

Measuring progress towards the Millennium Development Goals
Report of the fourth meeting of the
WHO Global Task Force on TB Impact Measurement
17-18 March 2010, WHO-HQ, Geneva

Background

The WHO Global Task Force on TB Impact Measurement (hereafter the Task Force), was established in June 2006. Its mandate is to produce a robust, rigorous and widely-endorsed assessment of whether the 2015 targets set for TB control are achieved at global level and for each WHO region; to regularly report on progress towards these targets in the years leading up to 2015; and to help build national capacity in monitoring and evaluation. Full details can be found on the Task Force website.¹ The Task Force includes experts in TB epidemiology from technical agencies (including KNCV, CDC, the Union, RIT/JATA) and academic institutions (for example, Harvard University and the London School of Hygiene and Tropical Medicine), financial partners (such as the Global Fund and USAID) and representatives from high-burden countries.

Following the first three meetings of the Task Force (June 2006, December 2007 and September 2008), clear recommendations for how to measure progress towards the Millennium Development Goals (MDGs) and Stop TB Partnership targets have been developed.² These recommendations focus on three major strategic areas of work. These are:

- Systematic analysis of surveillance data linked to recommendations for how to strengthen surveillance and improve TB control, as well as updated estimates of disease burden, with the ultimate goal of measuring cases and deaths directly from notifications and VR data;
- Surveys of the prevalence of TB disease, with particular focus on 10 countries in Africa and 9 in Asia, stressing the use of surveys not only to measure disease burden but also to improve TB control through, for example, a better understanding of why cases are missed or diagnosed late by national TB programmes (NTPs);
- Periodic review and updating of methods used to translate surveillance and survey data into estimates of incidence, prevalence and mortality.

¹ http://www.who.int/tb/advisory_bodies/impact_measurement_taskforce/en/.

² TB Impact Measurement: policy and recommendations for how to measure the burden of TB and progress in TB control. WHO, 2009. HTM/TB/2009.416.

The Task Force has established three subgroups to take forward each of these areas of work, with substantial progress achieved to date.³

The fourth meeting of the full Task Force was convened in Geneva on 17–18 March 2010. This meeting report explains the five objectives that were set for this meeting of the Task Force. For each objective, it then summarizes the presentation and major discussion points, followed by the main outcomes and recommendations. The annexes of the report include a) the meeting participants and b) the meeting agenda.

Aside from the meeting report, the background papers that were distributed to participants in advance of the meeting and the meeting presentation slides are available on the Task Force website.⁴

Meeting objectives

The meeting had five objectives:

1. To review progress made by the Task Force since September 2008, both overall and for each of the three major strategic areas of work (surveillance, surveys, methods).
2. To present and discuss progress in applying the Task Force framework for systematic assessment of TB surveillance data, and to define next steps, with particular attention to the standards to be reached for direct measurement of disease burden using surveillance data.
3. To present and discuss progress in design, implementation and analysis of surveys of the prevalence of TB disease and to define next steps, with particular attention to current challenges in survey implementation and how to address them, results from recent surveys, and updating of the 2007 guidelines.
4. To present and discuss proposed updates to methods for estimating TB disease burden following an 18-month review process, and their implementation in the context of WHO global reports and the Global Burden of Disease study.
5. To give each of the three Task Force subgroups an opportunity to discuss their plan of work for the next 12 months and to share this with the full Task Force.

³ http://www.who.int/tb/advisory_bodies/impact_measurement_taskforce/progress_update/en/.

⁴ http://www.who.int/tb/advisory_bodies/impact_measurement_taskforce/en/.

Objective 1: Task Force progress since September 2008, both overall and for each of the three major strategic areas of work (surveillance, surveys, methods)

Ana Bierrenbach (WHO-HQ, STB/TME) presented an overview of the progress made since September 2008 in each of the three major strategic areas of work (**Background paper # 1**).

Discussion/conclusions

- Overall high praise for work done over past 18 months;
- Global advocacy to sustain and increase mobilization of resources for impact measurement is needed.

Objective 2: To present and discuss progress in applying the Task Force framework for systematic assessment of TB surveillance data, and to define next steps with particular attention to the standards to be reached for direct measurement of disease burden using surveillance data

Ana Bierrenbach (WHO-HQ, STB/TME) presented an overview of the progress in applying the Task Force (TF) framework for assessment of surveillance data in WHO regional workshops and country missions, covering approximately 60 countries. Case studies were used to illustrate how each of the three components of the Task Force framework have been implemented in practice, the challenges that were faced and the lessons learned (**Background paper # 2**). John Puvimanasinghe from the Global Fund (GF) then presented the tools and approaches that have been used for the assessment of data quality and strengthening of monitoring and evaluation systems used to date by the GF, and how they relate to the TF framework. Eddie Addai and Sai Pothapregada (GF) explained the recent joint efforts that have been made by WHO and the GF to develop a harmonized approach to assessment of TB surveillance data and strengthening of monitoring and evaluation systems, and the planned next steps (**Background papers # 3 and # 4**). Finally, Ibrahim Abubakar (Health Protection Agency - UK) and Davide Manissero (ECDC - Sweden) presented what is being done by the UK and the ECDC to assess the quality of their surveillance systems, and this relates to the TF framework (**Background paper # 5**).

Discussions focused on:

- Practical application of TF framework for systematic assessment of the quality and coverage of surveillance data at national and subnational levels. The framework, which was strongly endorsed at the last TF meeting in September 2008, has three major components: (1) assessment of data quality, (2) assessment of whether or not surveillance data are a good proxy for trends in incidence and mortality, and (3) assessment of the extent to which cases are missed by surveillance systems. Discussion included the many lessons that have been learned through the use of the framework;

- Harmonization and joint approach to assessment of data quality and surveillance systems by WHO and the Global Fund, using the TF framework;
- Lessons to be learned from high-quality surveillance systems (UK and ECDC);
- Implications of the certification process for TB notification systems to be considered (nearly) fully representative of true underlying incidence;
- Proposal for countries to transition to the use of electronic and internet-based recording and reporting systems. This proposal generated lively discussions, with the concern that it should be done in a careful stepwise manner that recognizes the different stages of implementation of TB notification systems in countries. The need for maintaining paper-based systems for as long as appropriate was also highlighted, as was the importance of assessing the extent to which TB surveillance should be integrated into general (or infectious disease) information systems.

Outcomes/conclusions

- High praise for work done over the past 18 months through regional workshops and country missions;
- Strong support for the harmonized approach developed with the GF, and for the proposal to build assessments of surveillance data and related plans to strengthen surveillance into the programme review, grant proposal and grant review mechanisms of the GF;
- Much enthusiasm and volunteering to contribute to this area of work;
- Next steps:
 - Finalize harmonization of WHO/GF tools and approach to using them;
 - Define standards/benchmarks for direct measurement of disease burden which countries should progressively work towards (developed countries may already meet them);
 - Workshops for countries in African and Western Pacific regions which have not yet been covered.
- Needs:
 - Clear guidance on how to implement electronic recording and reporting (ERR), including the quality checks needed to introduce such systems, as well as further discussion on when/whether to recommend the introduction of individual case-based systems rather than aggregated reporting;
 - Early and effective buy-in for certification process. Countries need to express willingness to be externally audited and to accept ownership of process. It will be important to develop/improve tools that can be used for self-assessment of TB surveillance systems. It was commented that an external assessment of the UK surveillance data would be possible.

Objective 3: To present and discuss progress in design, implementation and analysis of surveys of the prevalence of TB disease and to define next steps, with particular attention to current challenges in survey implementation and how to address them, results from recent surveys, and updating of the 2007 guidelines

Ikushi Onozaki (WHO-HQ, STB/TME) presented an overview of progress in implementation of prevalence surveys in the 21 global focus countries (**Background paper # 6**). Binh Hoa (NTP Vietnam) then presented the main lessons learned and the policy implications from the recently completed TB disease prevalence survey in Vietnam (**Background paper # 7**). Babis Sismanidis (WHO-HQ, STB/TME) presented the rationale, and proposed outline and authors for the second edition of the "Red book" (**Background paper # 8**), as well as the decisions made regarding recommendations on several "contentious" issues that were discussed in a pre-meeting held on 16 March.⁵

Discussions focused on:

- General review of progress since last meeting;
- Updating of guidelines on how to design and implement surveys - the "Red Book", in particular new or updated recommendations on "contentious" issues;
- Presentation of the results of the Viet Nam survey;
- Discussion of the roles and responsibilities of the TF secretariat, technical agencies, NTPs and national survey partners.

Outcomes/conclusions

- Acknowledgement of the value of prevalence surveys in selected countries and the major progress made in the last 2 years, with Asian countries on track and 5–6 African countries in a strong position to start surveys in 2010 or early 2011;
- Strong support for updating guidelines on surveys and agreement on recommendations regarding contentious issues; the primary outstanding issue is what screening strategy to recommend in high HIV-prevalence settings;
- Next steps:
 - Meeting of lead authors for review of first drafts of all revised "Red Book" chapters to be held in Geneva 21 or 22 June;
 - WHO to circulate revised country-specific drafts of roles and responsibilities of WHO secretariat, lead and support technical agencies, NTPs and lead national partner, if applicable, as basis for further discussion. Documents with drafts of roles and responsibilities for partners involved in the prevalence surveys of Ethiopia, Nigeria and Rwanda were elaborated immediately after the Task Force meeting and have already been circulated among the technical agencies;
 - Workshop for African countries to be hosted by Ethiopia in early October.

⁵ For details of the proposed recommendations on contentious issues, please see the presentation given by C Sismanidis which is available on the TF website.

Objective 4: To present and discuss proposed updates to methods for estimating TB disease burden following an 18-month review process, and their implementation in the context of WHO global reports and the Global Burden of Disease study

Philippe Glaziou (WHO-HQ, STB/TME) presented the proposed updates to the methods for estimating TB disease burden (**Background paper # 9**), and Ana Bierrenbach (WHO-HQ, STB/TME) presented the challenges to the estimation of TB disease burden by age and sex (**Background paper # 10**).

Discussions focused on:

- Proposed updates to methods following an 18 month review by TF subgroup, led by Philippe Glaziou and Marieke van der Werf;
- Discussion of how to produce estimates of disease burden by age and sex.

Outcomes/conclusions

- Full endorsement of updated methods and praise for the high quality of the work done and improvements made;
- Agreement on the difficulties of estimating disease burden by age and sex with current data;
- Agreement on the importance of vital registration (VR) data for measuring disease burden and changes in this burden;
- Agreement on the importance of increasing emphasis on and use of directly measurable indicators and targets (as opposed to indicators and targets based on estimates of disease burden), with gradual deemphasis of the case detection rate in particular. This is especially needed in the context of monitoring and evaluation frameworks that are used by the GF for performance-based funding decisions.
- Next steps:
 - Further analysis to be done on age/sex estimates by Ana Bierrenbach and Babis Sismanidis;
 - WHO to share with TF members for review and approval the estimates of TB burden disaggregated by 21 epidemiological regions which will be submitted for the Global Burden of Disease study.

Objective 5: To give each of the three Task Force subgroups an opportunity to discuss their plan of work for the next 12 months and to share this with the full Task Force

The TF was separated in two subgroups: (1) surveillance/estimates and (2) prevalence surveys.

Discussion topics and main outcomes/next steps:

- Recommendations for the design and implementation of prevalence surveys in relation to the update of the "Red Book" and in providing technical assistance to countries;
- Promotion and advocacy for investment in vital registration systems. Ideas included:
 - Timing advocacy messages with the publication of WHO reports that can emphasize the importance and utility of mortality data;
 - Potential to synergize our message on the utility of mortality data with HIV and malaria communities; Philippe Glaziou will investigate the opportunity to get this on the WHA agenda;
 - Use of GF funding mechanisms to invest in the development of these systems. Discuss potential with colleagues from the Global Fund;
 - Jaap Broekmans offered to bring this to Mario Raviglione's attention to see what might be done to increase the profile of this issue.
- Increasing the analytical capacity that is available within high burden/high priority countries. Next steps include:
 - Discussions with GF colleagues, including explicit recommendations for support for training and salary for analysts and dedicated monitoring and evaluation (M&E) personnel as part of the development of a strong surveillance system;
 - Discussions with countries participating in the Round 9 GF grant negotiation workshop to be held in Geneva from the 29 March to 1 April the need for budgeting for training and salary support for analysts/M&E dedicated personnel, as well as for participating in WHO regional workshops and country missions.
- The identification of individuals who will be involved (or whose organizations will be involved) in the following activities related to surveillance and TB estimates:
 - Standards and benchmarks for surveillance guidelines:
 - Ibrahim Abubakar
 - Amal Bassili
 - Chen-Yuan Chiang
 - Ted Cohen
 - Eline Korenromp
 - Eugene McCray
 - Amy Piatek
 - Kazuhiro Uchimura
 - Norio Yamada

- Case-based & ERR surveillance systems:
 - Amal Bassili
 - Eugene McCray
- Harmonization between GF and TF tools for assessment/strengthening of surveillance systems (apart from WHO-HQ and Global Fund teams):
 - Amal Bassili
 - Eliud Wandwalo

As this activity is already ongoing and draft tools/documents are expected soon, these will be forwarded to the entire subgroup for comments.

- Training checklists for supervisors (for Global Fund grant review, for reviews of country missions, and for reviews of M&E activities):
 - Daniel Chemtob
 - Angelica Salomão

There was discussion of the utility of building on existing training documents and coordinating efforts with others who are currently developing training tools.

- Staffing for workshops and country missions:
 - Ibrahim Abubakar
 - Amal Bassili
 - Eugene McCray
 - Amy Piatek
 - Eugene Wandwalo

In addition, Ana Bierrenbach will compose and send an email to the entire Task Force requesting TF members to identify young individuals who would be good candidates to receive training to staff future workshops. This email will include a description of the qualifications of these individuals and (as much as possible) details about what will be asked of them in terms of time commitment and potential funding.

Annex 1. List of Participants

Chair

Jaap Broekmans

NTPs

Daniel Chemtob (Israel)	Binh Hoa Nguyen (Vietnam)
David Mametja (South Africa; <i>invited, could not attend</i>)	Peok Satha (Cambodia)

Technical agencies, external consultants and research institutes

Ibrahim Abubakar (Health Protection Agency - UK)	Eveline Klinkenberg (KNCV - The Netherlands)
Emily Bloss (CDC - USA)	Davide Manissero (ECDC - Sweden)
Martien Borgdorff (University of Amsterdam - The Netherlands)	Eugene McCray (CDC - USA)
Vineet Chada (NTI India; <i>invited, could not attend</i>)	Patrick Moonan (CDC - USA)
Chen-Yuan Chiang (The Union)	Narayan Pendse (Switzerland)
Liz Corbett (LSHTM - Malawi; <i>invited, could not attend</i>)	Hans Rieder (The Union - Switzerland)
Ted Cohen (Harvard University - USA)	John Stover (The Future Institute - USA; <i>invited, could not attend</i>)
Charlotte Colvin (Path - USA; <i>invited, could not attend</i>)	Frank van Leth (KNCV - The Netherlands)
Donald Enarson (The Union - France; <i>invited, could not attend</i>)	Petra van Haas (Zambart Project - Zambia)
Sian Floyd (LSHTM - UK)	Kazuhiro Uchimura (RIT - Japan)
Eleanor Gouws (UNAIDS - Switzerland; <i>invited, could not attend</i>)	Norio Yamada (RIT - Japan)
Vahur Hollo (ECDC - Sweden)	Eliud Wandwalo (Management Sciences for Health - Tanzania)
Sang Jae Kim (The Union - Korea)	Brian Williams (Switzerland)

Funding Agencies

Eddie Addai (Global Fund - Switzerland)	Amy Piatek (USAID)
Ryuichi Komatsu (Global Fund - Switzerland)	John Puvimanasinghe (Global Fund - Switzerland)
Eline Koremromp (Global Fund - Switzerland)	Sai Pothapregada (Global Fund - Switzerland)
Montserrat Meiro-Lorenzo (World Bank; <i>invited, could not attend</i>)	

WHO Regional and Country Offices

Amal Bassili (EMRO)	Angelica Salomão (AFRO)
Andrei Dadu (EURO)	Daniel Sagebiel (WPRO)
Roberta Pastore (SEARO)	Akihiro Seita (EMRO)
Philips Patrobras (Nigeria)	

WHO-HQ

Ana Bierrenbach (HTM/STB)	Pierre-Yves Norval (HTM/STB)
Katherine Floyd (HTM/STB)	Ikushi Onozaki (HTM/STB)
Philippe Glaziou (HTM/STB)	Babis Sismanidis (HTM/STB)
Jean Iragena (HTM/STB)	Veronique Vincent (TDR)
Knut Lonnroth (HTM/STB)	

Annex 2. Agenda

DAY 1: Wednesday 17 March 2010

Time	Topic	Presenter
08.30 - 09:00	Registration	
09:00 - 09:15	Welcome and introduction of participants Declaration of conflict of interest	Jaap Broekmans (Chair)
09:15 - 09:30	Meeting objectives and expected outcomes Review and adoption of agenda	Katherine Floyd (WHO) Jaap Broekmans (Chair)
Objective 1: Overview of Task Force progress since September 2008		
09:30 - 10:00	<u>Presentation:</u> Overview of Task Force progress: main achievements, challenges, current priorities and next steps (Background paper #1)	Ana Bierrenbach (WHO)
10:00 - 10.15 Coffee break		
Objective 2: Task Force framework for assessment of surveillance data: progress to date and next steps		
10:15 - 11:30	<u>Presentation:</u> Application of the Task Force framework for assessment of surveillance data via WHO regional workshops and country missions: <i>progress to date, challenges faced and lessons learned, proposed next steps</i> (Background paper #2)	Ana Bierrenbach (WHO)
11:30- 12:00	<u>Presentation:</u> Assessment of data quality and strengthening of monitoring and evaluation systems: current tools and approach used to date by the Global Fund and how they relate to the Task Force framework, <i>with country examples</i> (Background paper #3)	John Puvimanasinghe (The Global Fund)
12:00 - 12:20	<u>Presentation:</u> Development of a harmonized approach to assessment of TB surveillance data and strengthening monitoring and evaluation systems: recent joint efforts and next steps planned by the Global Fund and WHO (Background paper #4)	Eddie Addai (The Global Fund)
12:20 - 13.00	<u>Presentation:</u> Assessing the quality and coverage of surveillance data in the UK: how is it done and how can HPA help to develop the Task Force framework for assessment of surveillance data, particularly the standards/process required for certification/accreditation and definition of the role of capture-recapture studies? (Background paper #5)	Ibrahim Abubakar (HPA)
13.00 - 14.00 Lunch		
14:00 - 14.30	<u>Presentation:</u> Application of the Task Force framework in the European context: How can ECDC and experience from European countries help to strengthen and expand use of the Task Force framework for assessment of surveillance data, including development of the standards/process required for certification/accreditation?	Davide Manisero (ECDC)
14:30 - 15:30	<u>Discussion</u> How to strengthen and expand use of the Task Force framework including development of a certification process?	All
15.30 - 15.45 Tea Break		
Objective 3: Prevalence surveys in 21(+) global focus countries		
15:45 - 17:30	<u>Presentation:</u> Overview of progress in implementation of prevalence surveys in the 21 global focus countries: achievements, challenges, next steps (Background paper #6)	Ikushi Onozaki (WHO)

DAY 2: Thursday 18 March 2010

Time	Topic	Presenter
Objective 3: Prevalence surveys in 21(+) global focus countries		
09:00 - 09:15	Summary of main discussion/outcomes from Day 1	Jaap Broekmans
09:15 - 09:45	<u>Presentation</u> : Lessons learnt and policy implications from recently completed TB disease prevalence surveys and their interpretation - Vietnam (Background paper #7)	Binh Hoa (NTP Viet Nam)
09:45 - 10:05	<u>Presentation</u> : Second edition of the "Red book": Rationale, and proposed outline and authors (Background paper #8)	Babis Sismanidis (WHO)
10:05 - 10:45	<u>Discussion</u>	All
10.45 - 11.00 Coffee Break		
Objective 4: Updates to methods and their implementation in WHO reports and the GBD study		
11:00 - 11:45	<u>Presentation</u> : Proposed updates to methods for estimating TB disease burden following an 18-month review process by Task Force subgroup, and next steps including their use in TB burden estimates required for the Global Burden of Disease study (Background paper #9)	Philippe Glaziou (WHO) Marieke van der Werf (KNCV)
11:45 - 12:15	<u>Presentation</u> : Estimating the burden of TB by age and sex: availability of data, gaps and next steps (Background paper #10)	Ana Bierrenbach (WHO)
12:15 - 13:00	<u>Discussion</u>	All
13.00 - 14.00 Lunch		
14:00 - 14:30	Continued from above (if necessary)	
Objective 5: Plan of work for the next 12 months		
14:30 - 16:00	<u>Group work</u> : Separate meetings in two subgroups: (1) surveillance/estimates and (2) prevalence surveys (<i>Tea break to be taken during this time, refreshments available at 15.30</i>)	All in two separate groups
16:00 - 17:00	Report back from the leaders of each subgroup, highlighting priorities and related work to be done during the next 12 months	Ikushi Onozaki Philippe Glaziou/ Ana Bierrenbach
17:00 - 17:30	Meeting outcomes and concluding remarks	Jaap Broekmans (Chair) Katherine Floyd (WHO)