

STAG-TB

Report of the 17th Meeting
of the
**STRATEGIC AND
TECHNICAL ADVISORY
GROUP FOR TUBERCULOSIS**

12-14 June 2017

WHO Headquarters
Geneva, Switzerland



**World Health
Organization**

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WHO/HTM/GTB/2017.32



Report of the 17th Meeting

WHO STRATEGIC AND TECHNICAL ADVISORY GROUP FOR TUBERCULOSIS (STAG-TB)

12-14 June 2017

In its work on tuberculosis (TB), the World Health Organization (WHO) aims for a world free of TB and, as part of the Sustainable Development Goals, to end the global TB epidemic by 2030. It seeks to enable universal access to TB prevention and care, guide the global response to threats, and promote innovation. The WHO Secretariat, at all its levels, requires regular scientific, technical and strategic advice from its Strategic and Technical Advisory Group for Tuberculosis (STAG-TB).

Mission and functions of the STAG-TB:

The mission of the STAG-TB is to contribute to ending the TB epidemic, and eventually eliminating the disease, by providing state-of-the-art scientific and technical guidance to WHO. It has the following functions:

- 1.1 To provide to the Director-General independent evaluation of the strategic, scientific and technical aspects of WHO's Tuberculosis work;
- 1.2 To review, from a scientific and technical viewpoint, progress and challenges in WHO's TB-related core functions, including:
 - 1.2.1 The content, scope and dimension of WHO's development of TB policies, strategies and standards in TB prevention, care and control;
 - 1.2.2 The content, scope and dimension of WHO's collaboration, and support of, countries' efforts to control TB, including the provision of guidance and capacity-building on policies, strategies, standards and technical assistance;
 - 1.2.3 The content, scope and dimensions of WHO's TB epidemiological surveillance, monitoring, evaluation and operational research activities, their relevance to countries' efforts to end the TB epidemic and approaches to be adopted;
 - 1.2.4 The content, scope and dimensions of WHO's promotion and support of partnerships, and of advocacy and communications for TB prevention, care and control worldwide;
- 1.3 To review and make recommendations on the establishment of committees, working groups, and other means through which scientific and technical matters are addressed; and
- 1.4 To advise on priorities between possible areas of WHO activities related to tuberculosis prevention, care and control.

The 17th meeting of the STAG-TB took place at WHO Headquarters on 12-14 June, 2017. The meeting was organized by the WHO Global TB Programme (GTB), which provides the Secretariat for the advisory body.

Dr Ibrahim Abubakar, Director of the Institute for Global Health of the University College London, was appointed by the WHO Director-General as STAG-TB Chair for the period of 2016-2018. He worked with the WHO Secretariat in the development of the 2017 meeting agenda. For 2017, there were twenty two members of STAG-TB with strong gender, geographical and expertise balance. Twenty-one members, including the Chair, were in attendance for the meeting.

The STAG-TB members were joined by over 175 technical, academic and civil society partners and WHO staff from Headquarters, all six Regional Offices and many WHO Country Offices.

This report provides a summary of the 17th meeting of STAG-TB, with a focus on the conclusions and recommendations provided by STAG-TB to WHO for each of the topics addressed. The meeting agenda is attached as **Annex 1**. **Annex 2** provides the list of participants. The Terms of Reference for STAG-TB are provided at http://who.int/tb/advisory_bodies/stag/en/

Each STAG-TB meeting session began with an introductory presentation(s) by WHO staff and, in some cases, partners. Comments and suggested recommendations were provided by one or two STAG-TB members serving as session discussants, followed by comments and recommendations offered by other STAG-TB members, and additional comments by other participants.

The STAG-TB members serving as session discussants developed draft written recommendations, with the assistance of WHO rapporteurs. All draft recommendations were reviewed by STAG-TB members as a whole on the last day of the meeting, and any proposed revisions were recorded. The final revised recommendations were consolidated by the WHO Secretariat in this report with no further changes, except grammatical corrections and formatting. The consolidated report was reviewed by the STAG-TB Chair. The report was submitted via the Director, Global TB Programme to the Assistant Director-General, HIV/AIDS, TB, Malaria and Neglected Tropical Diseases Cluster, on behalf of the WHO Director-General.

The report is posted on the WHO website:

http://www.who.int/tb/advisory_bodies/stag_tb_report_2017.pdf.

Seventeenth meeting objectives:

At this 17th STAG-TB meeting in 2016, WHO requested STAG-TB to review and advise on a number of areas of WHO global TB work. The WHO STAG-TB Secretariat and the Chair of STAG-TB developed the agenda for the 17th meeting based on the suggested issues proposed by the STAG-TB members at their 16th meeting and on several new important priorities of the WHO Secretariat in 2017. The meeting was organized in two parts. The first part focused on issues recommended by STAG-TB and priority issues arising for evidence review and activity of WHO in TB during 2016-2017.

The second part focused on obtaining STAG-TB advice on the planning process, major outcome areas, draft policy briefs and declaration development process, for the first **WHO Global Ministerial Conference on Ending TB in the Sustainable Development Era: A Multisectoral Response** to be co-organized by WHO and the Ministry of Health of the

Russian Federation and hosted by the Russian Federation in Moscow, 16-17 November 2017.

Here are the specific agenda points covered following an introductory session:

Part I:

- Update on TB impact measurement
- Recent reviews of pharmacokinetics, pharmacodynamics and isoniazid-resistant TB: implications for WHO treatment policies
- Monitoring patient-centred care through health related quality of life metrics
- Updated on actions of the Civil Society Task Force on TB
- Expanding efforts to combat childhood TB
- Operational research to end TB at the country level

Part II:

- Introduction to conference aim, approach, outcome areas, policy package and declaration process
- Perspectives on ending TB and multisectoral action by UN agency partners
- Outcome area 1: Advancing TB response within UHC, AMR and SDG Agendas
- Outcome area 2: Increased and sustainable financing
- Outcome area 3: Scientific research and innovation
- Outcome area 4: Developing a multisectoral accountability framework

SESSION 1: INTRODUCTION

On behalf of the WHO Director-General, Dr Ren Minghui, Assistant Director-General, HIV/AIDS, TB, Malaria and Neglected Tropical Diseases Cluster, welcomed STAG-TB members and all other participants to the meeting. He noted the conclusion of Dr Margaret Chan's two terms as WHO Director-General, and the election by the World Health Assembly of the new Director-General, Dr Tedros Adhanom Ghebreyesus and his planned term beginning in July, 2017.

Dr I. Abubakar, STAG-TB Chair, welcomed all members and introduced the provisional agenda for the meeting for adoption. D. Weil, WHO Global TB Programme Coordinator for Policy, Strategy & Innovations (PSI), and STAG-TB Secretariat lead, presented the Terms of Reference of STAG-TB, meeting processes and noted the review of meeting participant Declarations of Interest. No interests were deemed significant for the meeting, and no modification in participation was made to the meeting. Declared interests were recorded and are available from the Secretariat. The actions taken on

recommendations from the 2016 meeting were reported on as relevant to each session of the 2017 meeting.

An introductory video, done by M. Dias, WHO Global TB Programme was shown on the status of the TB epidemic, global response, and provided highlights of WHO's TB-related products, consultations, and activities in the past year.

Dr Raviglione provided an overview presentation on "High-level action: driving momentum to End TB" on 2017 and 2018 high-level meetings addressing need to accelerate action to end TB and reach the End TB Strategy milestones and targets. He reflected on the latest WHO data, the opportunities with new transformational scientific innovations within and beyond TB, new WHO guidance, action across the sustainable development goals, and a new geopolitical environment.

WHO Regional advisers for TB from all of the WHO regions presented brief updates on their efforts to support countries in pursuing the End TB Strategy and regional plans of action related to the strategy, and aligned with wider regional strategies related to advancing universal health coverage and all health-related Sustainable Development Goals and addressing regional challenges, such as migration and complex emergencies. All presentations available from the WHO STAG-TB Secretariat at the Global TB Programme.

The STAG-TB Chair then introduced individual sessions for discussion, conclusions and recommendations (except where noted for information-only sessions).

STAG-TB CONCLUSIONS AND RECOMMENDATIONS BY SESSION

Presenter and STAG-TB Member discussant names for each session are shown in the meeting agenda (**Annex 1**).

PART I

SESSION 2: TB IMPACT MEASUREMENT - 2016-2017 PROGRESS - THIS WAS AN INFORMATION SESSION AND THE PRESENTATION PROVIDED IS AVAILABLE FROM THE WHO STAG-TB SECRETARIAT/GLOBAL TB PROGRAMME.

SESSION 3: COMPENDIUM OF WHO GUIDELINES AND ASSOCIATED STANDARDS: ENSURING OPTIMUM DELIVERY OF THE CASCADE OF CARE FOR PATIENTS WITH TUBERCULOSIS

STAG-TB:

- Acknowledges and applauds WHO in developing the comprehensive Compendium of policy guidelines and standards in a user-friendly layout that follows the cascade of care delivery for patients with TB incorporating website links to the detailed policy guidance.
- Recognizes that the proposed standards serve as a baseline for patient care for all countries irrespective of the conditionality of recommendations.

STAG-TB recommends that WHO:

1. Incorporate additional sections to address programmatic implementation and financing for the essential elements of the End TB Strategy, including addressing the needs of hard-to-reach populations.
2. Review existing guidelines and identify gaps where new policy guidance needs to be developed¹.
3. Incorporate into the Compendium available guidance on the importance of social components of patient care, use of new drugs, adoption of public-private mix activities and International Standards of TB Care (ISTC), and TB/HIV monitoring and evaluation; and add an annex with a list of references for each standard.
4. Support civil society and partners to advocate with governments for implementation of the recommendations based on WHO tools, and to monitor implementation and country-level uptake.
5. In addition to civil society partners, involve academia and private practitioners in country-level implementation.

¹ e.g. guidance for transitioning from microscopy to Xpert, as well as phasing out other old technologies, post-treatment patient care, treatment of non-MDR INH-resistant TB and incorporate into a subsequent version of the compendium.

6. Develop the Compendium as an electronic tool or App, translated into the six WHO official languages, and one that can be updated at least annually while ensuring consistency in the policy recommendations throughout the document with accurate website links.

SESSION 4: RECENT REVIEWS OF PHARMACOKINETICS, PHARMACODYNAMICS AND ISONIAZID-RESISTANT TB: IMPLICATIONS FOR WHO TREATMENT POLICIES

STAG-TB commends WHO for the major effort undertaken to:

- Address the key clinical questions arising from the 2016 policies and updates on the management of MDR-TB;
- Explore the newly emerging data from molecular diagnostics and pharmacokinetics/pharmacodynamics (PK/PD) of TB medicines;
- Revise critical concentrations for phenotypic drug susceptibility testing; and
- Develop policy guidance on treatment of isoniazid-resistant TB based on the latest scientific evidence.

STAG-TB acknowledges:

- The importance of growing knowledge and emerging data from PK/PD studies and from molecular diagnostic innovations in helping to optimise treatments success, and reduce the development of resistance and drug adverse effects; As such, PK/PD data complements the MDR-TB treatment guidance from clinical studies which informed the 2016 WHO policy recommendations;
- The importance of exploring the optimum dosing of rifampicin for treatment of rifampicin-susceptible TB and linking PK/PD data to the results of ongoing clinical trials on high-dose rifampicin; In doing so, other rifamycins (eg. rifapentine for preventive therapy) also should be investigated;
- That emerging innovations and new data may imply future individualisation of MDR-TB treatment at country and patient level, in order to improve treatment outcomes, reduce the development of additional resistance and better balance effectiveness with patient safety;
- The need to accelerate the development of molecular drug-susceptibility testing (DST) technologies, particularly the rapid, near-point-of-care test for isoniazid resistance as a means to treat this form of TB more fast and appropriately, and to optimise access to existing molecular capacity at country level (eg. the GeneXpert

platform as well as sequencing capability already existing for diseases other than TB);

- The need for more data on PK/PD and molecular DST that could help optimise patient care.

STAG-TB recommends that WHO:

1. As immediate priorities, revise and update treatment guidance focusing on: (i) the inclusion of fluoroquinolones in treatment of isoniazid-resistant TB; (ii) limiting injectable agents to situations in which they cannot be avoided; (iii) adequate regimens for retreatment cases without an ~~HR~~ isoniazid-resistant-TB diagnosis which protects them from acquiring additional resistance (given the discontinuation of the “category 2” regimen); and, (iv) the further review of the dosages of rifamycins.
2. As mid-term priorities, assess the evidence for molecular diagnosis (including targeted or whole genome sequencing) as the future reference standard for drug-resistant TB diagnosis and clinical decision-making, and for developing a standardised approach to precision medicine that can be implemented regardless of the resource-setting.

SESSION 5: MONITORING PATIENT-CENTRED CARE THROUGH HEALTH-RELATED QUALITY OF LIFE METRICS

STAG-TB acknowledges that:

- Current approaches to TB care still rely heavily upon biomedical interventions and often miss out on other care aspects which require a broader educational, psychological, and social undertaking;
- Ignoring quality of life is unacceptable and unethical, and stigmatization can delay health-seeking behaviour and influence adversely treatment completion;
- The metrics associated with TB-related quality of life may require further development. The case of measurement of TB patient and household costs shows that new metrics can be developed within a relatively short time.

STAG-TB recommends that WHO:

1. Pursue the way forward presented for assessment/measurement of TB health-related quality of life (QOL), strengthening the process and exploring the possible

linkages/methods to capture data linked to TB patient-household cost (as well as other dimensions of patient QOL), addressing current limitations in the methodologies, and engaging affected communities and civil society in the process.

2. Pursue a holistic approach to care (including rehabilitation services and post-treatment care and due attention to the roles of different health workers, e.g., nurses vs. doctors), building on the recently-developed WHO policies relevant for patient-centred care and on well-known and feasible approaches to patient care, to improve outcomes beyond the well-defined treatment outcomes.
3. Clarify and further develop its work in this area.
4. Explore existing collaborative frameworks between TB programmes and mental health care services (as well as other components of NCDs, e.g. tobacco-related disease, nutrition) as part of a TB patient-centred care response, mental health being one key dimension of health related quality of life affected in people with TB which may be better dealt with through integration of services, similar to TB/HIV collaboration.
5. Promote research on currently neglected areas related with TB health related quality of life, e.g. TB stigma, mental health, and disability).

SESSION 6: UPDATE ON ACTIONS OF THE CIVIL SOCIETY TASK FORCE ON TB - THIS WAS AN INFORMATION SESSION AND THE PRESENTATION PROVIDED IS AVAILABLE FROM THE WHO STAG-TB SECRETARIAT/GLOBAL TB PROGRAMME.

SESSION 7: EXPANDING EFFORTS TO COMBAT CHILDHOOD TB

STAG-TB recognizes and acknowledges:

- The progress made by WHO and partners since the launch of the Childhood TB Roadmap in 2013;
- That childhood TB is increasingly included in national TB strategic plans and other relevant documents;
- The availability and country uptake of the new child-friendly fixed dose combinations for treatment of susceptible TB;

- The encouraging examples from pilot projects of decentralized capacity for prevention, diagnosis and treatment of childhood TB, including household-based contact screening;
- The opportunities for better linkages with existing platforms for maternal and child health at the frontline care level;

STAG-TB recognizes the following major gaps:

- Although the use of TB preventive therapy in young (<5 years of age) children with household exposure to TB is included in most national strategic plans, this is rarely (if ever) implemented;
- TB is a common (but often unrecognized) cause of death in young children in TB endemic areas, and most children with TB are incorrectly diagnosed, while diagnostic approaches remain highly centralized;
- Children treated in referral hospitals or in the private sector are rarely included in figures reported to the WHO;
- Disaggregation of the adolescent age group is currently impossible due to TB age brackets and reporting frameworks used (paper-based);
- The Childhood TB Roadmap published in 2013 did not include clear targets and timelines and failed address the needs of adolescents.

STAG-TB recommends that WHO:

1. Strongly promote programmatic scale-up of household contact screening to identify children with TB disease, and those children with TB infection who benefit most from preventive therapy.
2. Review ongoing trials and upcoming evidence on the use of non-sputum based samples (e.g. nasopharyngeal aspirate (NPA), stool).
3. Evaluate existing models of decentralized care for children with TB and develop targeted training and management tools [algorithms, Standards of Practice (SOPs)] that would facilitate integrated service delivery.
4. Support National TB Programmes (NTPs) in establishing strong linkages across the health sector and with the private sector in order to better capture children diagnosed and treated outside of NTPs and to improve treatment (e.g. using existing

tools such as the IMCI; PPM framework) & recommends WHO to continue to engage with UNICEF, other UN agencies and partners.

5. Include in WHO Global TB Report data on adolescent TB (age range 10-19yrs), initially from countries with case-based electronic surveillance systems, with the aim of estimating the disease burden and developing programmatic guidance.
6. Update the 2013 Childhood TB Roadmap with renewed targets and timelines and broaden its scope to include adolescents.

SESSION 8: OPERATIONALIZING RESEARCH TO END TB AT THE COUNTRY LEVEL

STAG-TB:

- Welcomes the activities undertaken by GTB to promote research at country level through the development of national TB research networks and plans, and encourages their wider adoption to assist countries in their efforts to End TB.

STAG-TB recommends that WHO:

1. Reinforces its work with low- and medium-income, high TB burden countries to provide support in research planning and implementation, and assist in the development of research platforms (regional or thematic) to enhance collaborations, leverage funding, and facilitate knowledge sharing and capacity building.
2. Support countries to develop implementation work plans stemming from national research agendas, including relevant country specific indicators to reflect adherence to workplans.
3. In collaboration with governments, funders and other relevant stakeholders, facilitate the development and implementation of innovative research financing and capacity building strategies at the global and country level.

PART II

REVIEW OF POLICY CONTENT OF THE FIRST WHO GLOBAL MINISTERIAL CONFERENCE ON *ENDING TB IN THE SUSTAINABLE DEVELOPMENT ERA: A MULTISECTORAL RESPONSE*

Dr M. Raviglione and Dr T. Kasaeva, STAG-TB Member and Ministry of Health of the Russian Federation presented an overview of the aims, objectives, and planning process for the WHO Global Ministerial Conference co-organized with the Russian Federation and to be held in Moscow on November 16 and 17, 2017. Full materials are available on the WHO Conference website. STAG-TB and all participants were asked to provide their advice and feedback on the aims, objectives, organization of the conference and proposed invitees. Day 2 the STAG-TB Meeting was dedicated to in-depth discussion on each of the key outcome areas and sub-thematic tracks of the Conference, and the drafts of the related policy briefs developed to inform the Conference. STAG-TB recommendations on process and content are noted below.

As the Conference aims to address multisectoral action needed to end the epidemic, within the context of the UN Sustainable Development Agenda, WHO invited representatives of several UN agencies who are directly working to fight TB within the remit of their agencies to comment on the Conference. The speakers all were committed to the aims and objectives of the Conference for action at country level and its contribution in moving towards the UNGA High-Level Meeting (HLM) on TB in 2018. A. Maina of the UN High Commission on Refugees working on the health of refugees, including addressing prevention and care of TB among their priorities. P. Dhavan of the International Organization for Migration working on the health of migrants , with significant efforts specifically in support of TB prevention and care of migrants, and both spoke also to cross-UN efforts to address the migrant and refugee crisis. A. Detjen of UNICEF spoke to the special efforts needed to address TB among the development concerns of children and collaborative efforts with WHO and many partners to improve TB treatment and care for children. A. Reid, coordinating TB/HIV efforts of UNAIDS spoke to the new momentum that is possible for accelerating and scaling up joint actions against the two epidemics, and the lessons learned from HIV from such high-level political discussions possible through the Ministerial Conference and the UNGA HLM.

OUTCOME AREA 1: ADVANCING THE TB RESPONSE WITHIN THE UNIVERSAL HEALTH COVERAGE, AMR AND SDG AGENDAS

STAG-TB:

- Commends the WHO Global TB Programme for the development of the draft policy briefs on outcome area 1 and its related thematic tracks;

- Acknowledges the extent of technical input and consultation that has been undertaken with countries, civil society and partners in the development of these draft briefing documents;
- Recognizes that these briefs will serve as background documents for the sessions focused on this outcome area and thematic tracks, and that these drafts will subsequently be strengthened for clarity and content;
- Supports the process for development of the declaration (and its overall preamble).

STAG-TB recommends that WHO:

Incorporate the following inputs to strengthen the Ministerial Conference policy briefs on outcome area 1 and its related thematic tracks:

1. To provide political leadership and commitment, the recommended Commission should be convened by the Head of State who should remain its patron with multisectoral membership and potentially chaired by the health minister (develop a plan).
2. Countries should fast track universal access to health care through all state and non-state care providers to reach all people with TB including the missing cases, (human resources) especially those managed by the private sector, ensuring no one is left behind.
3. The proposed End TB charter for ethics, equity and human rights, should be supported by a legislative framework, and developed with clarity of language, process and inclusive of male gender (burden and missing cases), vulnerable groups and poverty related issues.
4. Measures to improve prevention including prompt identification and treatment of tuberculosis, should be reflected in the brief for all areas inclusive of MDR-TB.

OUTCOME AREA 2: INCREASED AND SUSTAINABLE FINANCING

STAG-TB:

Supports fully the aim of Outcome Area 2 for the Ministerial Conference, with a focus on driving commitments for domestic and global financing for UHC, TB-specific needs, and to eliminate catastrophic costs for TB patients and affected households.

STAG-TB recommends that WHO:

In revising the policy brief, declaration content and in preparing for the Conference and UNGA HLM:

1. Reinforce the top messages that: TB investment represents great value for money, that underfinancing of TB response is a threat, and ensuring allocative efficiency and quality are important;
2. Work with relevant experts to: (a) formulate an improved indicator(s) to measure domestic TB financing commitment relative to full needs; and (b) estimate the economic risks of failure to invest now;
3. In keeping with the policy brief,
 - (a) Support country-led work to develop and promote cogent, persuasive, and attractive End TB investment cases, involve partners with financing, economics, and communications capacity, align work with National Strategic Plans, and pursue innovative financing streams such as with the private sector); and
 - (b) Coordinate key partners to support the actions required at country level to achieve the financing targets.

OUTCOME AREA 3: SCIENTIFIC RESEARCH AND INNOVATION

STAG-TB:

- Welcomes the development of a background policy paper on *Global TB R&D Investments 2005–2016: Past, Present, Future* in preparation for the Global Ministerial Conference in Moscow November 2017 and the policy brief aligning asks to promote and expand TB research and innovation both at the national and international levels;
- Supports the proposition of development of a *Global Coalition for TB Research* as a way to promote research, broaden funding sources and optimize research investments based on international consensus and support global efforts to invigorate TB research.

STAG-TB recommends that WHO:

1. Strongly advocate the need to conduct research along the full spectrum, ensure that basic and translational research for development of new tools be linked

with implementation research on the use and scale-up of current and new tools and highlight the need to conduct multi-disciplinary and multisectoral research.

2. Invite Ministries of Science and Technology (MoST) - or equivalent - along with representatives of Ministries of Health at the Conference, engage MoST in discussions about TB R&D funding commitments, and involve representatives of the private sector to collectively raise funds and develop efficient information-sharing and capacity-building pathways.
3. Strongly promote, together with relevant stakeholders, the development of a *Global Coalition for TB Research* that addresses new funding mechanism(s), with a view to promote and support TB R&D within the context of SDGs, as well as existing or forthcoming initiatives - such as the AMR initiative - and including engagement from the BRICS (Brazil, Russia, India, China and South Africa).

SESSION 4: DEVELOPING AN END TB MULTISECTORAL ACCOUNTABILITY FRAMEWORK

STAG-TB:

- Recognizes the value of a multisectoral accountability framework for TB that builds on existing global and national processes for monitoring, review and action.
- Acknowledges the presented content and recognizes the need to update the related content in the draft policy brief.

STAG-TB recommends that WHO:

1. Lead the development of a multisectoral accountability framework, working with senior officials in Ministries of Health, civil society, other UN agencies and partners, as a key component of preparations for, and deliverable of, the UN high-level meeting on TB in 2018.
2. Expand the scope of the annual WHO global TB report, in particular to include monitoring of new indicators that are part of the accountability framework.
 - This is expected to include the 14 SDG indicators that are associated with TB incidence, and new indicators (and related targets) that will be needed to track commitments and calls to action in the Declaration adopted at the 2017 WHO Ministerial Conference.

ADDED ITEM: THE WHO PRIORITY PATHOGENS LIST

The Chair of the STAG-TB called for STAG-TB discussion of the WHO Priority Pathogens List, and ongoing work on related final analysis and a report, as an additional agenda item².

STAG-TB:

- Acknowledges that TB is the leading pathogen causing deaths in the world and the efforts of WHO to revisit the priority pathogen list and explore criteria and methods with a view to re-examine whether *Mycobacterium tuberculosis* may be included in the list.
- Understanding that indicators used in the application of the criteria are inadequate to allow inclusion of *M. tuberculosis*, strongly recommends that WHO withdraw the current list, and that it pursue immediate review of the application of the criteria for selection of pathogens to take into account the limitations of the original prioritization process.
- Supports, following the revision of the criteria, the production of a revised list and the appropriate placement of *M. tuberculosis* on such a list.

PLANNING OF THE 2018 STAG-TB MEETING

The WHO Secretariat announced the planned dates for the 18th annual STAG-TB meeting: **11-13 June 2018** at WHO Headquarters in Geneva. Proposed agenda items for the 2018 session will be discussed with STAG-TB members in advance.

CLOSING

The meeting was closed with final remarks and appreciation to all participants offered by Dr Ren Minghui and Dr Raviglione on behalf of the World Health Organization, and by Dr Abubakar on behalf of the Strategic and Technical Advisory Group for Tuberculosis. Dr Abubakar acknowledged the outstanding achievements of Dr Raviglione as Director of the WHO Global TB Programme since 2003, as this STAG-TB meeting was likely to be the last STAG-TB meeting before Dr Raviglione’s retirement. The meeting’s participants

² Note: Subsequent to the STAG-TB 2017 meeting, and with awareness of the recommendations of STAG-TB and the concerns raised by other partners, WHO pursued collaborative work across the Department of Essential Medicines and Health Products and the Global TB Programme towards an updated expanded analysis and a final report on *prioritization of pathogens for discovery, research and development of new antibiotics for drug-resistant bacterial infections and tuberculosis*, published in September, 2017.

gave Dr Raviglione a standing ovation, and Dr Raviglione appreciated the contributions made by STAG-TB members to the work of WHO since the establishment of STAG-TB in 2001.



MONDAY, 12 JUNE 2017		
09:00– 10:30	<p>SESSION 1: Opening and overview</p> <p>Welcome and introductions</p> <p>a. Objectives, agenda and follow-up on STAG-TB 2016 recommendations</p> <p>b. Opening video</p> <p>c. High level action: Driving momentum to end TB</p> <p>d. Progress reports from Regions</p> <p>Discussion</p>	<p>Ren Minghui, ADG, HTM Cluster M. Raviglione, Director, Global TB Programme I. Abubakar, Chair</p> <p>D. Weil</p> <p>M. Dias</p> <p>M. Raviglione</p> <p>, EURO, EMRO, PAHO, SEARO, WPRO</p>
10:30– 10:50	Coffee	
10:50– 11:30	<p>SESSION 2: TB impact measurement: 2016-2017 progress <i>(information session)</i></p> <p>Discussion</p>	K. Floyd
11:30– 12:30	SESSION 3: Compendium of WHO guidelines and	

	<p>associated standards: Ensuring optimum delivery of the cascade of care for patients with tuberculosis</p> <ul style="list-style-type: none"> • Introduction • Aims of the guidance <p>Discussant</p> <p>Discussion and STAG-TB recommendations</p>	<p>M. Raviglione C. Gilpin B. Mutayoba</p>
12:30– 13:30	Lunch	
13:30– 14:30	<p>SESSION 4: Recent reviews of pharmacokinetics, pharmacodynamics and isoniazid-resistant TB: implications for WHO treatment policies</p> <p>Discussant</p> <p>Discussion and STAG-TB recommendations</p>	<p>K. Weyer K. van Weezenbeek</p>
14:30– 15:30	<p>SESSION 5: Monitoring patient-centred care through health-related quality of life metrics</p> <p>Discussant</p> <p>Discussion and STAG-TB recommendations</p>	<p>E. Jaramillo T. Mosidi</p>
15:30– 15:50	Coffee	
15:50-16:20	<p>SESSION 6: Update on actions of the Civil Society Task Force on TB</p>	<p>Civil Society Task Force Members</p>
16:20 -17:20	<p>SESSION 7: Expanding efforts to combat childhood TB</p> <p>Discussant</p> <p>Discussion and STAG-TB recommendations</p>	<p>M. Grzemska F. Amanullah</p>

17:20– 18.20	SESSION 8: Operationalizing research to end TB at the country level Discussant Discussion and STAG recommendations	C. Lienhardt B. Durovni
18:20– 18:30	Summary of the day	I. Abubakar, Chair
18:30– 20:00	RECEPTION - UNAIDS/WHO D Building Cafe	

TUESDAY, 13 JUNE 2017		
Review of policy content of the first WHO Global Ministerial Conference: “Ending TB in the Sustainable Development Era: A Multisectoral Response”		
9:00 – 10:00	Introduction: Conference aim, approach, key outcome areas, declaration process and roadmap 2017-2018 Short comments from UN agency partners on multisectoral action Discussion Conference policy package and introduction to the sessions	M. Raviglione T. Kasaeva A. Maina, UNHCR; P. Dhavan, IOM; A. Detjen, UNICEF; A. Reid UNAIDS D. Weil
10:00 – 10:20	Coffee	
Session 1: Universal health coverage, social protection and addressing the TB determinants		
10:15 – 12:30	Panel: Overview for the thematic area a. Respect for equity, ethics and human rights b. Action on AMR, health security and MDR-TB	M. Uplekar M. Dias K. Weyer

	<p>c. Stepped up TB/HIV response d. Synergies across the responses to TB and non communicable diseases</p> <p>Discussant</p> <p>Discussion and STAG-TB recommendations</p>	<p>A. Baddeley G. Fones</p> <p>I. Abubakar</p>
12:30 – 13:30	Lunch	
Session 2: Increased and sustainable financing		
13:30 – 14:30	<p>Overview of the thematic area</p> <p>Discussant</p> <p>Discussion and STAG-TB recommendations</p>	<p>D. Weil</p> <p>C. Vincent</p>
Session 3: Scientific research and innovation		
14:30 – 15:30	<p>Overview of the thematic area - Background analysis on trends in TB research financing</p> <p>Discussant</p> <p>Discussion and STAG-TB recommendations</p>	<p>C. Lienhardt E. Lessem</p> <p>N.V. Nhung</p>
15:30 – 15:50	Coffee	
Session 4: Multisectoral accountability framework		
15:50 – 16:50	<p>Developing an End TB multisectoral accountability framework</p> <p>Discussant</p> <p>Discussion and STAG-TB recommendations</p>	<p>K. Floyd</p> <p>T. Lwin</p>
Day 2 Wrap - up		

16:50 - 17:00	Summary of the discussions and wrap-up	I. Abubakar
WEDNESDAY, 14 JUNE 2017		
08:30 – 10:30	STAG-TB recommendations review	Chair STAG Members
10:30 -10:50	Coffee	
10:50 – 12:30	STAG-TB recommendations review	
12:30 – 12:45	18th STAG-TB Meeting, 11-13 June 2018 STAG-TB suggestions for the agenda	STAG-TB Members
12:45 – 13:00	CLOSING REMARKS	I. Abubakar Ren Minghui M. Raviglione

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