24 M, 25-29 F, 25-29 M, 30-34 F, 30-34 M, 35-39 F, 35-39 M, 40-44 F, 40-44 M, 45-49 F, 45-49 M, 50+ F, 50+ M, Unknown age F, Unknown age M • Newly Tested Positives: <1 F, <1 M, 1-4 F, 1-4 M, 5-9 F, 5-9 M, 10-14 F, 10-14 M, 15-19 F, 15-19 M, 20-24 F, 20-24 M, 25-29 F, 25-29 M, 30-34 F, 30-34 M, 35-39 F, 35-39 M, 40-44 F, 40-44 M, 45-49 F, 45-49 M, 50+ F, 50+ M, Unknown age F, Unknown age M • New Negatives: Unknown age M, <1 F, <1 M, 1-4 F, 1-4 M, 5-9 F, 5-9 M, 10-14 F, 10-14 M, 15-19 F, 15-19 M, 20-24 F, 20-24 M, 25-29 F, 25-29 M, 30-34 F, 30-34 M, 35-39 F, 35-39 M, 40-44 F, 40-44 M, 45-49 F, 45-49 M, 50+ F, 50+ M, Unknown age F, Unknown age M

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TB_ART Num.

• reported quarterly at facilities

Numerator:	Disaggregate Groups	Disaggregates
Number of TB cases with documented HIV-positive status who start or continue ART during the reporting period	Age/Sex/ART Status [Required]	• New on ART: <1 M, <1 F, 1-4 M, 1-4 F, 5-9 M, 5-9 F, 10-14 M, 10-14 F, 15-19 M, 15-19 F, 20-24 M, 20-24 F, 25-29 M, 25-29 F, 30-34 M, 30-34 F, 35-39 M, 35-39 F, 40-49 M, 40-49 F, 50+ M, 50+ F, Unknown age M, Unknown age F • Already on ART : <1 M, <1 F, 1-4 M, 1-4 F, 5-9 M, 5-9 F, 10-14 M, 10-14 F, 15-19 M, 15-19 F, 20-24 M, 20-24 F, 25-29 M, 25-29 F, 30-34 M, 30-34 F, 35-39 M, 35-39 F, 40-49 M, 40-49 F, 50+ M, 50+ F, Unknown age M, Unknown age F

Reminder: TB_STAT_POS and TB_ART Numerator refer to both TB cases who were identified HIV-positive and PLHIV who were diagnosed with TB

% of TB cases who know their HIV status $=$ $\dfrac{\text{TB\_STAT Num.}}{\text{TB\_STAT Den.}}$

% of HIV-positive TB cases who are on ART $=$ $\dfrac{\text{TB\_ART Num.}}{\text{TB\_STAT\_POS}}$

percent coverage should be 100%

- Review % coverage by geographic unit (OU to site), partner, agency, age/sex disaggregates

- TB_STAT Den., TB_STAT Num., and TB_ART Num. should be **summed** over quarters

TX_TB Den.

- Reported semi-annually at facilities

Denominator:	Disaggregate Groups	Disaggregates
The number of ART patients who were screened for TB at least once during the semiannual reporting period.	Age/Sex by Start of ART by Screen Result [Required]	• New on ART/Screen Positive: <15 F, 15+ F, Unknown age F, <15 M, 15+ M, Unknown age M • New on ART/Screen Negative: <15 F, 15+ F, Unknown age F, <15 M, 15+ M, Unknown age M • Previously on ART/Screen Positive: <15 F, 15+ F, Unknown age F, <15 M, 15+ M, Unknown age M • Previously on ART/Screen Negative: <15 F, 15+ F, Unknown age F, <15 M, 15+ M, Unknown age M
	Specimen Sent [Required]	Number of ART patients who had a specimen sent for bacteriologic diagnosis of active TB disease.
	Diagnostic Test (Disaggregation of Specimen Sent) [Required]	• GeneXpert MTB/RIF assay (with or without other testing) • Smear microscopy only • Additional test other than GeneXpert
	Positive Result Returned [Required]	Number of ART patients who had a positive result returned for bacteriologic diagnosis of active TB disease.

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TX_TB Num.

- Reported semi-annually at facilities

Numerator:	Disaggregate Groups	Disaggregates
Number of ART patients who were started on TB treatment during the semiannual reporting period.	Age/Sex by ART Status (Current/New on ART) [Required]	- The number of patients starting TB treatment who newly started ART during the reporting period: <15 F, 15+ F, Unknown age F, <15 M, 15+ M, Unknown age M - The number of patients starting TB treatment who were already on ART prior to the start of the reporting period: <15 F, 15+ F, Unknown age F, <15 M, 15+ M, Unknown age M

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1. All ART patients should routinely be screened for TB
   - TX_TB Den. should be ~100% of TX_CURR

2. % Achievement* for TX_TB Denominator should be on track.

% Achievement = Result/Target

	TX_CURR FY20 Q2	TX_TB Den. FY20 Q2
	2,186,739	2,083,512
	# ART patients	# ART patients screened for TB

% ART pts. screened for TB: 95%
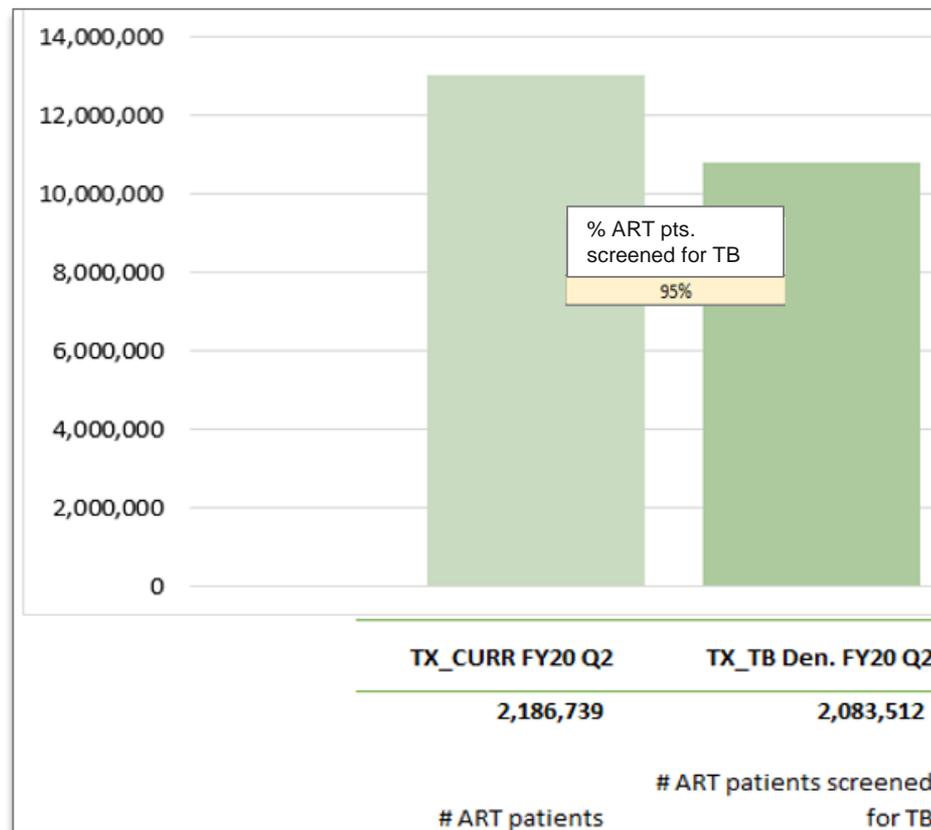
TX_TB Den. FY20 Q2	TX_TB Den. Target FY20	TX_TB Den. % Achievement FY20
2,083,512	3,850,106	54%

Example data

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How to Review this Data: TX_TB

Example data

ART patients, Screen Positive for TB and TB Treatment

% ART pts. screened for TB: 95%

3. For New on ART, TX_TB Den POS should be ~10-15% of all screened. For Already on ART, TX_TB Den POS should be ~5% of all screened.

4. All TX_TB Den POS should have a specimen sent

	TX_CURR FY20 Q2	TX_TB Den. FY20 Q2	TX_TB Den. POS FY20 Q2	TX_TB Den. Spec. Sent FY20 Q2	TX_TB Den. Spec. Pos. Return FY20 Q2	TX_TB Num. FY20 Q2
	2,186,739	2,083,512	106,749	100,870	11,051	15,825
	# ART patients	# ART patients screened for TB	# ART pts. screened positive	# specimens sent for bacteriologic diagnostic test	# specimens returned, positive	# ART patients on TB treatment

	Percentage of TX_TB Den. Spec. Sent Type
Xpert, Positive	73%
Smear, Positive	22%
Other, Positive	5%

5. Review distribution of Specimen Sent Type to ensure optimization of Gene Xpert machines

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Example data

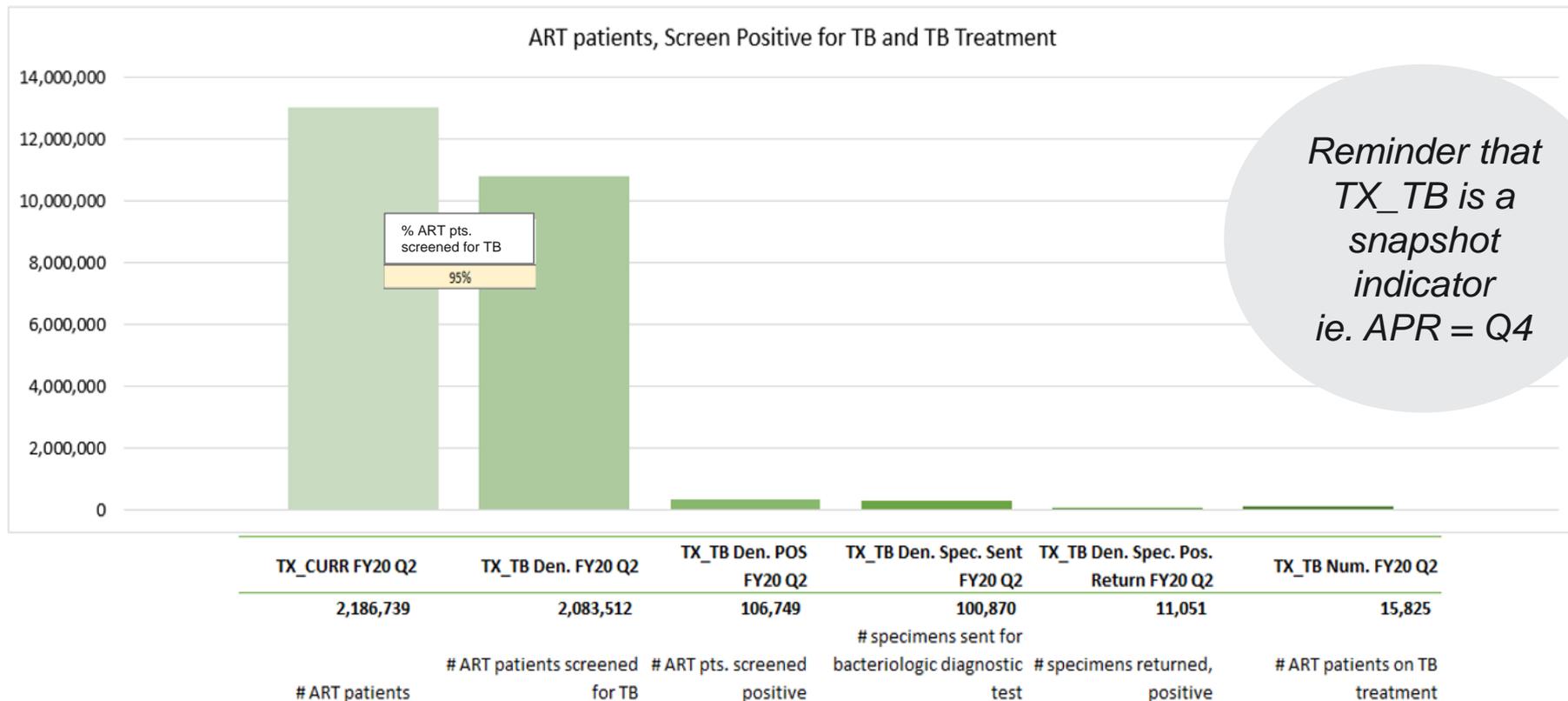ART patients, Screen Positive for TB and TB Treatment

	TX_CURR FY20 Q2	TX_TB Den. FY20 Q2	TX_TB Den. POS FY20 Q2	TX_TB Den. Spec. Sent FY20 Q2	TX_TB Den. Spec. Pos. Return FY20 Q2	TX_TB Num. FY20 Q2
	2,186,739	2,083,512	106,749	100,870	11,051	15,825
	# ART patients	# ART patients screened for TB	# ART pts. screened positive	# specimens sent for bacteriologic diagnostic test	# specimens returned, positive	# ART patients on TB treatment

% ART pts. screened for TB
95%

Reminder that TX_TB is a snapshot indicator ie. APR = Q4

6. This cascade should also be viewed by **new on ART** and **already on ART** to ensure that TB screening is routinely being offered to both of these populations.

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TB_PREV Den. & TB_PREV Num.

Number of ART patients who were initiated on any course of TPT during the **previous** reporting period

Among those who started a course of TPT in the **previous** reporting period, <u>the number that completed a full course of therapy</u> (for continuous IPT programs, this includes the patients who have completed the first 6 months of isoniazid preventive therapy (IPT), or any other standard course of TPT such as 3 months of weekly isoniazid and rifapentine, or 3-HP)

*Note that TB_PREV Den. is defined as those who initiated TPT during the **previous** reporting period. As it relates to the Denominator, the "new" vs. "previous" on ART disaggregates would also be counted from the **previous** reporting period.*

- Reported semi-annually at facilities

- Den. and Num. have the **same** disaggregates

Disaggregate Groups	Disaggregates
Age/Sex by ART Start: [Required]	• Newly enrolled on ART: <15 F/M, 15+ F/M, Unknown Age F/M • Previously enrolled on ART: <15 F/M, 15+ F/M, Unknown Age F/M

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How to Review this Data: TB_PREV

Example data

TPT Completion

% TPT Completion FY20 Q2	
	85%

TB_PREV Den. FY20 Q2 188,979
initiated during previous reporting period
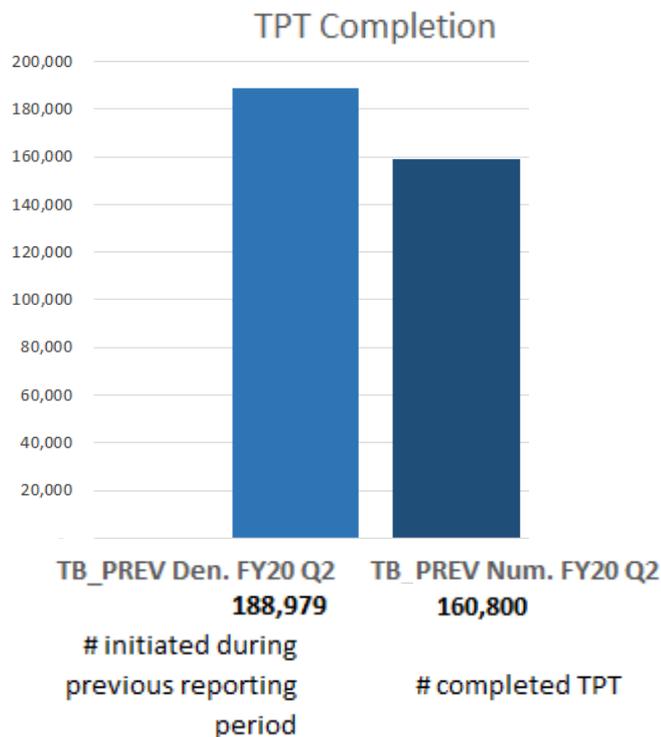
TB_PREV Num. FY20 Q2 160,800
completed TPT

1. % TPT Completion should be equal to or greater than 85%.

TB_PREV Num. FY20 Q2	TB_PREV Num. Target FY20	TB_PREV Num. % Achievement FY20
160,800	270,500	59%

2. % Achievement* for TB_PREV Numerator should be on track.

* *% Achievement =Results/Targets*

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Example data

ART Patients, Screen Negative for TB and TPT Completion

	% ART pts. screened for TB FY19 Q2	% TPT completion FY20 Q2
	99%	85%

TX_CURR FY19 Q4	TX_TB Den. FY19 Q4	TX_TB Den. NEG FY19 Q4	TB_PREV Den. FY20 Q2	TB_PREV Num. FY20 Q2
2,204,371	2,171,796	1,390,121	77,480	66,088
# ART patients	# ART patients screened for TB	# ART pts. screened negative	# initiated during previous reporting period	# completed TPT

Reminder: **cohort view** *for TB Screening and TPT data*
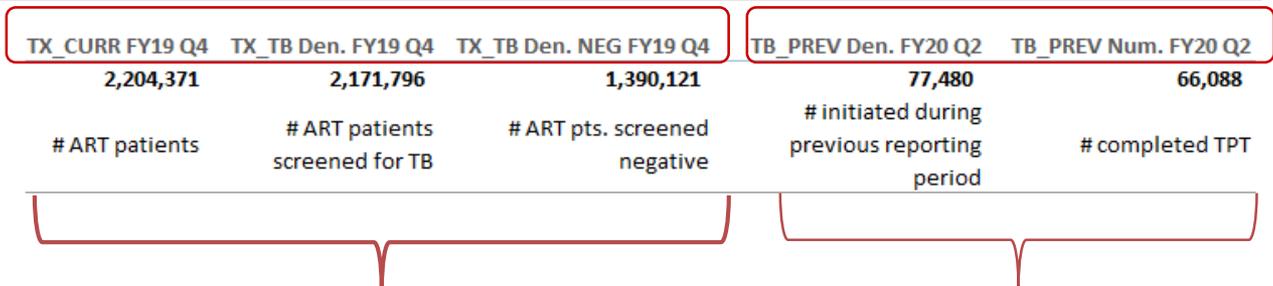
Tx. and Screening data from the **previous** reporting period

should be adjacent to

TPT data from the **current** reporting period

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Example data

ART Patients, Screen Negative for TB and TPT Completion

	% ART pts. screened for TB FY19 Q2	% TPT completion FY20 Q2
	99%	85%

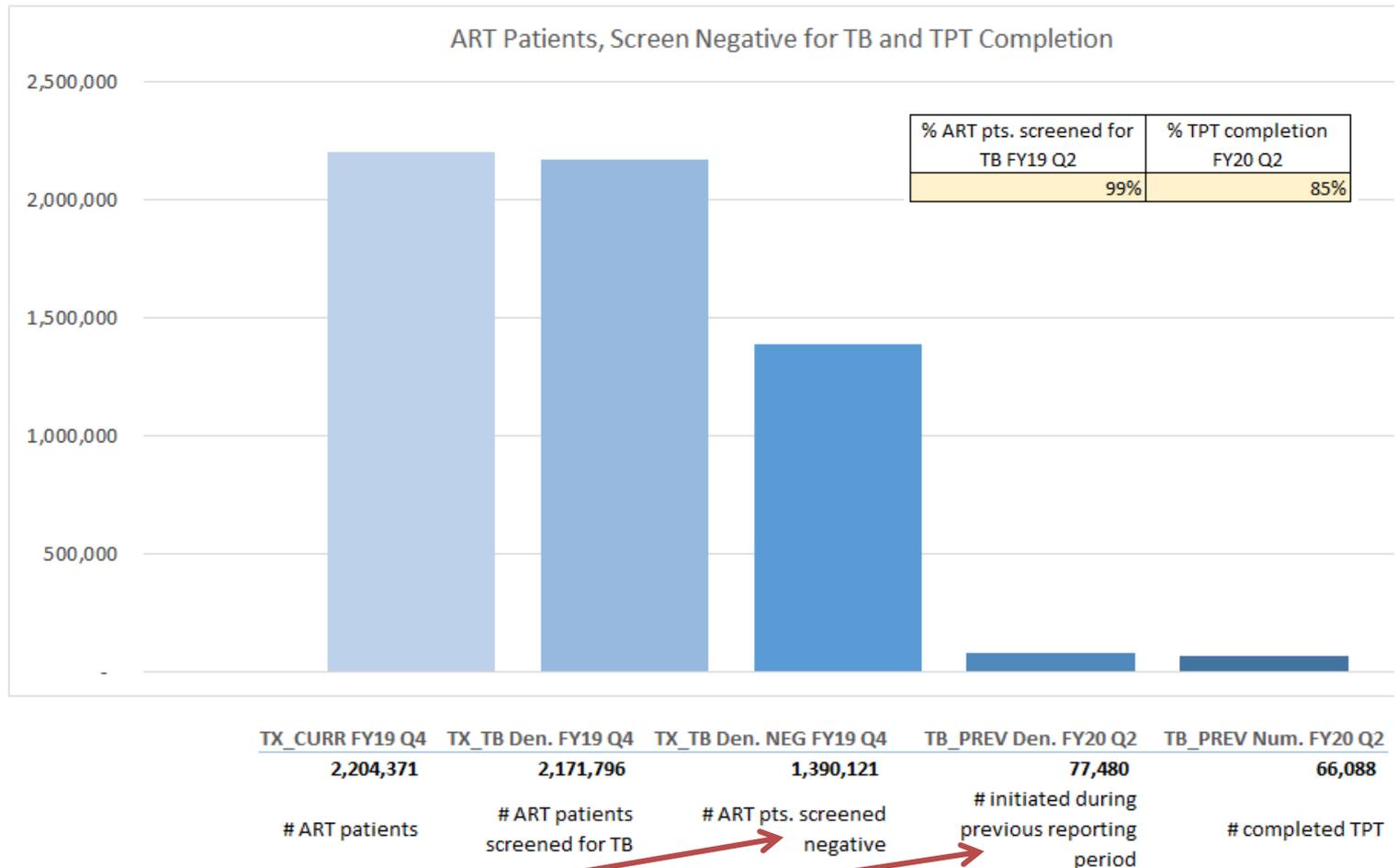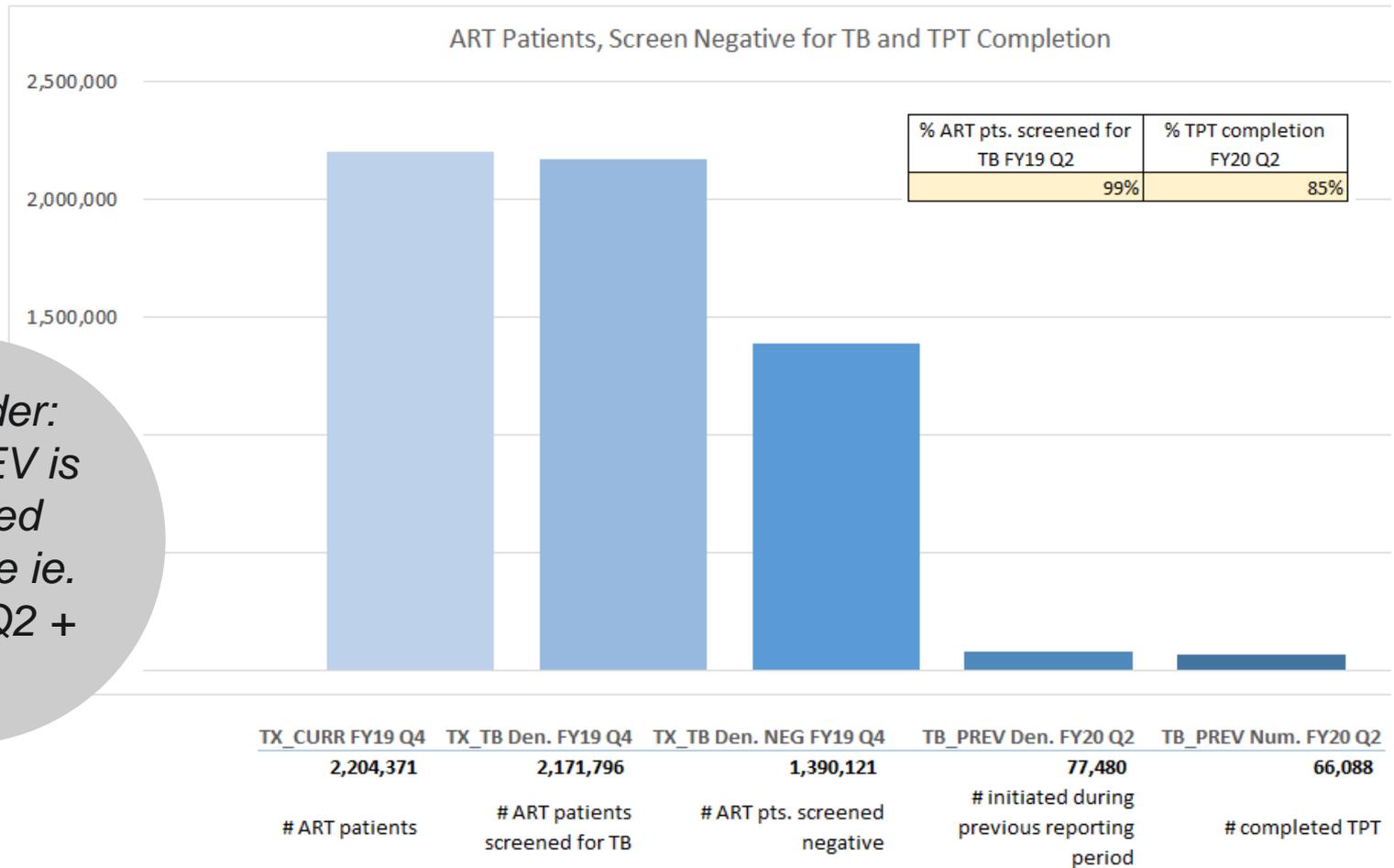| TX_CURR FY19 Q4	TX_TB Den. FY19 Q4	TX_TB Den. NEG FY19 Q4	TB_PREV Den. FY20 Q2	TB_PREV Num. FY20 Q2
2,204,371	2,171,796	1,390,121	77,480	66,088
# ART patients	# ART patients screened for TB	# ART pts. screened negative	# initiated during previous reporting period	# completed TPT

3. If ART patients screen negative for TB and they are clinically eligible, they should initiate TPT (especially true for new on ART patients).

For ex.: Kenya has treated most of the PLHIV on ART population and is now focused on uptake of TPT for newly identified PLHIV on ART.

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Example data

ART Patients, Screen Negative for TB and TPT Completion

	% ART pts. screened for TB FY19 Q2	% TPT completion FY20 Q2
	99%	85%

TX_CURR FY19 Q4	TX_TB Den. FY19 Q4	TX_TB Den. NEG FY19 Q4	TB_PREV Den. FY20 Q2	TB_PREV Num. FY20 Q2
2,204,371	2,171,796	1,390,121	77,480	66,088
# ART patients	# ART patients screened for TB	# ART pts. screened negative	# initiated during previous reporting period	# completed TPT

Reminder: TB_PREV is summed over time ie. APR = Q2 + Q4

4. This cascade should also be viewed by **new on ART** and **already on ART** to ensure that TPT is being given to both of these populations.

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Section 4:
Overview of guiding narrative questions

Guiding Narrative questions

TB_STAT

Guiding narrative questions:	1. Please describe how the denominator was determined. 2. Describe the sources for the data that you are reporting (i.e., are the data from just PEPFAR-supported facilities or do the data reflect national-level data, including those from non-PEPFAR supported facilities)?

TB_ART Num.

Guiding narrative questions:	1. Describe the sources for the data that you are reporting (i.e., are the data from just PEPFAR-supported facilities or do the data reflect national-level data, including those from non-PEPFAR supported facilities)? As above, please describe the sources of the data you are reporting.

Guiding Narrative questions

TX_TB

Guiding narrative questions:	1. If the denominator does not roughly equal TX_CURR (i.e., if not all patients are being screened for TB disease regularly), please describe the main reasons.
	2. If there are issues with reporting the disaggregations, please describe.
	3. If there are issues with performance (e.g., if specimens are not sent for all persons with TB symptoms, or if the numerator doesn't equal positive specimen returned), what are they and how can they be addressed?
	4. Are the patients in the numerator all receiving care from PEPFAR-supported sites? Are they receiving TB and HIV care from the same site?

TB_PREV

Guiding narrative questions:	1. Roughly what proportion of all PLHIV on treatment have already completed TB preventive therapy prior to this reporting period?
	2. If TB preventive therapy was not provided to all PLHIV in care, what are the main reasons for limited scale-up?
	3. Roughly what proportion of patients who received TPT were treated with the 6-month isoniazid regimen?
	4. What proportion of patients who completed TPT received IPT, 3-HP or an alternative TPT regimen (e.g. 3-month INH, rifampentine, 1-HP)?

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Section 5:
Additional Resources and Acknowledgments

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Additional Resources

- Global Tuberculosis Report, 2017; WHO: http://www.who.int/tb/publications/global_report/en/

- Latent TB Infection : Updated and consolidated guidelines for programmatic management; WHO: http://www.who.int/tb/publications/2018/latent-tuberculosis-infection/en/

- A guide to monitoring and evaluation for collaborative TB/HIV activities, WHO: http://www.who.int/tb/publications/m_and_e_document_page/en/

- Monitoring an Evaluation Framework; Global Fund: https://www.theglobalfund.org/en/monitoring-evaluation/framework/

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