

**The country-level modelling guidance
and model catalogue:
How will Country NTPs adopt these?**

Perspective from Vietnam



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The use of TB modelling in Vietnam

- In 2014, Vietnam applied TIME to model the epidemiological impact of the proposed interventions for the GF CN 2015-2017. The application was successful, leveraging 20M USD additional (above allocation) funding for TB control, especially MDR TB.
 - *Input data: Epidemiological and costing*
 - *Areas focused: case finding, new MDR-TB policies*
 - *Output: projections of TB epidemic and associated cost*
- Scenario 1: Find more TB cases in community
Intervention effect:
 - Increase case detection rate by ~8% (reflect relative jump from 76 to 84%) by 2017
- Scenario 2: MDR: DST coverage
 - Xpert based DST screening of all diagnosed pulmonary cases (at provincial level). Scaled up from 2015 onwards
 - Improved cure rate
 - 9 months regimen for MDR patients

The use of TB modelling in Vietnam

- In 2017, TIME has been used again with updated NTP epidemic assessment, ambitious interventions and targets to prepare for GF FR 2018-2020.
 - Combine current data on Viet Nam TB epidemic into single logical framework (TIME)
 - Generate projections of TB burden under different intervention scenarios
 - Inform discussions on priority interventions for Viet Nam GF FR 2018-2020
- Intervention scenarios: Explore 4 different interventions areas:
 1. MDR PMDT package
 2. HH contact tracing and <5 IPT
 3. Address HIV-associated TB
 4. Case finding to achieve NSP targets
- Limitations:
 - *Applied at national level, not yet applied at provincial level*
 - *Limited risk groups (HIV, MDR), not yet taken into account sex, age, urban/rural, contacts, diabetes...*

Technical Assistance in TB modelling for Vietnam



- London School of Hygiene and Tropical Medicine - TIME
 - *1 week workshops in Hanoi and Jakarta*
 - *1 month intensive training in London*
 - *Distant and In-country support in 2014 and 2017 for Global Fund Concept Notes*
- Liverpool School of Tropical Medicine
 - *Research Investment Case on TB contacts in 2017*

The country-level modelling guidance

- 10 key principles of “Good Modelling Practice” are systematically compiled in a document to guide NTP through the whole process of modelling.
- Make recommendations for actions that would strengthen the field of TB modelling undertaken to support country decision-making.
- Very helpful for NTP to become independent and wise users of TB models.
- National and/or regional seminars/workshops should be held to disseminate these key principles for stakeholders
- Checklists might be developed from the guidance to evaluate the quality/limitation of the modelling work

Model catalogue



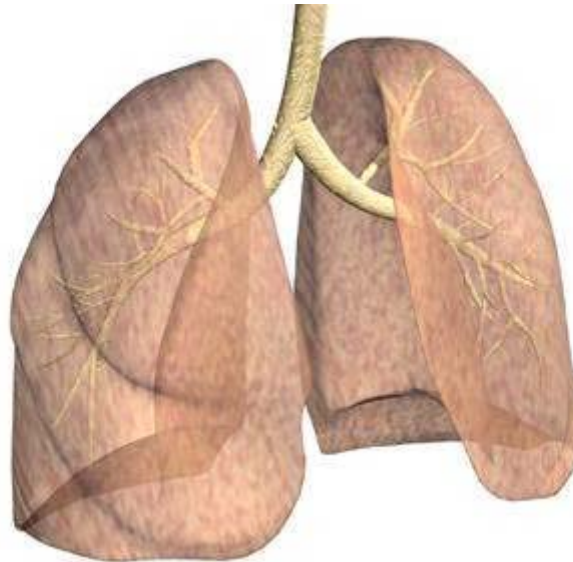
- 5 TB models (AuTuMN, IDM, Optima TB, SEARO, TIME) with features of Epidemiological modelling, Cost modelling and Policy/Intervention modelling.
- Very helpful for NTPs to compare and contrast and select the most suitable one(s) given its demands, data availability, human capacity etc...

Next steps

- Advocate for modelling to be a valuable and reliable tool for policy making process.
- Set up a national modelling team/network
- Capacity building for the team/network using the guidance as well as choosing the most relevant packages to learn and to apply
- Integrated modelling into the process of policy identification and comparison.
- Optimize modelling packages to be more and more user-friendly and intervention-specific both epidemiologically and financially.

THANK YOU VERY MUCH

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For your attention !