Finding the Missing People with TB: Strategic Initiative for Countries

WHO Technical support in optimizing strategies to enhance case detection in 13 High burden countries

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Finding the Missing People with TB:: Strategic Initiative for Countries
Sunday, 8 October 2017, 9am – 6pm
The Westin Guadalajara, Mexico,
I will talk about:

• Background
• WHO Support to the Global Initiative
• AREAS of support
  – Public-private engagement
  – Global X-pert expansion and MDR case detection
  – Children and contact tracing
  – TB HIV
  – Screen TB
  – TB Patient Cost Survey
  – Digital Health Tools
• Summary
Pursuing WHO mandate in TB control:

WHO addresses all functions in its TB efforts

1. Provide global leadership on TB prevention, care and control through the WHO End TB Strategy and engage in partnerships for TB action

2. Shape the TB research agenda and stimulate the generation, translation and dissemination of valuable knowledge

3./4. Develop evidence-based policies, strategies and standards for TB prevention, care and control, and monitor their implementation

5. Jointly with over 150 staff across 6 WHO regional and 74 country offices, provide technical support to Member States, catalyze change, and build sustainable capacity

6. Monitor the global TB situation, and measure progress in TB care, control, and financing
Global Fund TB financing for WHO

Global Fund/WHO Grant Agreement for the NFM ("Partnership Agreement") (1 January 2014 – 30 June 2016)

- Support for the New Funding Model (NFM) processes (e.g., National Strategic Plans, program reviews, epidemiological analysis, gap analysis and prioritization, grant making, capacity building) in GF eligible countries


- Monitoring of MDR-TB response in countries with GF grants supporting MDR-TB scale up

Sub-recipient of Global Fund Grants

- E.g Fiji, Sudan, Papua New Guinea, DPRK, and Multi-country Oceania, & many more
WHO Technical support to the Global Initiative
WHO & Stop TB Partnership are using Global Fund Strategic Initiative funding to support 13 countries during planning, implementation and monitoring of their plans to find missing people with TB.

In collaboration with USAID and other TB technical partners.

Targeted interventions to catalyze country efforts to find missing people with TB, TB/HIV and DR-TB (adults and children)
Need based TA on specific aspects of finding missing TB cases (e.g. M&E, PPM, ACF, scale up of rapid diagnostics, digital health tools) through country missions/ stakeholder consultations

Identify bottlenecks /opportunities
1. Review of funding/matching funding application
2. Review of NSP
3. Recent programme/Epi-review reports

Develop country specific package of interventions
1. Review of national guidelines-algorithms
2. Review of national coverage data (e.g. rapid diagnostics)
3. Review of Patient pathways
4. Identify TA needs
5. Assist in finalization of plan/budget

Strengthen country capacity for implementation
1. Adaptation of guidance /tools
2. Adaptation of M&E into HMIS/DHIS2 indicators
3. Updating of training material
4. Training of key stakeholders

Documentation of experiences and systematic reporting
1. Dissemination and experience sharing through WHO hosted platforms or events organised at global/regional meetings
2. Systematic recording and reporting of detected TB cases

At every stage WHO GTB will share analysis and discuss issues with the STP, USAID and other partners. WHO will also closely liaise with the GF secretariat, the GF country team and the national stakeholders through physical or virtual meetings and review progress in find missing TB cases including integrated community

Grant making
Grant implementation
WHO will provide intensified support to help countries find the missing cases.

Support countries with:
- identifying key gaps in their GF plans and other key documents and data and priorities key actions to find the missing cases.
- technical support for case finding interventions
- Develop a comprehensive tool/checklist to help countries strengthen and operationalize plans to finding missing cases.
- Mapping and placement of diagnostics as part of scale-up.
- Expanding public-private engagement to reach missed cases
- Uptake of digital platforms
- Paediatrics: Strengthen contact investigation
- Undertaking patient cost surveys and translating findings into policy.
- TB/HIV TB screening in HIV care: algorithm review location of services.
- Workshops on implementation and sharing best practice

- ENGAGE-TB, planning implementation, monitoring/evaluation and experience sharing.
Roadmap to finding missing TB cases: WHO support

- Identify bottlenecks /opportunities
- Develop country specific package of interventions
- Strengthen country capacity for implementation
- Scale-up access to new TB diagnostics & approaches
- Digital health technologies & innovations for data collection & reporting
- Systematic screening
- Contact investigations
- PPM
- TB/HIV, MDR TB, Childhood TB

Documentation of experiences & replication of best practices
Integrated community based TB activities
ENGAGE TB
WHO support for integrated community-based TB activities to Find missing TB cases

- Identify bottlenecks and opportunities
- Documentation of experiences and advocacy for scale-up beyond focus countries
- Adapt global model and tools to improve quality
- Build capacity of implementing stakeholders and TA providers
- Strengthen national M&E for community-based activities
Public-private engagement
Changes in Case notification 2013 to 2015 in 13 priority countries

CHANGES in NOTIFICATIONS in the 13 GF CATALYTIC FUNDING PRIORITY COUNTRIES BETWEEN 2013 & 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>2013</th>
<th>2015</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>54,763</td>
<td>38,314</td>
<td>-16,449</td>
</tr>
<tr>
<td>Kenya</td>
<td>13,651</td>
<td>4,363</td>
<td>-9,288</td>
</tr>
<tr>
<td>Nigeria</td>
<td>21,985</td>
<td>1,000</td>
<td>-20,985</td>
</tr>
<tr>
<td>Ukraine</td>
<td>5,992</td>
<td>3,579</td>
<td>-2,413</td>
</tr>
<tr>
<td>United Republic of Tanzania</td>
<td>3,171</td>
<td>4,831</td>
<td>1,660</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2,077</td>
<td>2,077</td>
<td>0</td>
</tr>
<tr>
<td>Mozambique</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Democratic Republic of Congo</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pakistan</td>
<td>15,966</td>
<td>12,121</td>
<td>-3,845</td>
</tr>
<tr>
<td>Philippines</td>
<td>5,974</td>
<td>5,974</td>
<td>0</td>
</tr>
<tr>
<td>India</td>
<td>4,352</td>
<td>4,352</td>
<td>0</td>
</tr>
<tr>
<td>13 Catalytic funding countries</td>
<td>106,915</td>
<td>92,523</td>
<td>-14,392</td>
</tr>
<tr>
<td>GLOBAL</td>
<td>16,419</td>
<td>15,400</td>
<td>-1,019</td>
</tr>
</tbody>
</table>

Note: The chart shows the changes in case notification for each country and the total change for the 13 catalytic funding countries.
WHO support to find the missed cases in the private sector or non-NTP public sectors

Large proportion of missed cases in the private or non-NTP public sector.
Huge scope to scale up notification and close case detection gap as evidenced in India.
PPM: Addressing Key Bottlenecks

What do we need to address?
- Under Appreciation and Weak Commitment
- Weak Systems and Capacity
- Weak Investments and Support
- Reservations on Sustainability

What can be done to scale up PPM as part of the Strategic Initiative
- Invest in Rapid Scale Up of Working Models
- Introduce Innovations and Develop New Models
- Ensure Enforcement of Essential Regulations
- Work on Sustainable Financing within "UHC"
Tools to scale up engagement of all care providers

PPM Action Plan Guide

PPM Scale Up Tool-Kit
Global Xpert expansion for MDR case detection
Current status of Xpert expansion

- Need 5x scale up from retreatment to all notified: 5 times from notified to suspects (more if suspects come from risk-group screening).
- E.g. SEARO has had 5 fold increase in Xpert machines in 2 yr period. (350 to 1600 machines 2014-16)
- Globally in 2016 countries with over 70% of global burden received only 50% of X-pert cartridges needed for notified cases.
- Globally 6 million cartridges in 2016
- Close linkage between Xpert expansion and % MDR detection.

<table>
<thead>
<tr>
<th>Regions</th>
<th>Xpert cartridges delivered 2016</th>
<th>NOTIFICATIONS 2015</th>
<th>% of Global TB Burden</th>
<th>Xpert TEST per notification</th>
<th>% of MDR notified/estimated MDR among notified</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR</td>
<td>4,222,550</td>
<td>1,270,251.00</td>
<td>21%</td>
<td>AFR</td>
<td>3.3</td>
</tr>
<tr>
<td>AMR</td>
<td>358,190</td>
<td>207,542.00</td>
<td>3%</td>
<td>AMR</td>
<td>1.7</td>
</tr>
<tr>
<td>EUR</td>
<td>287,990</td>
<td>210,597.00</td>
<td>4%</td>
<td>EUR</td>
<td>1.4</td>
</tr>
<tr>
<td>EMR</td>
<td>252,000</td>
<td>483,526.00</td>
<td>8%</td>
<td>EMR</td>
<td>0.5</td>
</tr>
<tr>
<td>SEA</td>
<td>1,346,470</td>
<td>2,589,189.00</td>
<td>43%</td>
<td>SEA</td>
<td>0.5</td>
</tr>
<tr>
<td>WPR</td>
<td>431,760</td>
<td>1,236,966.00</td>
<td>21%</td>
<td>WPR</td>
<td>0.3</td>
</tr>
<tr>
<td>Grand Total</td>
<td>6,898,960</td>
<td>5,998,071.00</td>
<td>100%</td>
<td>Grand Total</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Globally 6 million cartridges in 2016.
Children and contact tracing
Hypothesizing about missing cases

PAEDIATRIC CASES

• Children:
  – Missed due to inadequate HCWs capacity to suspect and diagnose child TB cases
  – Limited access to diagnostic services (children mostly seen in hospitals)
  – Lack of sensitive diagnostic tools for children; often TB is missed or diagnosed very late
  – **Contacts tracing not routinely implemented**
  – Inadequate integration or linkages with other programmes (Maternal and Child Health service platforms, HIV, nutrition, etc).
TB HIV
Main gaps and barriers need to be addressed to find missing cases in HIV settings:

- Poor implementation and reporting of TB screening among people attending HIV care, including children;
- A mismatch between ART and TB diagnostic services using Xpert MTB/RIF;
- Outdated algorithms for the diagnosis and management of HIV-associated TB;
- Lack of data on the diagnostic pathway from TB screening to diagnosis among people newly enrolled in HIV care;

SCREEN TB
ScreenTB: a web-based tool for designing TB screening programmes

- Designing TB screening requires careful consideration for potential risks and benefits
- May factors influence cost-effectiveness
  - TB risks, diagnostics algorithms, cost for diagnostics, operational arrangement, etc
  - Multiple trade-off’s (cost vs yield, TB risk vs population size (scale), reachability, etc)
  - Parameters highly variable by local context
- Need for a tool for optimal, context specific design of TB screening
- Used in several countries in WPR and regional training workshops in EURO and AFRO

https://wpro.shinyapps.io/screen_tb/
TB PATIENT COST SURVEY
TB patient cost surveys — to improve TB care in the context of UHC and social protection

- TB Patient cost surveys measure total costs due to be borne by TB patients and families.
- TB costs before diagnosis occupies a significant proportion thus highly relevant.
- The finding of the survey significantly inform policy discussion to improve:
  - TB care delivery (decentralization, community-based care, etc)
  - TB care financing (package design, payment mechanisms within the overall UHC policies)
  - Social protection in favour of TB control objectives
- Stakeholders consultation after the survey will facilitates multi-sector dialogue.

VIET NAM
FIRST NATIONAL SURVEY
OF COSTS FACED BY TB PATIENTS AND THEIR HOUSEHOLDS
2016

SURVEY COVERAGE

KEY RESULTS

1 Proportion of households that experienced catastrophic costs
   - 63% of households affected by TB or MDR-TB experienced costs that were above 20% of their annual household income
   - 98% of households affected by MDR-TB experienced catastrophic costs
     - The poorest households were the most affected, with costs representing on average 247% of annual household income

2 Costs experienced by households affected by TB or MDR-TB, on average
   - Patients faced direct and indirect costs amounting on average to:
     - US$1068 for an episode of TB
     - US$4289 for an episode of MDR-TB
     - 58% of total costs were for travel, accommodation, nutritional supplements and special foods
   - Medical expenditures
     - Pre-diagnosis
     - Post-diagnosis
     - Reported household income loss

Medicinal expenditures (post-diagnosis)
Medical expenditures (pre-diagnosis)
Travel, accommodation, food, nutritional supplements (post-diagnosis)
Travel, accommodation, food, nutritional supplements (pre-diagnosis)
Digital Health Tools
Digital Health Tools

• New technologies can help patients and health care workers communicate better to ensure good treatment adherence, and test results communication.
• Many programmes will need technical assistance to mount these interventions successfully
• The Strategic Initiative can catalyze implementation but has to be matched with other resources (e.g. country GF grant, domestic funds)
• Next steps
  – Who is the NTP focal point for this?
  – How will a costed roll-out plan be developed?
  – Contact falzond@who.int with specific requests
EXAMPLES OF WORK
ALREADY STARTED
EXAMPLES OF WORK ALREADY STARTED
Integrated Community based TB activities:
Experience of support to DRC (28th September to 4th October)
### Bottlenecks/Opportunities
- Situational analysis done
- National stakeholder consultation done
- Package of interventions for CHW agreed
- Engagement of HIV/MCH NGO in TB agreed
- Inputs into plan and budget provided

### Tools
- Assessment of tools, models and training materials done
- Community based TB activities aligned
- Reporting Indicators aligned
- Engage-TB tools for use by HIV and MCH NGO being developed

### M&E
- Integration of Standard indicators into national DHIS2/HMIS initiated
- NTP M&E registers and reports aligned
- Community TB module to be incorporated into national DHIS2 by 1Q2018

### Technical Support
- Participated in country mission to review matching funding proposal
- Inputs to ensure consistency in proposal provided
- Allocation for budget for NCB ensured
- WHO staff and additional consultants sensitized

Need for ongoing TA

Global task force to mentor

WHO and MoH to discuss modalities next week

WHO THC to provide ongoing support

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Integrated Community based TB activities: Experience of support to DRC (28\textsuperscript{th} September to 4\textsuperscript{th} October)
Xpert MTB/RIF Expansion: Experience of support to DRC (28th September to 6th October)

- GeneXpert quantification exercise and phasing defined;
- TB & HIV stakeholders consulted;
- Algorithm adopted and ready for roll-out;
- Key activities & and timeline for roll out developed;
- TA needs identified;
- Operational plan to be completed by end October;
TB and HIV One Stop Shop: Experience of support to DRC (28th September to 6th October)

Price List of Services in facility in Kinshasa

- Baseline exercise (incl. field visits) completed;
- Barriers identified;
- Essential package of interventions agreed upon;
- Alignment with Xpert roll-out;
- LF-LAM to be piloted;
- Priority provinces identified;
- Outline of key activities to roll out agreed upon;
- Tool to facilitate integration for adaption identified;
- Operational plan completion by end October;
## Country Example of Mapping the missing cases and activities

<table>
<thead>
<tr>
<th>Model Estimate</th>
<th>% of total Prevalent cases</th>
<th>GF interventions in upcoming grant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treated and Notified (55%)</strong></td>
<td></td>
<td>GF grant will make a contribution to the programmatic management, diagnostics, and treatment activities in the public sector</td>
</tr>
<tr>
<td>Public Sector</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td><strong>PPP</strong></td>
<td>15%</td>
<td>Engagement with Existing PPPs</td>
</tr>
<tr>
<td><strong>Symptomatic Uncertain if treated or not treated 15%</strong></td>
<td></td>
<td>Introduction of electronic mandatory TB notification (NTP) PPP expansion</td>
</tr>
<tr>
<td>Treated not notified or not treated</td>
<td>15%</td>
<td>Screening of risk groups regardless of symptoms and rural hard to reach camps will identify additional symptomatic cases + hospital screener, Engage Community Health Workers</td>
</tr>
<tr>
<td><strong>Not Symptomatic not treated 30%</strong></td>
<td></td>
<td>Around 30% of these per year to be diagnosed from screening asymptomatics in risk settings (hospitals slums prisons) using XrayCAD4TB-Xpert</td>
</tr>
</tbody>
</table>

**TOTAL PREVALENT CASES (Incident cases + 30%)** 100%
Strategic initiative to find missing cases – Key interventions

• **Assist countries** baseline assessment/mapping to identify bottlenecks and opportunities in finding missing TB cases

• Support development of **national action plans** (which would incorporate a package of targeted interventions to find missing cases and disseminate tools to support implementation)

• Build and **strengthen country capacity** to effectively implement developed action plans

• Support countries to accelerate **scale up** of and access to new diagnostic tools and approaches to increase case finding

• Support strengthening of **monitoring and evaluation systems**, including introduction and expansion of digital health technologies and innovative mechanisms for data collection and reporting

• Assess and **document progress** in reaching missed cases, promoting successes and lessons learned to support scale up and replication
Thank you!