Hospital Engagement in TB Control: progress and the way forward

National Centre for TB Control and Prevention, China CDC

8th Meeting of the Subgroup of Public-Private Mix for TB Care and Control
10 November 2012
Kuala Lumpur, Malaysia
Contents

• The system for reporting, referring and tracing through IDRS

• Model of hospital-based PMDT at prefecture level

• New model for TB control at county level
China TB control structure

Medical Administrative Network

- Bureau of Disease Control
  - Medical administration
  - Health Policy & Regulation

- Section of Disease Control
  - Medical administration

- County Health Bureau

TB control network: CDC

- National CDC/CIS

- Provincial CDC/CIS

- Prefecture CDC/CIS

- County
  - 3,200 TB dispensaries and designated hospitals

48,000 health units
**TB control network: current model**

<table>
<thead>
<tr>
<th>Task</th>
<th>National TB programme</th>
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Infectious Disease Reporting System (IDRS)
• **Infectious Disease Reporting System (IDRS)**
  – After SARS outbreak, in 2004, MOH launched web-based Infectious Disease Reporting System (IDRS).
  – Real-time report for 37 communicable diseases including TB.
  – By the end of 2010, IDRS covered 100% of CDCs, 97% of county and above hospitals and 82% of township level clinics of China; up to 48,000 users.

• **TB information management system (TBIMS)**
  – In 3,200 TB dispensaries and designated TB hospitals mostly at county level
Background - 2

• **Infectious Disease Reporting System (IDRS)**
  – All PTB cases and suspects detected in general hospitals should be reported into IDRS
  – All the general hospitals must refer PTB patients to TB institutions
  – All TB institutions must provide follow-up tracing if the PTB patients do not reach TB dispensaries.
Interface between IDRS and TB Electronic System

Hospital

IDRS Database

Local CDC

new card

modified card

new card

new card

TB dispensary

Local CDC

TB dispensary

Hospital

TBIMS Database
Use IDRS to improve case detection in NTP

PTB patients diagnosed
In general hospital

Patients reported to the internet
and referred to TB institution
by the hospital

Follow up the patients without
arrived

Successfully arrived

Successfully Traced

Some TB patients lost

TB dispensary
(Registered, free diagnosis and treatment)
Contribution to total arrival rate, 2004-2011

Overall arrival rate (%)

Year

Tracing arrival
Referred arrival

2004
2005
2006
2007
2008
2009
2010
2011
Contribution to notified TB cases (2004-10)
Model of hospital-based PMDT at prefecture level
MDR-TB SERVICE MODEL

- Prefectural designated TB hospital: diagnosis, treatment and management of MDR-TB

- Prefectural TB dispensary: Patient management, recording & reporting, supervision, training other health facilities’ staff, ACSM

- County-level TB dispensary: Specimen and/or strain transportation, management after patients discharged from hospital

- Community level: Health education, social support, ADR reporting, DOT
Building up hospital-CDC collaboration address M/XDR TB

CDC system

Patients evaluated for TB

No MDR

MDR

Routine treatment (1\textsuperscript{st}-line drugs)

Designated hospital

Patients evaluated for TB

No MDR

M/XDR

M/XDR treatment (2\textsuperscript{nd}-line drugs)

Effective case management in community
# Diagnosis and Treatment of MDRTB Cases

<table>
<thead>
<tr>
<th></th>
<th>GF</th>
<th>GATES</th>
<th>DBF</th>
<th>Others</th>
<th>Total</th>
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<tbody>
<tr>
<td><strong>Time period</strong></td>
<td></td>
<td></td>
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<tr>
<td>2008.9-2012.7</td>
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<td>2011.1-2012.7</td>
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<td>2006.1-2010.12</td>
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<td>2010.3-2012.7</td>
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<tr>
<td><strong>Coverage</strong></td>
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<tr>
<td><strong>Provinces</strong></td>
<td>24</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>30</td>
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<tr>
<td><strong>Prefectures</strong></td>
<td>67</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>80</td>
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<tr>
<td><strong>Diagnosed No.</strong></td>
<td></td>
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<tr>
<td>MDR/XDR-TB</td>
<td>5700</td>
<td>312</td>
<td>72</td>
<td>432</td>
<td>6516</td>
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<tr>
<td><strong>Enrolled Treatment No.</strong></td>
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<tr>
<td>MDR/XDR-TB</td>
<td>3524</td>
<td>193</td>
<td>72</td>
<td>216</td>
<td>4005(61.5%)</td>
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Experiences and challenges

• Experiences:
  – Hospital engagement is the critical factor to the success of PMDT
  – The implementation in project sites is showing to be feasible for China PMDT’s scale-up

• Challenges:
  – Proper compensation mechanism to the hospital needs to be explored;
  – High-risk subsidy for health staff;
  – More training needed for designated hospital doctors on R&R, standard regimen, health promotion, TB infection control, etc.;
  – More enforcement on the correct use of anti-TB drugs, treatment guidelines.
New TB control model at county level

The Health Sector Reform
# TB Control Network: current model

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The Health Sector Reform

1. Increasing government subsidies to insurance schemes (¥80 in 2008 to ¥200 in 2011); increasing reimbursement for in- and out-patient services

2. Public hospital reform – use of clinical algorithm, profit de-linked from drug sale, public health responsibilities?

3. Use of essential medicine list to reduce irrational drug use and increase access to safe and effective drugs

4. Financing primary health care providers to deliver public health services (¥25/capita in 2011)
## The responsibilities in new county TB control model

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<th>Task</th>
<th>CDC system</th>
<th>Designated medical institute</th>
<th>General hospital</th>
<th>Community health service</th>
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<td>Sputum examination</td>
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<td>Make a diagnosis</td>
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Conclusions

• Health Reform will impact the way TB services are organised and delivered.
• Need for clear new tasks and responsibilities for the hospital system and CDC
• Need to strengthen the public health function of the hospitals and to ensure adequate funding.