New approaches to TB case detection
TB REACH overview

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Outline

• Why new approaches for TB case detection

• Approaches used in TB REACH

• Preliminary results
TB case detection gap
3 million people with TB missing

Estimated incidence

Cases detected and notified

<table>
<thead>
<tr>
<th>Year</th>
<th>TB cases (millions)</th>
<th>CDR 65% (63–68%)</th>
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<tbody>
<tr>
<td>1990</td>
<td>3.7</td>
<td></td>
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<tr>
<td>2000</td>
<td>7.6</td>
<td></td>
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<td>2010</td>
<td>8.8</td>
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<td>5.8</td>
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Where are missing cases

- No access to health care
- Access to health facilities, but don't go
- Presenting to health facilities, but undiagnosed
- Diagnosed by public or private providers, but not notified
- Diagnosed by NTP or collaborating providers
- Recorded in notification data

All TB cases

Undiagnosed cases

Diagnosed but not notified cases

Notified cases
TB REACH

• Initiative to promote **early and increased** TB case detection using **innovative** approaches
  – In poor, underserved & vulnerable populations
• Provides **fast track short term** funding
  – Up to 1 million USD per project for one year
    • possibility for second year extension
• Competitive selection of projects for funding
• Open to all possible applicants
  – Govt. as well as non-govt. and civil society organizations
• Supported by a multi-year CIDA Grant to the Partnership
TB REACH

Implementation of TB REACH initiative

Stop TB Partnership Secretariat

Strategic guidance

Programme Steering Group (PSG)

Project selection

Independent Proposal Review Committee (PRC)

M&E of individual projects

External M&E agency (HLSP/KIT)

Individual project implementation

Grantees
TB REACH Waves 1 and 2

Total 75 projects in 36 countries; total about US$50 million committed
TB REACH Grantees
TB case detection pathways

The patient-initiated pathway

- Patient accessing health care
  - Minimize barriers to health care access
  - Strengthening identification of patients with suspected TB

The screening pathway

- Active TB
  - Contacts
    - Children
    - Other risk groups
      - HIV
      - Previous TB
      - Malnourished
      - Smokers
      - Diabetics
      - Drug abusers
  - Clinical risk groups
  - Risk populations
    - Prisons
    - Urban slums
    - Poor areas
    - Migrants
    - Workplace
    - Elderly/infants

- Infected
  - Exposed

- Completing high quality diagnosis
  - Ensuring quality-assured diagnosis

- Treatment delays
  - Improve referral and notification practices

- Notification & treatment
Case finding approaches

Screening pathway

Contacts
Urban slums
PLHA
Children
Prisoners
IDPs & migrants
Indigenous population
Pvt. Clinics / pharmacists
Case finding approaches
Patient initiated pathway

- Specimen transport
- Lab result reporting
- Public-private mix
- Chest camps

- Awareness
- CCT
- Difficult terrain
- Mobile van
Case finding approaches

Diagnostics

- LED FM
- Xpert
- Xray

- Same day diagnosis
- Innovative power supply
TB REACH Wave-1: Preliminary results
One year data for 2011 from 30 projects

- Baseline (2010*): 64,704
- TB REACH implementation (2011*): 81,388

Total SS+ TB detected in evaluation population:
- Baseline: 23,999
- TB REACH: 24,387

Note: * indicates the year of data collection.
Additional* cases detected individual TB REACH Wave 1 projects

Preliminary data unadjusted for control population, implementation period and external factors

*Additional cases are those that would not have been detected in the evaluation population (NTP BMUs) in the absence of TB REACH project
Successful approaches...1

• **Outreach** – most successful approach and best value for money
  – by field health workers and community volunteers
  – by engaging private care providers
  – specimen collection and transport to lab
  – use of mobile phones
  – by mobile van in some situations
Successful approaches..2

- Screening
  - Contact investigation if done systematically
  - Active screening of IDPs
  - Urban slum population
    - Chest camps, community volunteers

- Laboratory intervention
  - Successful if well packaged in other more active case finding approaches
Comments on other interventions

- HSS interventions - slow to implement and results so far not good
- Introduction of new diagnostic technology - high start-up costs but recurring cost will be low (e.g. LED FM, digital X-ray) – may be good value for money in the long run
- Screening in prison - high start-up cost, slow to implement due to administrative bottlenecks and yield of absolute number of cases is low
- Screening of migrants – with the exception of IDP and refugee settlements migrants are a difficult to access group and results so far have not been encouraging
- Case detection interventions among certain population is more expensive due to complexity in diagnosing TB – e.g. children
Wave 2

- Increased demand (318 applications)
- 45 selected for funding
- Projects have started at the end of 2011
- 30 of 45 projects included GeneXpert
- TB REACH-GDF procured over 150 Xpert machines and over 250,000 test cartridges within last 6 months
- Also procured additional machines for Expand-TB, WHO and a few countries
Wave 3 coming in July 2012
Thank you

- Acknowledgements
  - TB REACH Grantees
  - HLSP/KIT
  - TB REACH Secretariat
  - TB REACH PSG and PRC
  - Frontline health workers and patients in TB REACH projects