



World Health
Organization

**Global WHO Consultation Meeting on the Programmatic
Management of Latent Tuberculosis Infection**

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Venue: Hotel President, Seoul, Republic of Korea

Monitoring and evaluating LTBI management: standard indicators and system



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TB/HIV collaborative activities
and for TB elimination

Acknowledgment

The *LTBI M&E framework* is being developed by the THC Unit at WHO/GTB (Haileyesus Getahun, Yohhei Hamada, Fatema Kazi) in collaboration with the WHO LTBI Task Force members and in consultation with several partners and stakeholders

M&E system for LTBI: needs and reality

- The End TB Strategy includes a global target for LTBI management

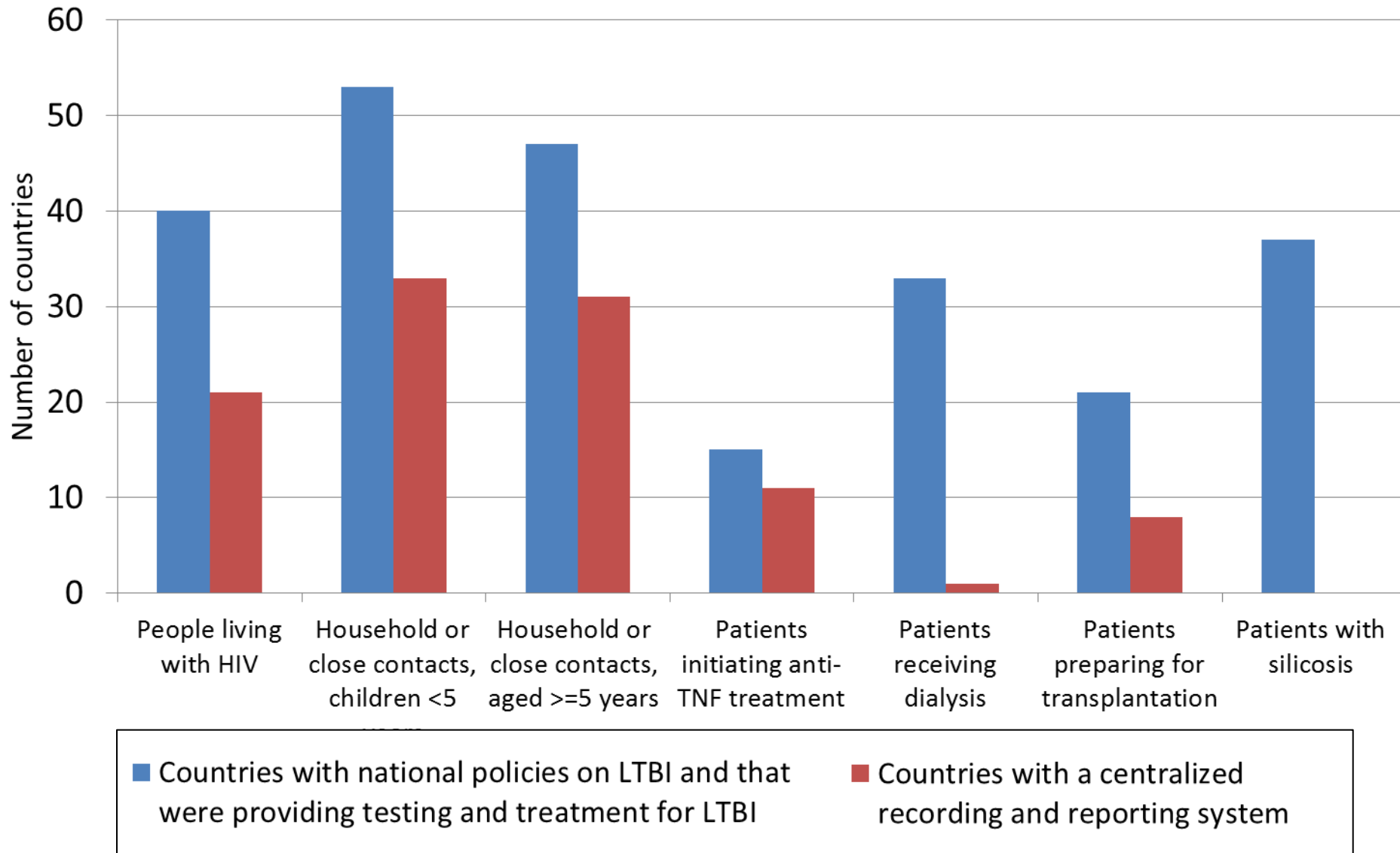
Top-ten priority indicators for monitoring implementation of the End TB Strategy at global and national levels, with recommended target levels that apply to all countries

Indicator	Recommended target level*	Main rationale for inclusion in top-ten
<p>5 LTBI treatment coverage Sum of the number of people living with HIV newly enrolled in HIV care and the number of children who are contacts of cases started on LTBI treatment, divided by the number eligible for treatment, expressed as a percentage.</p>	<p>≥90%</p>	<p>Treatment of LTBI is the main intervention available to prevent development of active TB disease in those already infected with M. tuberculosis.</p>
<p>6 Contact investigation coverage Number of contacts of people with bacteriologically-confirmed TB cases who were investigated for TB divided by the number eligible, expressed as a percentage.</p>	<p>≥90%</p>	<p>Contact tracing is a key component of TB prevention, especially in children.</p>

M&E system for LTBI: needs and reality

- The End TB Strategy includes a global target for LTBI management
- but currently very little is done to “know how programs perform”

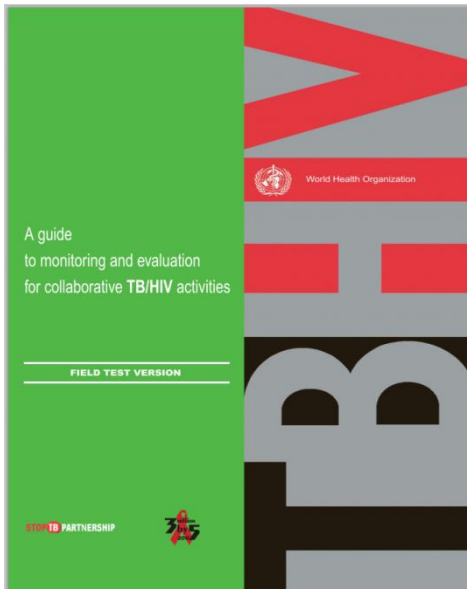
Baseline assessment of LTBI policies and practices among 74/113 high and middle income countries



M&E system for LTBI: needs and reality

- The End TB Strategy includes a global target for LTBI management
- but currently very little is done to “know what programs are doing”
- And, apart for the HIV setting, a standard M&E tool is not available. This needs to adapt to the two-pronged approach for the diagnosis and treatment of latent TB in low and high incidence settings

Context and evolution : M&E of collaborative TB/HIV activities



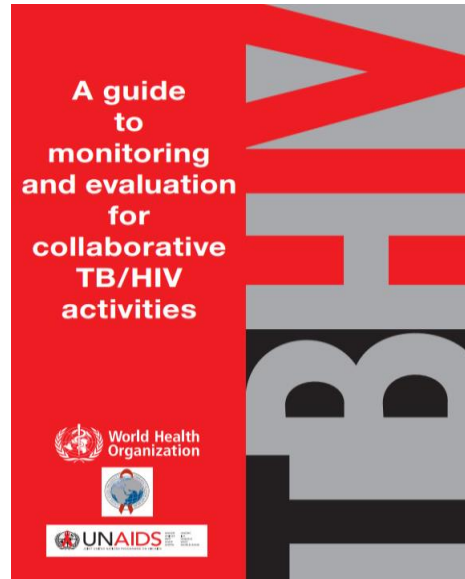
2004

(Field test version)

Few countries implementing and no documentation

Guide was based on expert opinion

20 indicators total including 8 qualitative indicators

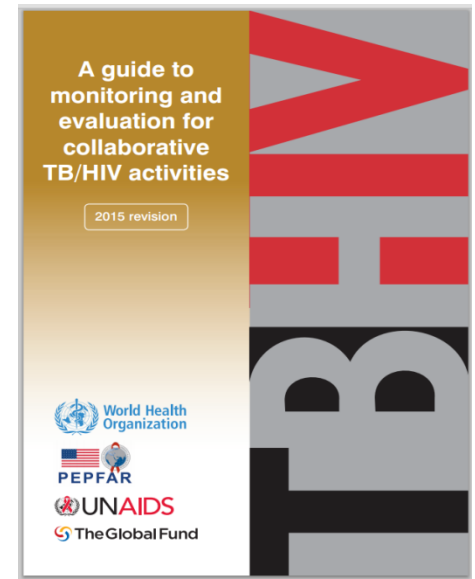


2009

Scaling up of services – 170 countries implementing

Harmonisation of indicators and report with UNAIDS and PEPFAR

13 indicators in total; 10 dropped; 3 new; 3 modified; no qualitative



2015

185 countries reported at least HIV testing for TB patients

Core/optional/global/National/quality /impact indicators

7 indicators in total; 6 dropped; 5 modified core; 2 new core

**Monitoring and evaluation of the management of latent
TB infection in at-risk populations**

WHO Guide for high and low TB burden countries

Draft – work in progress

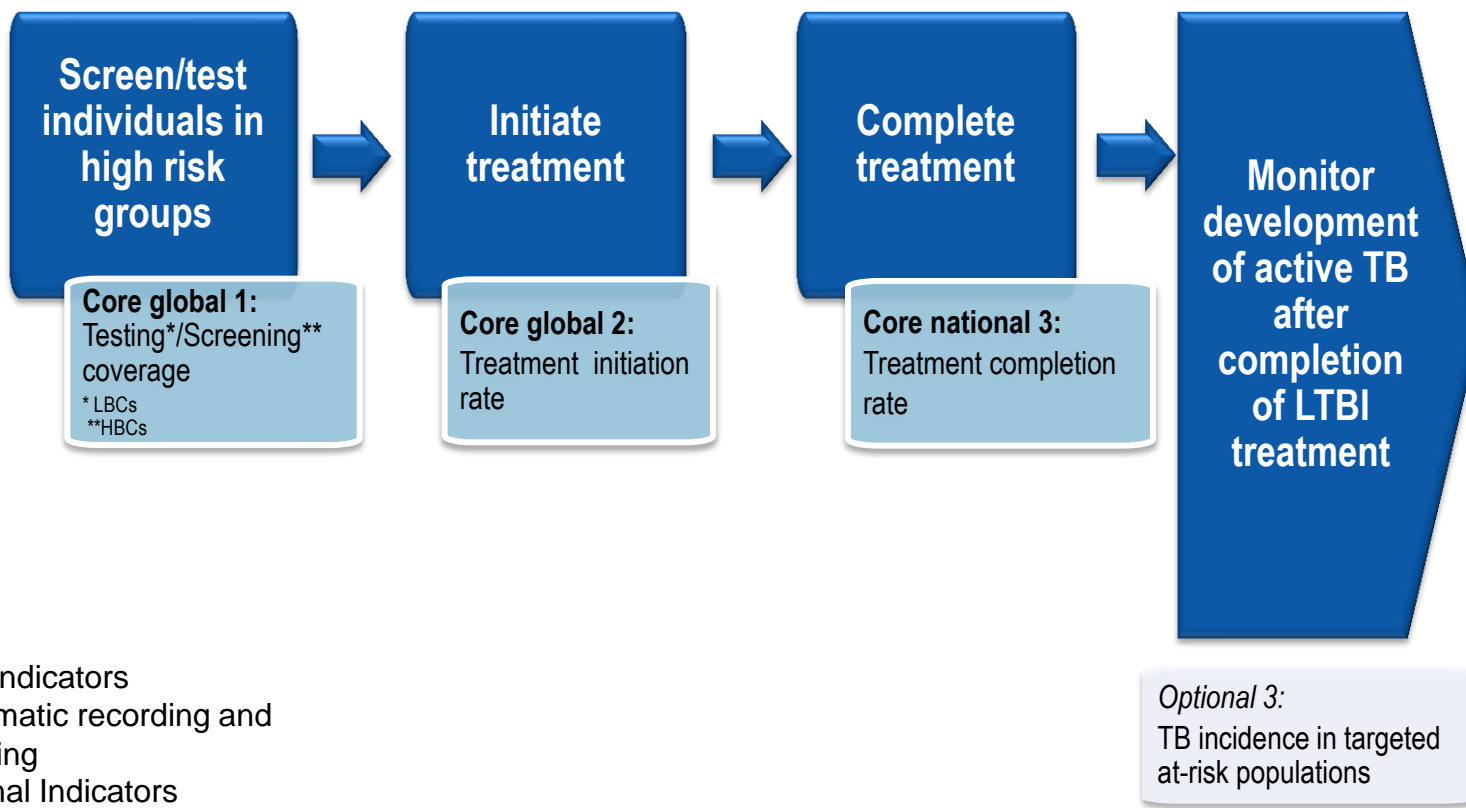
Aims

1. Guidance to establish M&E plans in member states
 - Define internationally accepted standard indicators
 - Ensure consistency of data collection

Principles

1. Built on existing policies (e.g. M&E guide for TB/HIV activities)
2. Global perspective with adaptation to local needs and available resources
3. Integrated into existing TB information system / health information systems
4. Favours electronic recording and reporting system, while adapting to paper based forms as necessary

Core indicators: the minimum number to measure core steps in LTBI cascade of care



Indicators

- **Core national and global:** three indicators, independent of setting (capture global targets)
- **Core national:** adapted to setting (help countries in optimizing LTBI activities)
- **Optional:** to measure TB incidence rate among at-risk populations

Summary of the indicators

HIGH TB BURDEN

Resource-limited and other high and middle-income countries with an estimated TB incidence rate of more than 100 per 100 000 population

CORE GLOBAL AND NATIONAL INDICATORS

- 1) Proportion of **children** less than 5 years old who are household TB contacts (according to national guidelines) who have **completed TB investigations**
- 2) Proportion of **children** less than 5 years old who are household TB contacts (according to national guidelines) who are eligible for starting on TB preventive therapy that have **started treatment**
- 3) Proportion of eligible **people living with HIV** newly enrolled in HIV care, **started on TB preventive therapy**

Summary of the indicators

HIGH TB BURDEN

Resource-limited and other high and middle-income countries with an estimated TB incidence rate of more than 100 per 100 000 population

CORE GLOBAL AND NATIONAL INDICATORS	CORE NATIONAL INDICATORS	
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Summary of the indicators

HIGH TB BURDEN

Resource-limited and other high and middle-income countries with an estimated TB incidence rate of more than 100 per 100 000 population

CORE GLOBAL AND NATIONAL INDICATORS	CORE NATIONAL INDICATORS	OPTIONAL INDICATORS
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Summary of the indicators

LOW TB BURDEN

High-income and upper middle-income countries with an estimated TB incidence rate of less than 100 per 100 000 population

CORE GLOBAL AND NATIONAL INDICATORS

- 1) Proportion of **children** less than 5 years old who are household TB contacts (according to national guidelines) who have **completed TB investigations**
- 2) Proportion of **children** less than 5 years old who are household TB contacts (according to national guidelines) who are eligible for starting on TB preventive therapy that have **started treatment**
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Summary of the indicators

LOW TB BURDEN

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- 3) Proportion of eligible **people living with HIV** newly enrolled in HIV care, **started on TB preventive therapy**

CORE NATIONAL INDICATORS

- 1) Proportion of eligible individuals from at risk populations (according to national guidelines) tested for latent TB infection
- 2) Proportion of individuals from at risk populations (according to national guidelines) with a positive latent TB test who are eligible for starting TB preventive therapy that have started treatment
- 3) Proportion of individuals from at risk populations (according to national guidelines) with a positive latent TB test who have

Summary of the indicators

LOW TB BURDEN

High-income and upper middle-income countries with an estimated TB incidence rate of less than 100 per 100 000 population

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Core global and national indicator # 1

Contact investigation of child household contacts

- Household contact: “A person who shared the same enclosed living space for one or more nights or for frequent or extended periods during the day with the index case during the 3 months before commencement of the current treatment episode”.
- TB investigation: symptom screening. TB diagnostic procedure if positive at screening

Numerator and denominator

- Denominator: Total number of children less than 5 years who are household TB contacts (according to national guidelines) during the reporting period.
- Numerator: Total number of children less than 5 years old who are household TB contacts who have completed TB investigations (according to national guidelines) during the reporting period.

Core global and national indicator # 2

LTBI treatment initiation of child household contacts

- Children less than 5 years old, who are household contacts of pulmonary TB cases, in whom active TB is ruled out either by symptom screening or TB diagnostic procedures, should be offered preventive treatment for LTBI.

Numerator and denominator

- Denominator: Total number of children less than 5 years who are household contacts of TB who are eligible for starting on TB preventive therapy during the reporting period.
- Numerator: Total number of children less than 5 years who are household TB contacts who have started TB preventive therapy during the reporting period.

Core global and national indicator # 3

LTBI treatment initiation of PLHIV

- PLHIV in which active TB is ruled out either by symptom screening or TB diagnostic procedures should be offered preventive treatment for LTBI.
- PLHIV issued with a prescription for LTBI treatment are recorded as measurement of LTBI treatment initiation.

Treatment initiation of preventive therapy for people living with HIV

- Denominator: Total number of eligible PLHIV newly enrolled in HIV care during the reporting period.
- Numerator: Total number of eligible PLHIV who have started on TB preventive therapy during the reporting period.

Tools

- 1. Routine recording and reporting:** to assess the coverage of screening or testing of at risk populations as well as the initiation and completion of preventive treatment, which constitute core indicators for measuring the implementation of LTBI activities
- 2. Periodic surveillance:** to assess the development of active TB disease during or after completion of latent TB treatment as well as clinical practice in the initiation of treatment and reasons for lack of adherence in completing treatment.

Data recording

- TB registers should be adapted to include variables on household contacts (differentiating children under five), those investigated for TB, and those starting LTBI treatment.
- Countries that have adopted registers for contact investigations, could adapt this register to collect data on core global and national indicators

Check if the TB register fits the need

Date of registration	BMU-TB-no.	Name	Sex (M/F)	Age	Address	Health facility where treatment card is kept ^a	Date treatment started	Number of children <5 years who are household contacts	Number of children <5 years who are household contacts started on IPT

^aIn case several copies are kept, the most peripheral facility should be entered.

Data reporting

- Quarterly TB reporting forms should be adapted to collect aggregated data that will be used as numerators and denominators of LTBI indicators

Rapport trimestriel (Reporting)

Date rapport : / /

Antécédents de traitement inconnus	Total

Enfants de <5 ans au contact d'un cas de TB pulmonaire confirmé bactériologiquement ayant commencé un TPI

Agents de santé atteints de TB

35-44 ans		45-54 ans		55-64 ans		65 ans et plus		Total	
M	F	M	F	M	F	M	F	M	F

VIH+	Nombre testé VIH+ mis sous CTX	Nombre testé VIH+ mis sous ARV

Date rapport : / /

Antécédents de traitement	Total

Enfants de <5 ans au contact d'un cas de TB pulmonaire confirmé bactériologiquement		
Total	Évalués	Trait. débuté

Agents de santé atteints de TB

35-44 ans		45-54 ans		55-64 ans		65 ans et plus		Total	
M	F	M	F	M	F	M	F	M	F

Nombre testé VIH+ mis sous CTX	Nombre testé VIH+ mis sous ARV

Conclusions

- Programmatic management of LTBI requires the adoption of an M&E plan
- Standardized core indicators are essential
- Recording and reporting tools to measure selected indicators need to be developed at national level
- An LTBI M&E plan cannot be implemented without allocation of significant resources