

Africa Regional Workshop

Strengthening TB Monitoring and Evaluation Systems

April 2024



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Strengthening TB Monitoring and Evaluation Systems

TB DIAH

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This publication was produced with the support of the United States Agency for International Development (USAID) under the terms of the TB Data, Impact Assessment and Communications Hub (TB DIAH) Associate Award No. 7200AA18LA00007. TB DIAH is implemented by the University of North Carolina at Chapel Hill, in partnership with John Snow, Inc. Views expressed are not necessarily those of USAID or the United States government. WS-24-74 TB

Acknowledgments

This report was produced by Monica Pamela, TB Data, Impact Assessment, and Communications Hub (TB DIAH) consultant, and Bridgit Adamou, Senior Monitoring and Evaluation Advisor for TB DIAH and lead organizer and facilitator for the Africa Regional Workshop. Special appreciation goes to Lutugela Nyoni and Mugisha Wilson from the John Snow, Inc. (JSI) Tanzania office for their support with workshop logistics and operations. The event would not have been successful without their help to plan and implement the workshop. We acknowledge the United States Agency for International Development (USAID) for its financial support. In particular, we would like to acknowledge Sevim Ahmedov and Anna Meltzer from USAID/Washington for their contributions to shaping the workshop agenda. We would also like to thank the World Health Organization, Stop TB Partnership, and the Global Fund to Fight AIDS, Tuberculosis, and Malaria for their collaboration. Lastly, we thank those at the USAID/Tanzania Mission, specifically Bhavin Jani, for his help with organizing the training and hosting the event in beautiful Dar es Salaam.

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Suggested citation:

Africa Regional Meeting: Strengthening TB Monitoring and Evaluation Systems. May 2024. TB DIAH, University of North Carolina at Chapel Hill.

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Abbreviations

APPR	Automated Partners Performance Report
CA	Central Asia
DR	drug-resistant
DS	drug-sensitive
DQA	data quality assessment
DQR	data quality review
eCBSS	electronic case-based surveillance system
EEE	Eastern Europe and Eurasia
EMR	electronic medical record
DRC	Democratic Republic of the Congo
HQ	headquarters
IP	implementing partner
JSI	John Snow, Inc.
LF-LAM	lateral flow urine lipoarabinomannan assay
LON	Local Organizations Network
MDR	multidrug-resistant
M&E	monitoring and evaluation
MEL	monitoring, evaluating, and learning
MOH	Ministry of Health
NSP	national strategic plan
NTBLCP	National TB, Leprosy, and Buruli Ulcer Control Program
NTLEP	National TB and Leprosy Elimination Program
NTLP	National TB and Leprosy Program
NTP	national TB program
PBMEF	Performance-based Monitoring and Evaluation Framework
PNLT	Programme National de Lutte contre la Tuberculose (<i>national TB program</i>)
PORALG	President's Office Regional Authority Local Government
POSAF	Pont Santé Afrique (<i>Africa Health Bridge</i>)
Q&A	question and answer

RDQA	routine data quality assessment
TB DIAH	Tuberculosis Data, Impact Assessment, and Communications Hub
TBSR	TB Situation Room
TPT	TB preventive treatment
UN	United Nations
USAID	United States Agency for International Development
WHO	World Health Organization

Executive Summary

Background

The Tuberculosis Data, Impact Assessment, and Communications Hub (TB DIAH) project, funded by the United States Agency for International Development (USAID), aims to ensure optimal demand for and analysis of routine and non-routine TB data and their appropriate use to support interventions, policies, and performance management. TB DIAH has developed several products and resources for improving TB monitoring and evaluation (M&E), one of which is the Performance-based Monitoring and Evaluation Framework (PBMEF). Because the framework is a foundational tool for many—USAID mission staff working on TB, national TB programs (NTPs) and ministries of health (MOHs) tracking progress against country-level TB targets, and implementing partners (IPs) managing USAID’s TB programming—training on the PBMEF’s purpose and application is essential.

To support the rollout of the PBMEF and improve country-level TB M&E, TB DIAH conducted a workshop on TB M&E and surveillance capacity strengthening for 10 countries in the Eastern Europe and Eurasia (EEE) and Central Asian (CA) regions in Tbilisi, Georgia, in November 2022 and again in October 2023. Building off the lessons learned in the EEE/CA workshops, TB DIAH was asked to host a similar workshop in Africa as a practical approach to maximize the number of countries the project can reach with this M&E support.

About the Workshop

The overall purpose of the Africa workshop was to provide an opportunity for country-level TB experts, stakeholders, and technical partners to cross-fertilize M&E experiences and further M&E capacity development in the region. The objectives of the workshop were threefold:

1. Present the updated PBMEF in-depth, describing how the essential list of indicators is incorporated into USAID’s TB portfolios, linked to national strategic plans (NSPs), and aligned with World Health Organization (WHO) indicators, and how the PBMEF and related tools, such as the revised Monitoring, Evaluation, and Learning (MEL) Plan Template, can be used as a performance management resource .
2. Present the new WHO surveillance guidelines and considerations for WHO reporting.
3. Provide the opportunity for collaboration and learning with NTP participants from each country presenting their TB data and sharing TB M&E best practices, challenges, and lessons learned.

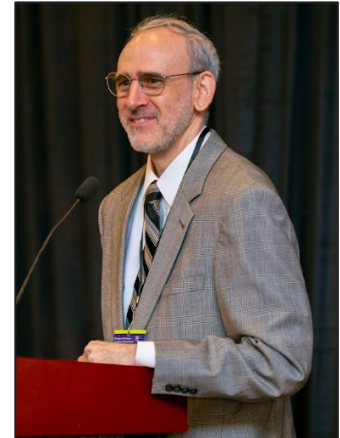
The workshop was held at the Dar es Salaam Serena Hotel in Dar es Salaam, Tanzania from April 16–19, 2024. There were 84 attendees (27 women and 57 men). Half of the participants were from NTPs/MOHs and USAID-funded IPs from the 11 USAID TB-priority countries in Africa (Democratic Republic of the Congo [DRC], Ethiopia, Kenya, Malawi, Mozambique, Nigeria, South Africa, Tanzania, Uganda,



Zambia, and Zimbabwe). The other attendees were USAID mission health office staff, USAID/Washington staff, USAID LEAP advisors, TB DIAH headquarters (HQ) staff, and representatives from WHO, Global Fund, and Stop TB Partnership. The participants attended a mix of lectures/presentations and individual and group activities.

Day 1

The workshop commenced with a warm welcome and opening remarks by Riziki Kisonga, Program Manager for the Tanzania NTP; Alexander Klaitis, Deputy Mission Director at USAID/Tanzania; Sevim Ahmedov, TB/HIV, Prevention and M&E Team Lead, Bureau for Global Health, TB Division at USAID/Washington; and Stephanie Mullen, Director of TB DIAH.



This was followed by session one: TB DIAH Overview of the PBMEF. Participants heard a description of TB DIAH, a five-year global project led by the University of North Carolina at Chapel Hill in partnership with John Snow, Inc. (JSI). The presenter highlighted key tools and resources created by the project and available on TB DIAH's website, such as the Knowledge Hub, Data Hub, Data-to-Action Continuum tool, TB Contact Investigation for Frontline Workers eLearning Course, Center of Excellence in TB M&E, and more.

USAID presented its Global TB Strategy (2023–2030), results framework, and implementation status. Efforts are underway to align the USAID strategy with WHO's End TB Strategy and the United Nations General Assembly targets, particularly in terms of the timeline. The PBMEF was highlighted as a valuable resource for monitoring progress of the strategy and aiding in better TB estimates.

The PBMEF was introduced as a tool to help with indicator collection, reporting, and analysis. Several key updates have been implemented in the latest edition of the PBMEF, including a revised framework, a new essential list of indicators, a standardized indicator reference sheet for all essential indicators, and indicator definitions aligned with evolving global standards and new strategies. All projects receiving TB funds must report on core indicators as outlined in their MEL plans.



TB DIAH introduced the 10 core indicators outlined in the PBMEF. These indicators are prioritized due to their fundamental role in monitoring national high-level indicators and tracking progress towards global targets. A detailed review of the core indicators and their stipulations was conducted, followed by a presentation of the core plus, national, and project-level indicators and extended indicators. The extended indicator list is still under review. Comprehensive indicator reference sheets for the 11 core plus, 16 national, and 30 project-level indicators have been created and approved.

Participants were given an overview of the cascade analysis, which involves the sequential processes of analyzing indicators for identifying, testing, evaluating, and treating individuals with TB. This approach enables stakeholders to assess and improve TB care delivery systematically. While core indicators provide valuable information, they alone are not sufficient for a comprehensive analysis. Emphasis should also be placed on core plus and national indicators to facilitate a more holistic assessment of TB control efforts.

Nigeria's use of cascade analyses has proven instrumental in addressing gaps in TB control efforts. It has also helped improve the country's data quality through deep dive analysis, which has resulted in increased demand and use by all USAID stakeholders. After the cascade analysis presentation, attendees were introduced to a group activity to create a cascade with PBMEF indicators and country data and then analyze the gaps in the cascade.



Day 2

During session two, country representatives shared progress toward NSPs and global targets and highlighted M&E challenges, success stories, and future M&E plans. These updates provided valuable insights into the country's progress, challenges, successes, and plans for future TB control efforts. NTP representatives from 10 countries and an IP representative from Zimbabwe presented updates on their TB control efforts, demonstrating their commitment to implementing strategies guided by the PBMEF, NSPs, and global TB targets.

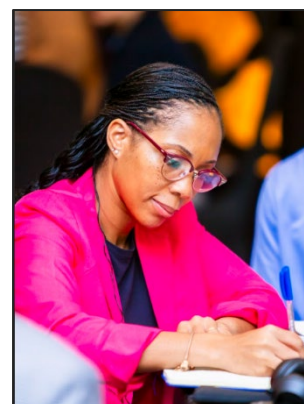


Most countries reported improvements in their TB M&E systems, although many still rely on paper-based systems and are in the process of transitioning to fully electronic platforms. NTPs and IPs are focusing more on data quality, seeking and capitalizing on local partnerships, and using TB data for informed decision making. TB M&E challenges faced by countries include data incompleteness, electricity shortages, limited infrastructure, computer availability, and limited staff availability and capacity for M&E tasks. Despite these challenges, there has been progress in data usage and management.

Day 3

Session three, WHO Consolidated Guidance on TB Data Generation and Use, Module 1 - TB Surveillance, comprised the first part of Day 3. The WHO's guidance is on strengthening TB surveillance efforts to provide accurate measures of new TB episodes and related deaths and monitor trends over time. TB notification data forms the cornerstone of TB surveillance efforts. Improving data recording and reporting practices is crucial to closing the gap in underreporting and ensuring the accuracy of surveillance data.

The WHO provided an overview of the content in the updated 2024 TB surveillance document, pointing out what's new with respect to terms and definitions, reporting frequency, core indicators, methodologies, and the reporting template, along with additional considerations for countries with a case-based digital surveillance system. To reinforce the new information, attendees participated in an online quiz that involved questions related to completing a patient registration card.



Session four was about technical updates from partners. The Stop TB Partnership shared their Global Plan to End TB 2023–2030, with a focus on leaving no one behind. The overarching goal of the plan is to end TB by 2030, aligning with global targets set by the WHO. Prevention has emerged as a priority area within the plan. The plan highlights the crucial role of research and development in advancing TB control efforts, specifically the attention given to vaccine research and the development of new tools, such as artificial intelligence, to enhance TB diagnosis and treatment.



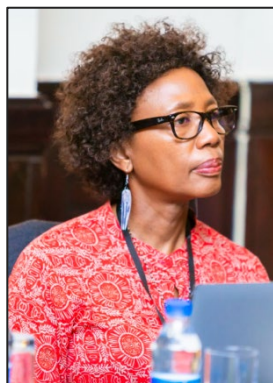
The Global Fund introduced their new strategy, which includes sub-objectives aimed at advancing TB control efforts. The Global Fund Modular Framework was updated with new modules and interventions aimed at addressing emerging TB control priorities and challenges. The framework includes new and updated standard indicators. However, countries are not obligated to increase the number of indicators they report, even if the list of indicators has been expanded.

Session five was about TB DIAH’s country-level initiatives to improve TB M&E. The DRC presented on TB DIAH’s support in the country to strengthen TB M&E capacity. This included conducting a TB M&E training and supporting data review meetings, the operationalization of DHIS 2, and operational research. The presenter stressed the importance of collaborating and working closely with local organizations and IPs.

TB DIAH explained how the project helped launch the Automated Partners Performance Report (APPR) system in Nigeria and conduct data quality reviews. The APPR system is designed to serve as a framework for utilizing the performance management system to monitor the participation of IPs in TB control efforts. Implementation of the APPR system aims to enhance data visibility between ministries and other stakeholders involved in TB control. The presenter shared updates on the implementation phase of the initiative, including what progress has been made and challenges encountered.



Presenters from Nigeria and Zambia presented on how the TB Situation Room (TBSR) has been implemented in their countries. The TBSR helps visualize TB data, providing a clear picture of the current



situation and helping stakeholders assess the effectiveness of different TB strategies. In Nigeria, TB DIAH has supported the use of the situation room to address specific conditions that require immediate attention. Collaboration and communication were highlighted as essential components of the TBSR in Nigeria, enabling stakeholders to work together effectively in addressing TB challenges.

Zambia has four years of experience with implementing a TBSR. Additions to the TBSR are made collaboratively by individuals in the districts, emphasizing the importance of community engagement and participation. The presenter shared initiatives undertaken within the TBSR framework, demonstrating efforts to enhance TB control strategies.

Day 4

Session six focused on improving and ensuring data quality. TB DIAH presented the new MEL Plan Template and Guidance and how the PBMEF indicators are integrated into the MEL plan. The new template was created to standardize TB data collection and reporting, provide guidance on how to integrate PBMEF indicators into MEL plans, and provide more explanations, user-friendly guidance, and resources for users. It contains the MEL plan template with instructions, a sample MEL plan, and a blank MEL plan template. Although USAID does not require IPs with TB funding to use this template, it is strongly recommended and expected.



USAID presented on standards, expectations, norms, and approaches to ensuring data quality in TB programs. Attendees were introduced to a group activity involving a case study related to TB treatment registers. A facilitated discussion followed on how data quality is ensured at the mission, project, and NTP



levels. Various countries shared how they are conducting data quality audits and maintaining high standards of data quality in their TB programs.

The countries reported back on the cascade analysis group work. The presentations provided valuable insights into the effectiveness and utility of cascade analysis in different contexts, highlighting both successes and challenges faced by attendees.

USAID spoke about the direction of TB support in Africa from the USAID perspective. The focus is on advancing the PBMEF and developing an extended list of indicators to enhance M&E. A diverse range of experts should be engaged to enhance collaboration and bring fresh perspectives to TB control efforts.

In closing the workshop, TB DIAH extended heartfelt gratitude to all participants, presenters, partners, and organizers for their valuable contributions and active involvement at the workshop. Attendees were encouraged to visit the [workshop's webpage](#) to access the workshop resources, including photos, presentations, and evaluation forms. Certificates were distributed to the attendees as recognition of their involvement and contribution to the workshop.



Background

The Tuberculosis Data, Impact Assessment, and Communications Hub (TB DIAH) project, funded by the United States Agency for International Development (USAID), is part of USAID’s business model to fight TB: the Global Accelerator to End TB (TB Accelerator). The project aims to ensure optimal demand for and analysis of routine and non-routine TB data and their appropriate use to support interventions, policies, and performance management. To achieve this, TB DIAH supports national TB programs (NTPs) in strengthening TB surveillance systems and improving data use, building capacity to report on countries’ TB Roadmap indicators, strengthening monitoring and evaluation (M&E) skills, and developing and promoting online data resources.

TB DIAH has developed several products and resources for improving TB M&E, one of which is the Performance-based Monitoring and Evaluation Framework (PBMEF). Developed jointly by TB DIAH and USAID, the PBMEF is the cornerstone of USAID’s efforts to ensure effective accountability of its investments in TB at global, regional, and country levels and accelerate progress to end the TB epidemic. Because the framework is a foundational tool for many—USAID Mission staff working on TB, implementing partners (IPs) managing USAID’s TB programming, and NTPs and ministries of health (MOHs) tracking progress against TB targets in their countries—training on the purpose and application of the PBMEF is essential.

To support the rollout of the PBMEF and improve country-level TB M&E, TB DIAH conducted a workshop in TB M&E and surveillance capacity strengthening for 10 countries in the Eastern Europe and Eurasia (EEE) and Central Asian (CA) regions in Tbilisi, Georgia, in November 2022. The workshop brought together over 90 participants and included staff from USAID Missions, NTPs, IPs, World Health Organization (WHO)/Europe, the Global Fund, and TB DIAH headquarters (HQ). TB DIAH organized a follow-up workshop in Tbilisi in October 2023 with seven of the EEE/CA countries, presenting updates to the PBMEF and the new WHO TB surveillance guidelines.

Building off the lessons learned in the EEE/CA workshops, TB DIAH was asked to host a similar workshop in Africa as a practical approach to maximize the number of countries that the project can reach with this needed M&E support.

All the workshop materials (agenda, presentations, photos, PBMEF resources, and evaluation form) can be found on the workshop webpage: <https://www.tbdiah.org/arw2024/>

About the Workshop

The overall purpose of this regional event was to provide an opportunity for country-level TB experts, stakeholders, and technical partners to cross-fertilize M&E experiences and further M&E capacity development in the region. The objectives of the workshop were threefold:

1. Present the updated PBMEF in-depth, describing how the essential list of indicators are incorporated into USAID’s TB portfolios, link to national strategic plans (NSPs), and align with WHO indicators, and how the PBMEF and related tools, such as the revised Monitoring, Evaluation, and Learning (MEL) Plan Template, can be used as a performance management resource.
2. Present the new WHO surveillance guidelines and considerations for WHO reporting.
3. Provide the opportunity for collaboration and learning with NTP participants from each country presenting their TB data and sharing TB M&E best practices, challenges, and lessons learned.

The workshop was held at the Dar es Salaam Serena Hotel in Dar es Salaam, Tanzania from Wednesday, April 16, through mid-day Friday, April 19, 2024. Among the 84 attendees were 27 women and 57 men. Half of the participants were from NTPs/MOHs (which were funded by TB DIAH) and USAID-funded IPs from all 11 USAID TB-priority countries in Africa (Democratic Republic of the Congo [DRC], Ethiopia, Kenya, Malawi, Mozambique, Nigeria, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe). The other attendees were USAID Mission health office staff, USAID LEAP advisors, USAID/Washington staff, TB DIAH HQ staff, and representatives from WHO, Global Fund, and Stop TB Partnership. The participants attended a mix of lectures/presentations and individual and group activities.

Day 1

Welcome and Opening Remarks

The meeting commenced with warm welcome remarks extended to the diverse partnerships and participants from the 16 countries in attendance, particularly the 11 USAID TB-priority countries.

Riziki Kisonga, Program Manager at the Tanzania NTP, kicked off the welcome remarks, followed by **Alexander Klaitz, Deputy Mission Director at USAID/Tanzania**. He extended special recognition to Tanzania for the commendable progress made in reducing TB and expressed appreciation for the transformative work undertaken by TB DIAH.



Sevim Ahmedov, TB/HIV, Prevention, and M&E Team Lead, Bureau for Global Health, TB Division at USAID/Washington, emphasized the importance of understanding how TB acts within socially active environments. He explained that the workshop was going to look at how to systematize and organize the data we have and how to make sense of that data. It would also identify the tools that are available to discuss the data and the M&E frameworks used to help chart it all and have a better grip on what is happening in TB. We would be focusing on aligning the strategies that have been set by the different organizations and forming camaraderie with each other during group activities and discussion time.



Stephanie Mullen, Director of TB DIAH, highlighted that participants would be learning more about inventive systems and approaches. The objectives of the workshop are to ensure data quality measures are set in place, ensure that staff have the tools they need to analyze and use the data, and share experiences, best practices, and lessons learned with the country teams and colleagues from countries across the continent.

Bridgit Adamou, Senior M&E Advisor for TB DIAH, reviewed the workshop format and objectives, laying out what to expect in the days ahead.

Session 1: TB DIAH Overview of the PBMEF

Overview of the TB DIAH Project

Ann Fitzgerald, Deputy Director for TB DIAH, began the session with an insightful overview of TB DIAH, a global project led by the University of North Carolina at Chapel Hill in partnership with JSI, which was established in 2018 and will end in March 2025. Since its inception, TB DIAH has been dedicated to working on surveillance, reporting, and communication strategies to combat TB effectively.



Fitzgerald presented different tools and resources created by the project and available on [TB DIAH's website](#), such as the Knowledge Hub, Data Hub, TB Contact Investigation for Frontline Workers eLearning Course, Data-to-Action Continuum tool, and much more. Fitzgerald showcased TB DIAH's multifaceted approach to TB eradication by introducing the project's various work streams. Attendees were introduced to the virtual Center of Excellence in TB M&E concept, objectives, and function, with an emphasis on [MELVIN](#), a conversational artificial intelligence chatbot aimed at expanding M&E knowledge and enhancing learning experiences in TB.

USAID Global TB Strategy, Implementation Status, and Results Framework

Sevim Ahmedov provided insights into the implementation status and updates on USAID's Global TB Strategy (2023–2030). USAID's mission is to provide high-quality TB technical and development assistance through programs founded on principles of diversity, equity, and inclusion, and implemented in partnership with affected individuals and communities. Its strategic objectives are structured around reaching, curing, preventing, sustaining, and innovating. It was noted that 70–75% of TB funding comes from domestic funds.

Efforts are underway to align the USAID strategy with WHO's End TB Strategy and the United Nations (UN) General Assembly targets, particularly in terms of the timeline. This alignment ensures coordinated and harmonized efforts toward the shared vision of a TB-free world. Scaling up preventive treatment and development of a TB vaccine have been identified as critical needs in TB control efforts. Although there have been some promising developments in vaccine trials, this may still take time.

Attendees were taken through the results framework, including impact targets such as a 35% reduction in the TB incidence rate by 2023 and a 52% reduction in the TB mortality rate by 2030. Ahmedov presented the strategy's modeling trajectories.

The PBMEF was highlighted as a key resource for monitoring TB progress and aiding in better estimates. Ahmedov acknowledged challenges in aligning the PBMEF with M&E sections and NSPs. He suggested sharing any applicable indicators with the team and USAID so they can evaluate them for consideration.



Feedback Session

A USAID participant raised the point that the idea is to use our comparative advantages and work with partners at the Global Fund to provide funds to countries outside the 24 TB-prone countries.

The global impact group discussed revisiting the methodologies for TB estimations. There are some limitations, but if we get the numbers needed to screen, then TB estimates will improve.

The incidence and mortality model is only as good as the data within it. Countries need to focus on strengthening the data provided to the WHO.

Ahmedov cautioned the attendees that they are still taking the PBMEF step-by-step; it's not complete yet.



Introduction to the PBMEF

Meaghan Peterson, TB M&E Advisor at USAID/Washington, introduced the PBMEF, describing its background, updates, and implementation strategy. The PBMEF is governed by the TB Data Special Interest Group, ensuring collaborative oversight and input from stakeholders involved in TB M&E efforts. The framework was first published in 2021 and is undergoing continuous supervision to ensure it remains or stays updated and aligned with evolving global standards and strategies in TB control.



The PBMEF is aligned with guidelines and frameworks set forth by the WHO, USAID's Global TB strategy, the UN High Level Meeting declaration 2023, and country-level targets from the Stop TB Partnership and NSPs.

The PBMEF helps with standardized analysis. In addition, the framework emphasizes the importance of reaching 90% of the people affected by TB, reaching 90% of the key population, and achieving 90% of TB treatment success. The framework provides a set of standardized indicators and indicator cascades.

Several key updates have been implemented in the latest edition of the PBMEF, including:

1. A revised framework
2. A new essential list of indicators
3. A standardized indicator reference sheet for all essential indicators
4. Indicator definitions aligned with the evolving global standards and new strategies

An interim publication focusing on the essential indicator list has been published to provide immediate guidance to stakeholders. A standardized indicator naming convention has also been established, with updated names and definitions outlined on indicator reference sheets to ensure clarity and consistency.

All projects receiving TB funds are mandated to report on core indicators outlined in their MEL plans, reinforcing the importance of aligning M&E efforts with the PBMEF.

PBMEF In-depth, Part 1: Core Indicators

Ezra Tessera, Senior TB M&E Advisor for TB DIAH, provided a detailed overview of the core indicators. While adherence to including the core indicators is mandatory, countries have the flexibility to include additional indicators as deemed necessary for their specific contexts.

There are a total of 10 core indicators outlined in the PBMEF, each serving as a vital metric for tracking TB control efforts. The core indicators are prioritized due to their fundamental role in monitoring national high-level indicators and tracking progress towards global targets. A detailed review of the 10 core indicators and their stipulations was conducted during the session. Attendees gained a deeper understanding of each indicator's significance, methodology, and implications for TB control efforts.

Tessera provided insights into the TB Indicator Compendium, which serves as a comprehensive resource for TB indicators. Any changes or updates in diagnostic and therapeutic practices are reflected in the compendium, ensuring alignment with evolving standards and strategies.



Feedback Session

Concerns were raised regarding the differences and similarities between the terms “notified” and “treated” as used interchangeably by different entities. Tessera emphasized the importance of maintaining consistency between the PBMEF and WHO and clarified that people who are notified don't necessarily count as the people treated. Attendees emphasized the need for better alignment to ensure clarity and consistency in reporting practices. They also emphasized the need for clarity on the definitions of “diagnosed” and “notified,” as their interpretations vary across countries. Establishing a standardized definition will ensure consistency in reporting practices.



Attendees highlighted the importance of shifting focus from enrollment alone to include diagnostic and enrollment processes. With the advancement of the PBMEF, there is a need to consider a more comprehensive approach to TB case management.

Zambia discussed the importance of capturing both identified cases and treatment data to provide a complete picture of TB incidence and management. They emphasized the need to integrate these aspects into reporting practices effectively. The Zambians stated that they identify the number of cases. If you only track treatment data, your ledger is incomplete.

South Africa shared their experience of using electronic systems to capture and report TB notifications at the facility level. The development of an app by the National Institute for Communicable Diseases Unit has facilitated streamlined data collection and reporting processes, capturing facility-level information for both forms of TB. South Africa has been using the registered cases as a proxy for notifications. The decision was to use the electronic system to take the information and report it as notifications.

There are challenges in meeting targets for core indicators, particularly in Zambia and Nigeria. Attendees shared insights into the complexities involved in achieving set targets and the need for realistic goal-setting. In Kenya, the targets for the second indicator are based on what percentage of the patients should be and what is available in the publications. In Zambia, target setting for the second core indicator was difficult. They picked 70% as the target, but only got to 50%. In Nigeria, it is 80%.

PBMEF In-depth, Part 2: Core Plus, MEL National, and Project-Level Indicators

Kola Oyediran, Senior M&E Advisor for TB DIAH, went through the core plus, national, and project-level indicators and the extended indicators. The core plus indicators are aligned with the strategic plan to treat, cure, prevent, and sustain. These indicators include the WHO variable for alignment purposes only.

The extended indicator list is still under review. According to USAID requirements, indicators must be unambiguous and clear. A comprehensive indicator reference sheet for the 11 core plus, 16 national, and 30 project-level indicators has been created and approved by USAID and the Special Interest Group.

Oyediran introduced the indicator cascade approach and illustrative mapping of the drug-sensitive (DS)-TB and drug-resistant (DR)-TB indicators.

Oyediran also walked through the Excel-based PBMEF indicator matrix and the indicator reference sheet's anatomy. The matrix can be navigated by strategic objectives or PBMEF levels. The PBMEF indicator list has been completed by indicator level for ease of navigation of the indicators.

The session provided attendees with a deeper understanding of the intricacies involved in interpreting core indicators within the PBMEF framework. By clarifying the variability in numerator and denominator variables, the speaker empowered attendees to utilize these indicators effectively in their monitoring and evaluation practices.



Feedback Session

Question: Should lateral flow urine lipoarabinomannan assay (LF-LAM) tests for rapid diagnostic testing be included when referring to core indicator 4 (TB detection rate) on USAID-funded projects?

Answer: Yes, LF-LAM should be used and backed up with molecular testing because it produces many false positives.

Question: Does the numerator need to include all types of tests done or at least one of the two?

Answer: Just one test is needed.

Question: How do we provide the disaggregation for drug susceptibility test coverage?

Answer: The coverage disaggregation can be provided by types,

especially for those who are tested by machines. Indicator reference sheets contain detailed information and should be referred to for further clarification.

One attendee noted that for the national-level indicators, there is a correction needed on the age range considered for disaggregation because it leaves out 15-year-olds. Oyediran clarified that the online PDF version of the indicator list is the definitive version and includes the amended age range.

Overview of the PBMEF Guide: Basic Principles of Cascade Analyses Using PBMEF Indicators

Joseph Kuye, Senior TB Surveillance Advisor for TB DIAH/Nigeria, spoke about the PBMEF Guide, focusing on the basic principles of cascade analyses using PBMEF indicators and sharing insights from Nigeria's experience. He emphasized the basic principles for understanding the PBMEF indicators: understand the program you are dealing with, and make sure the data is available.



Kuye explained that a practical cascade analysis involves the sequential processes of analyzing indicators for identifying, testing, evaluating, and treating individuals with TB. This approach enables stakeholders to assess and improve TB care delivery systematically. To ensure the effectiveness of cascade analyses, efforts must be made to establish systems for aggregated data collection, conduct regular data reviews, and develop a deep understanding of the indicators used.

While core indicators provide valuable information, they alone are not sufficient for a comprehensive analysis. Emphasis should also be placed on core plus and national indicators to facilitate a more holistic assessment of TB control efforts.

Nigeria has a longstanding history of utilizing cascade analyses, with formal implementation of the tool initiated in 2019. Since then, it has proven instrumental in addressing gaps in TB control efforts. To fill these gaps, they've brought in another matrix to use alongside the cascade. As a result, the NTP has adopted new strategies such as instituting a TB cascade review meeting and conducting performance review meetings,



which have led to onsite data quality assessments (DQAs) and the sharing of best practices. They've also used benchmarks to optimize performance, improve efficiency, and facilitate peer review among the states.

Cascade analysis has helped improve their data quality through deep dive analysis and has resulted in increased demand and use by all USAID stakeholders. They have moved forward beyond the cascade analysis to bring innovations that have added value to it.

Feedback Session

Question: In the strategy highlighted, for the 90% cases detected, is the 75% bacteriologically confirmed the same indicator?

Answer: It is a different indicator and is included in the list of core indicators. It was added there because it is mentioned in the strategy. The WHO-

recommended diagnostic metric that is mentioned in the strategy refers to the initial diagnostic test in the national algorithm.

Question: On TB financing, “expected” was changed to “expenditure data.” Why, and how easy is it to get that data?

Answer: Both are still standard indicators in the WHO questionnaire. There is a lot of uncertainty with this data and by using an expected value we were adding to that ambiguity, so we wanted to remove that uncertainty.

Question: For the TB preventive treatment (TPT)-related indicator, changes must consider the context here. Are you presenting the changes, or do the HIV-related TPT indicators go in together?

Answer: It’s an upcoming change that has not yet been made yet. It is meant to align with the strategy and the context.

A participant pointed out that there is a slight difference between the WHO number of confirmed cases and the ones presented here. However, the PBMEF is aligned with the WHO so it must be a mistake and will be rectified.

Group Activity: Creating a Cascade with PBMEF Indicators and Analyzing Gaps in the Cascade

Anna Meltzer, TB Country M&E Advisor at USAID/Washington, and **Ezra Tessera** facilitated an engaging group activity focused on creating cascade analyses and analyzing gaps using PBMEF indicators. The session aimed to provide participants with a hands-on opportunity to apply PBMEF indicators to their country data.

Day 2

Rebeca Briceño-Robaugh, TB Strategic Information Technical Advisor at USAID/Washington, provided a recap of Day 1. Attendees were reminded that the meeting was not solely about collecting more data but rather about systematizing existing data. The emphasis of the first day was on the PBMEF and related indicators. Day 2 would focus on the priority country’s TB situations.



Session 2: Country Updates: Progress towards NSPs, Global Targets, M&E Challenges, Success Stories, and Plans



DRC

Colette Kinkela Bedi, M&E Advisor for the DRC NTP (Programme National de Lutte contre la Tuberculose [PNLT]), said that DRC reported a 5% increase in TB cases. However, 95% of these cases were successfully treated, indicating significant progress in treatment outcomes.

The PNLT’s NSP is supported by an M&E plan to ensure the effective utilization of national TB data. Strategies to improve TB data use include monthly data reporting, quarterly meetings in each province, regular

capacity building activities, routine data quality assessments (RDQA), and an M&E task force. Challenges include weak M&E funding, low data quality, and a lack of electronic medical records (EMRs) for TB patients.

An increase in the utilization of TB treatment was identified as a positive trend, indicating improved access to TB care and treatment services. TB notifications, including pediatric TB notifications, have significantly increased each year from 2018–2023.

MOZAMBIQUE

Raimundo Machava, M&E Team Lead at the Mozambique NTP, said that they have set targets for pediatric TB and multidrug-resistant (MDR)-TB, demonstrating a commitment to addressing specific challenges within these areas of TB control. However, there was an unfortunate increase in MDR-TB cases, signaling a need for intensified efforts to combat drug-resistant strains of TB.

In 2023, Mozambique updated its NTP M&E tools, resulting in improvements to the national TB M&E system. They have also piloted the DHIS Tracker (SIS TB), implemented an advanced data analytics platform (PAAD) at the provincial level, and conducted monthly online data analysis meetings with the provinces.

Machava acknowledged staffing challenges in Mozambique’s TB program and some data quality issues. The NTP has outlined strategies aimed at effectively utilizing TB data, including measures to improve data quality, strengthen data management systems, and enhance the capacity of healthcare workers in data collection and reporting.



SOUTH AFRICA



S'celo Diamini, Director of Research, Information, M&E and Surveillance for the South Africa NTP, said that South Africa is among the 30 high-TB burden countries contributing 87% of the global TB cases in 2022.

Significant changes and improvements were made to the national TB M&E system, such as developing electronic surveillance systems and targets, implementing WHO-recommended rapid diagnostics, and successfully monitoring adverse events on TB treatment. South Africa has aligned with the End TB Strategy 2035 as part of the Sustainable Development Goals. TB is also reflected in the country’s National Development Plan 2030 as one of the diseases to eliminate to increase life expectancy.

Diamini presented common challenges in South Africa related to technology: delays in capturing data in surveillance systems, incorrect indicator algorithms in the three interlinked electronic registers resulting in misclassifications, electricity load-shedding that corrupts information during electricity outages, and not enough computers in some basic management units.

Diamini shared South Africa’s vision for the future of data-driven TB control, highlighting plans for

community-based monitoring systems, using a real-time electronic surveillance system, and national implementation of the EMR and a single database for South African citizens.

Plenary Question and Answer (Q&A) Discussion with the Three Presenting Countries

South Africa highlighted the establishment of the TB Think Tank by the NTP, which serves as an objective entity responsible for TB research. The Think Tank reports to the NTP and provides advice and guidance on TB-related matters.



The National Health Department in South Africa oversees the management of data sharing between laboratories and healthcare facilities.

South Africa introduced a new EMR system linked to the National Health Repository, aiming to implement the “one patient, one record” initiative. The EMR system seeks to provide unique identifiers for individuals, improving data management and patient care.

Diamini highlighted challenges with TB screening, particularly those related to migration issues. Despite efforts to screen everyone, migration poses challenges as individuals may restart the TB detection process upon relocation. To address this, South Africa has initiated collaboration with

SADEC (Southern African Development Community) countries, facilitating joint TB initiatives and enhancing coordination in TB control efforts across borders.

South Africa implemented a concentrated service delivery approach during the COVID-19 pandemic, with services provided at centralized locations. A data recording tool was deployed, enabling direct transmission of data into the system and ensuring the continuity of TB services amidst the pandemic.

Surveillance activities were conducted from 2019 to 2021, facilitating the monitoring and tracking of TB incidence and trends. Although TB incidence is reported to the WHO, showing regional data, provincial-level data is lacking, highlighting the need for improved data disaggregation and localization.

DRC reported no disparities between its data and that provided by WHO, indicating alignment and consistency in reporting mechanisms.

To ensure comprehensive data coverage, DRC integrates data from multiple sources, including DHIS 2 and laboratory data, enabling the capture of all relevant indicators for TB surveillance and monitoring.

DRC employs two main data systems, namely TIER.net and EDR.web, to manage data quality. However, concerns were raised regarding data loss in TIER.net if information is not dispatched promptly.

Bedi commented that the tools used for data management are not solely dependent on the TB program; instead, they rely on inputs from the HIV program. Additionally, procuring these tools requires financial allowances. DRC faces challenges related to the coverage of the HIV program, which impacts the effectiveness of data management initiatives.



Mozambique utilizes the community-centered TB Strategy to manage individual patients. Because this strategy operates independently of labs, Mozambique has implemented additional tools to facilitate the linkage of data between patient management and laboratory services.

Mozambique faces challenges with data quality, particularly concerning numerical accuracy in report generation.

MALAWI

Kuzani Mbendera, Deputy Program Manager at the Malawi National TB and Leprosy Elimination

Program (NTLEP), said the goal of Malawi's NSP is to reduce TB incidence by 50% and mortality by 75% from 2015 to 2025. As of 2022, the TB incidence has declined by 37% and is on track to meet the 2025 target.

Malawi primarily relies on a paper-based system for data management, although EMRs have been implemented in 30 high-volume health facilities.

Mbendera showcased Malawi's data collection systems, providing an overview of the methodologies and tools used to gather TB-related data at various levels of the healthcare system. The country has standardized TB tools and guidelines and uses a balanced scorecard at the district level.

Some of the challenges are tracking inter-facility referrals, patient categorization diagnosed through LF-LAM, and limitations with the subnational TB burden estimate.



TANZANIA

Robert Balama, TB Data Manager at Tanzania's National TB and Leprosy Program (NTLP)



provided an overview of the burden of TB within the country. TB contributed to 41% of all HIV deaths in Tanzania.

Balama reported that they are on track to achieve the milestones outlined in the NSP, demonstrating progress in TB control efforts.

Tanzania integrated their Electronic TB & Leprosy Register with DHIS 2 country wide. However, the system is not yet operable with the EMR. Data entry is mainly done by a district-level manager, and few facilities can enter data into DHIS 2 Electronic TB & Leprosy Register.

Balama outlined the NTLP's plans for future TB control efforts, which included capacity building, RDQAs, and interoperability with EMR and other systems.

ZAMBIA

Mushota Kabaso, National M&E Advisor for the Zambian NTP, presented the reduction rate of HIV/TB co-infection from 2018 to 2022, demonstrating progress in addressing the intersection between HIV and TB. He outlined strategies for effectively utilizing TB data, emphasizing the importance of data-driven decision making in TB control initiatives.

Improvements to the national M&E system include complete migration to web-based reporting of all TB data, using DHIS 2 for aggregate TB notifications and program data, and using a patient-level EMR system for DR-TB that is fully interoperable with DHIS 2.

Mushota shared how they utilize the national TB data to inform policymaking, program planning, and resource allocation for TB control efforts. However, there are challenges with data quality, incomplete integration of digital reporting systems, internet problems, and staff attrition.



Plenary Q&A Discussion with the Three Presenting Countries

Zambia stated that the private sector plays a significant role in TB data reporting, contributing core data that is entered into the national system. They conduct data assessments on a quarterly basis, with a realistic frequency of three times a year. DHIS 2 has been implemented for five years. Data entry occurs at the facility level, with counting facilities sending their data to facility offices for upload.

Kabaso noted an increase in TB cases and emphasized the importance of timely data retrieval. Data is retrieved weekly, ensuring up-to-date information for monitoring and responding to changing TB trends.

Malawi has witnessed changes in its TB incidence rates, and there has been a decline in HIV-positive cases. They introduced the use of Scanform, a proprietary tool developed by QED. It was initially piloted by the HIV program. Scanform boasts an accuracy rate of over 95%.

Mbendera highlighted the significance of scorecards in TB control initiatives. These scorecards extend beyond mere case-finding.



Tanzania highlighted the accessibility of TB data, emphasizing that it can be accessed from anywhere as long as the user has the credentials. This ensures that stakeholders can access timely and relevant data to inform decision making and programmatic interventions.

The NTLP plays a critical role in the supply chain management of TB-related reagents and medicines. These essential supplies are distributed to both facilities, ensuring the availability of necessary resources for TB diagnosis and treatment.

Balama discussed the integration of laboratory data, particularly for past TB patients diagnosed via GeneXpert. However, there is currently no system in place to track individuals tested microscopically.

Tanzania utilizes scorecards with 12 indicators across five thematic areas in its TB control efforts. These scorecards cover all marginal areas, providing a comprehensive assessment of program performance and outcomes.

Balama mentioned the availability of other surveys, such as the TB Household Contact Survey, which targets families affected by TB. These surveys complement existing data collection efforts, providing valuable insights into TB transmission dynamics and household-level interventions.

ETHIOPIA

Taye Letta, Manager at the Ethiopia NTP, presented that multiple and complex challenges in Ethiopia resulted in the first increase in TB burden after two decades of decline. From 2021 to 2022, TB incidence increased by nearly 6%. During that time, TB mortality increased by over 6%. Ethiopia has achieved national and global targets for TPT for people living with HIV but is struggling to reach the TPT for contacts targets. Notified TB cases, TB treatment coverage, and DR-TB treatment coverage have all improved in recent years. Notable variations in TB burden and persistently high TB notification zones form a belt of high-transmission areas in the country.



Ethiopia uses DHIS 2 and the MDR-TB tracker electronic reporting systems; however, data sources are still paper-based. There are plans to expedite the transition from paper-based to electronic data collection, with the goal of having a completely digital case-based TB reporting and surveillance system by 2030.

Letta outlined strategies for effectively utilizing national TB data, emphasizing the importance of data-driven decision making in TB control initiatives. Ethiopia developed a TB and leprosy M&E training manual for facility and program managers and conducted RDQAs in 207 health facilities.

ZIMBABWE



Ngobile Mlilo, Senior M&E Officer with the TB Local Organizations Network (LON) Project, explained that because a representative from Zimbabwe's NTP was unable to attend the workshop and clearance to use the data was not granted by the health authorities, the emphasis of the presentation would be on the role of TB partners in Zimbabwe.

The key indicators point to the dual burden of TB/HIV and MDR-TB, a decline in TB incidence, increasing mortality, and low treatment coverage.

TB partners focus on four key areas: improved access to high-quality, person-centered care; strengthened service delivery platforms; reduced disease transmission and progression; and accelerated research and innovation.

Some of the partners' strategies for using TB data include capacity building, ensuring availability of recording and reporting tools with adequate job aides, conducting district-level performance review meetings, supporting RDQAs, providing technical support in resource mobilization, and the development of policies and guidelines, such as the "Making Sense of TB Data" guide.

UGANDA

Vincent Kamara, Data Manager for the Uganda NTLP, highlighted the country's persistently high rates of HIV-TB co-infection. Uganda reported a reduction in TB fatality rates in 2023, demonstrating progress in improving TB treatment outcomes and reducing mortality.



Strategies for using data include DHIS 2 dashboards; regular meetings for performance review, data harmonization, and planning; and an annual stakeholders conference and scientific symposium.

Kamara showed the commitment from the Office of the President to mainstream TB control efforts across the country, highlighting high-level political support for TB control initiatives.

The national TB M&E system has been improved with a DHIS 2 upgrade, new electronic case-based surveillance system (eCBSS) for TB and leprosy, electronic dashboards, and systems for monitoring community TB interventions. The eCBSS dashboard shows case-level data coverage and utilization throughout the country with weekly summary reports.

Since 2020, treatment coverage, DS-TB treatment success rate, notifications, and RR/MDR-TB notifications have been improving with some declines from 2022 to 2023.

Plenary Q&A Discussion with the Three Presenting Countries

Ethiopia stated that the data quality assurance program is supported by USAID and has been implemented in most facilities. Most of their indicators have been influenced by improvements in data quality. At the national level, they have established an M&E taskforce responsible for conducting data analysis for the districts. This centralized approach helps in synthesizing and interpreting TB data to inform strategic decision making and programmatic interventions. Letta shared plans to increase the level of molecular tests, particularly GeneXpert, aiming to reach 900 tests this year.

Letta highlighted the presence of numerous district and regional facilities involved in TB control efforts and the existence of a national-level task force focused on coordinating TB control activities and initiatives.

LON Zimbabwe supported the revision of monthly health facility report forms which have been printed and distributed. The reports include indicators on TPT eligibility and initiations as well as TPT outcomes for TB contacts and clients with silicosis.

Nigeria

Obioma Chijioke-Akaniro, M&E Manager, Global Fund Program Management Unit at the National TB, Leprosy, and Buruli Ulcer Control Program (NTBLCP), said Nigeria reported a rapid drop in the TB mortality rate, indicating significant progress in reducing TB-related deaths. This achievement reflects the effectiveness of TB control interventions, improved access to TB diagnosis and treatment services, and strengthened healthcare systems.



Nigeria has put several strategies in place for effectively using national data. This includes increasing partnership coordination and multisectoral engagement, conducting data review meetings, scaling up best practices, revitalizing non-reporting facilities through supportive supervision, doing a deep-dive analysis of the data, and triangulating the data at different levels.

Chijioke-Akaniro highlighted improvements in the TB treatment coverage rate, indicating increased access to TB treatment services among affected populations.

Kenya

Aiban Ronoh, Head of the M&E and Research Unit and Global Fund Project M&E Officer at the Kenya



NTP, presented that while TB incidence and mortality have been steadily decreasing since 2015, the pace of progress needs to increase to reach the 2030 Sustainable Development Goals and End TB 2035 targets.

Kenya has implemented several strategies for effective TB data use such as standardized reporting for ease of data analysis at all levels; digitization of routine reporting for case-based data collection; data dashboards on the NTP site, such as a TB reporting platform known as TIBU, which captures case-based data; health worker capacity strengthening; and RDQAs.

Some of the NTP's challenges are limited capacity in data analysis, use, and communications; unstructured target setting; low coverage of TB mortality audits; and infrequent impact surveys and assessments. Plans are under way to fully digitize Kenya's health data. The TIBU architecture is being upgraded and the M&E tools will be revised in 2025.

DR-TB notifications and bacteriologically confirmed pulmonary TB decreased from 2020 to 2023. However, TB treatment coverage, TB notifications, and childhood TB notifications increased during that period.

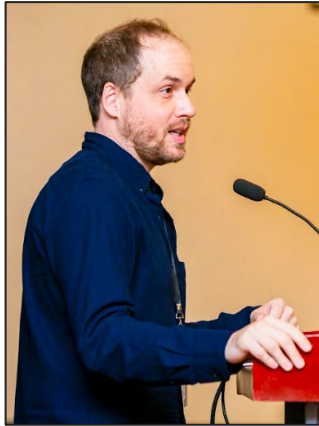
Day 3

Yewulsew Kassie, Senior Infectious Disease Advisor at USAID/Ethiopia, provided a recap of Day 2, where representatives from 11 countries presented updates on their TB control efforts, demonstrating their commitment to implementing strategies guided by the PBMEF and national guidance plans. Kassie highlighted the need for coordination and communication among countries to facilitate collaboration and knowledge-sharing in TB control efforts. While countries have made strides in developing guidance and systems for TB control, there is still work to be done to improve infrastructure and facility capacity.



Session 3: WHO Consolidated Guidance on TB Data Generation and Use, Module 1: TB Surveillance

Setting the Scene



Marek Lalli, TB Technical Officer for the WHO Global TB Program in Geneva, Switzerland, presented WHO updates. During this introductory session, Lalli said the focus of WHO’s guidance was on strengthening TB surveillance efforts to provide accurate measures of new TB episodes and related deaths and monitor trends over time. Lalli emphasized that TB notification data forms the cornerstone of TB surveillance efforts. Improving data recording and reporting practices is crucial to closing the gap in underreporting and ensuring the accuracy of surveillance data. The vision for the TB surveillance system is to establish a unified digital case-based environment for TB surveillance.

The attendees were informed that there is a global TB report book and mobile application available that allow easy access to all this data.

Lalli discussed the common problems and solutions and referred to the TB Surveillance Web Annex A.

Guidance on TB Surveillance

Lalli introduced new terms and updated definitions relevant to TB surveillance, ensuring clarity and consistency in terminology used across TB surveillance systems. The updated terms are as follows:

- Relapse → now *recurrent*
- Retreatment → now *re-registered* (for treatment)
- New or relapse → now *new episode*

The definitions remain the same as the previous definitions and reporting framework.

There are updated definitions for case outcomes, some treatment outcome categories for DS-TB and DR-TB, and patients transferred onto a new treatment regimen.

Lalli explained the differences in the reporting frequency: rapid, regular, or consolidated. WHO has a core set of TB surveillance indicators for all countries, irrespective of what data collection system is in place in the country. The indicator, “people requiring treatment for TB disease,” has been updated.

Countries with case-based digital surveillance systems were provided with additional considerations and guidance tailored to their specific needs.

New methodologies to enhance TB surveillance practices were introduced.

Lalli presented a standardized reporting template to facilitate consistent and uniform reporting of TB surveillance data across different settings and systems. The revised template has updated language, new age disaggregations, and new and updated data reporting blocks.



The session highlighted the importance of staying updated on the latest guidance and methodologies in TB surveillance to ensure the effectiveness and reliability of surveillance systems in tracking TB trends and informing public health interventions.

Feedback Session

Question: The treatment outcomes for DS-TB and DR-TB have been harmonized, but does that include the definition for “cure”?

Answer: They are the same, but there is a difference in measuring the last test for conversion.

Question: How do we handle all the changes made?

Answer: It will take time to adapt and include these changes, and yes, your treatment success rate will go down, but it will help motivate you to start the initial treatment with the right treatment.



Question: Were there consultations and discussions with countries that will be implementing these changes? We have the understanding that these changes will have implications at the health facility level, demanding huge resources and disrupting the progress we have been making. Is it necessary to make these changes, and when do you plan to implement this in supporting countries?

Answer: Yes, the WHO consulted with countries before updating the consolidated guidance. The plan is that implementation will be rolled out by country according to your

priority. We will not push you to implement this overnight. I don't think the changes are that major, but yes, it will require changes to paper and digital systems along with training.

Question: When you say “case,” do you mean that we should refer to each patient tested as a case?

Answer: We are only using “case” in the epidemiological sense, not the person.

Question: Can you please clarify the denominator for the cure or treatment completed and case outcomes?

Answer: The denominator should be the same for both the treatment and case outcome.

Question: Why use the term “new episode” to replace “new relapse”?

Answer: We thought it was simpler to say “new episode of TB” rather than always saying “new relapse.”

Question: With case outcomes, in Uganda, we notify you when you are in the case register, but with this clarity on case outcomes, would you recommend that we look at our lab diagnostic tools? Would that be considered a registered case, or do you still recommend that we should be in the TB register?

Answer: All people diagnosed with TB should be in the TB register, regardless of starting treatment or not.



Completing a Patient Registration Card

In this session, Lalli engaged attendees in an activity focused on completing a patient registration card. The activity aimed to provide practical experience in implementing the guidance outlined in the WHO Consolidated Guidance on TB Data Generation and Use. To further reinforce understanding and retention of the guidance, attendees were prompted to scan a QR code and participate in the online quiz, answering nine multiple-choice questions related to the updates from the previous session.

Current and Upcoming Digital Products to Support TB Surveillance and Program Planning

During this session, Lalli informed participants about current and upcoming digital products designed to support TB surveillance and program planning. DHIS 2 is a digital health information system widely used for health data management. DHIS 2 facilitates the collection, analysis, and visualization of health data, including TB surveillance data. Participants learned about the features and functionalities of DHIS 2, particularly TB registers (case-based) and TB reporting forms (aggregate data), and the system's



significance in improving TB surveillance activities. Lalli compared the different data storage systems, highlighting the differences. Attendees gained insights into how digital systems offer advantages in terms of data storage, accessibility, and analysis.

Attendees were briefed on planned updates for DHIS 2, scheduled to ensure alignment with the PBMEF. These updates aim to enhance DHIS 2's functionality in supporting TB surveillance and program monitoring efforts.

An upcoming digital product to support program planning was discussed, albeit at a conceptual stage. This product is expected to collect data from multiple sources and visualize that data on a series of dashboards. It aims to provide comprehensive insights for informed decision making in TB program planning and implementation.

Session 4: Technical Updates

Stop TB Partnership: Global Plan to End TB 2023–2030—Leave No One Behind

Enos Masini, Senior TB Advisor at Stop TB Partnership, briefed attendees on the Stop TB Partnership's Global Plan to End TB 2023–2030, with a focus on leaving no one behind. The overarching goal of the plan is to end TB by 2030, aligning with global targets set by the WHO. Prevention has emerged as a priority area within the plan. Masini underscored the importance of implementing robust prevention strategies to reduce TB incidence and transmission rates.

Masini emphasized system enablers, including strengthening health systems, improving access to quality healthcare services, and enhancing TB surveillance and monitoring mechanisms.



The plan highlights the crucial role of research and development in advancing TB control efforts. Special attention is given to vaccine research and the development of new tools, such as artificial intelligence, to enhance TB diagnosis and treatment.

Masini acknowledged challenges related to data collection, stressing the significance of collecting accurate and timely data to inform TB interventions effectively. Collecting data on presumptive TB is also important for surveillance and monitoring, along with comprehensive data collection approaches. The Global Plan outlines a comprehensive set of policy interventions aimed at addressing various aspects of TB prevention, diagnosis, treatment, and care.

A gap in addressing TB recovery among men was highlighted, signaling the need for targeted interventions to ensure equitable access to TB services across gender lines.

Praise was extended to the TB Think Tank initiative in South Africa, which serves as a model for collaborative TB research and policy development. But there is also a need to figure out how to effectively utilize TB data to communicate with non-TB stakeholders, which relates to the importance of advocacy and awareness-raising efforts.

Masini concluded with a discussion on the availability of resources for implementing the Global Plan.

Global Fund: Overview of the New and Updated Indicators in the Global Fund Modular Framework

Nnamdi Nwaneri, TB Surveillance and M&E Focal Point for the Global Fund, briefed attendees on the new and updated indicators in the Global Fund Modular Framework. The Global Fund introduced a new strategy that includes sub-objectives aimed at advancing TB control efforts. Emphasis was placed on prioritizing prevention strategies to reduce TB incidence rates.

Nwaneri highlighted the evolving nature of the TB landscape and emphasized the need for adaptability and agility in response to emerging changes. He addressed why the Global Fund Modular Framework was updated, underscoring the importance of aligning with evolving global TB control priorities and strategies.

Attendees were briefed on the introduction of new modules and interventions within the framework, aimed at addressing emerging TB control priorities and challenges. Nwaneri presented the handbook, outlining the key components of the Global Fund Modular Framework and providing guidance on TB program essentials and indicator selection.

Nwaneri provided an overview of the new and updated list of indicators included in the Global Fund Modular Framework, highlighting their relevance to monitoring and evaluating TB program performance.



Feedback Session

Nwaneri affirmed support for the creation of new tools to enhance TB surveillance and data generation efforts.

He clarified that we have standard indicators for the modules. When concerns were raised about the potential burden of increased indicator requirements, Nwaneri reassured attendees that countries are not obligated to increase the number of indicators they report, even if the list of indicators has been expanded.

It was highlighted that the board has decided to include at least one community, rights, and gender-related indicator in every grant, emphasizing the importance of this indicator.

While indicators are essential for monitoring TB program performance, they are not solely used for performance monitoring purposes. Rather, they serve multiple functions.

Even if a country does not have a Resilient and Sustainable Systems for Health grant, relevant indicators must still be included from the Resilient and Sustainable Systems for Health module.



Session 5: TB DIAH Initiatives to Improve TB M&E at the Country Level

TB DIAH Support in the DRC: Strengthening TB M&E Capacity



Henriette Wembanyama, President of Pont Santé Afrique (POSAF) in the DRC, provided updates on various TB DIAH initiatives aimed at strengthening TB M&E capacity in the country via four workstreams: train TB stakeholders in M&E, support data review meetings, support the operationalization of DHIS 2, and support operational research. She presented on the national and provincial data review that POSAF conducted with TB DIAH's financial and technical support, emphasizing the importance of regular reviews to ensure data accuracy and reliability.

Data quality reviews (DQRs) were conducted, the annual TB report was printed and disseminated, support was provided for DRC's online platform for data storage, and operational research was conducted.

Various data collection mechanisms were implemented in the DRC, highlighting their effectiveness in capturing essential TB-related information. The session concluded with Wembanyama emphasizing the importance of collaboration and working closely with local organizations and IPs.

TB DIAH Nigeria: Launching the Automated Partners Performance Report (APPR) System DQR



Abiodun Hassan, TB DIAH/Nigeria Team Lead, explained how TB DIAH supported the APPR and DQR in Nigeria. The initiative commenced in 2021 and is scheduled to conclude in September 2024. The speaker emphasized that the APPR system is designed to serve as USAID Nigeria’s HIV and TB team’s system of record, which is utilized in the performance management of IPs providing HIV, AIDS, TB, and COVID-19 services to clients all over Nigeria. It helps monitor the participation of partners in TB control efforts. Implementation of the APPR system aims to enhance data visibility between ministries and other stakeholders involved in TB control. Hassan provided a snapshot of the development process of the APPR system, outlining key stages and milestones achieved.

Hassan shared updates on the implementation phase of the initiative, including progress made and challenges encountered. Hassan spoke about the available interventions within the APPR system’s framework to improve TB data quality and enhance performance monitoring.

Nigeria and Zambia NTP: Implementing a TB Situation Room (TBSR)

Obioma Chijioke-Akaniro and **Mushota Kabaso** presented on how the TBSR has been implemented in Nigeria and Zambia.

Nigeria: Chijioke-Akaniro emphasized how Nigeria’s TBSR helps visualize TB data, providing a clear picture of the current situation. She showcased how data visualization can influence decision-making processes and drive actions based on real-time insights.

Chijioke-Akaniro highlighted Nigeria’s approach to linear data review within the TBSR, facilitating comprehensive analysis and understanding of the TB situation. She also expressed the importance of visualizing data based on various interventions, enabling stakeholders to assess the effectiveness of different strategies. Collaboration and communication were highlighted as essential components of the TBSR, enabling stakeholders to work together effectively to address TB challenges.

Zambia: Kabaso provided insights into Zambia’s four-year experience with the TBSR, demonstrating its longevity and continued relevance in TB control efforts. He mentioned that additions to the TBSR are made collaboratively by individuals in the districts, emphasizing the importance of community engagement and participation.

Kabaso shared initiatives undertaken within the TBSR framework, demonstrating efforts to enhance TB control strategies. He underscored the importance of contact tracing in TB control efforts, highlighting its role in identifying and managing potential TB cases.



Feedback Session



The TBSR serves as a surveillance tool in Zambia, with a significant impact observed among health workers.

In Nigeria, the situation room is utilized to address specific situations that require immediate attention. Different dashboards are employed based on the prevailing circumstances, with the use of custom software for dashboard management.

Attendees were informed that the website displaying the situation room data is accessible to stakeholders. There is standard guidance on running a situation room.

Day 4

Pamela Kisoka, M&E Officer for TB Services, President's Office Regional Authority Local Government (PORALG) in Tanzania, recapped the previous day's sessions, specifically updates from WHO, Stop TB Partnership, Global Fund, and TB DIAH's in-country partnerships in the region. The final day would focus on data quality and using the PBMEF indicators in MEL plans and indicator cascades.



Session 6: Improving and Ensuring Data Quality

MEL Plan Template and Integrating PBMEF Indicators into MEL Plans



Bridgit Adamou explained that MEL plans are used by IPs to guide activities over the life span of the program and measure whether the program is achieving the programmatic result they set out to achieve. MEL plans should be updated annually to ensure they reflect the latest program goals and objectives.

The session included a comparison between USAID's current generic MEL plan and the updated version developed by TB DIAH that is TB-specific. The new MEL plan template was created to standardize TB data collection and reporting, provide guidance on how to integrate PBMEF indicators into MEL plans, and provide more explanations, user-friendly guidance, and resources for users.

While USAID does not require IPs to use this new template, it is strongly recommended and expected that IPs with TB funding use the new MEL plan template for their projects.

Adamou guided attendees through the three parts of the guidance document (the MEL plan template with instructions, a sample MEL plan, and a blank MEL plan template), highlighting its structure and components.

The template can be found on the TB DIAH’s website: www.tbdiiah.org/assessments/pbmef/. A webinar dedicated to the MEL template is scheduled for May 2nd, 2024, offering further guidance on its implementation and use. A recording of the webinar will be available on the TB DIAH website.

Standards, Expectations, Norms and Approaches to Data Quality

Andrew Goldbaum, Information Systems Advisor at USAID/Washington, presented on standards, expectations, norms, and approaches to ensuring data quality in TB programs. The session began with Goldbaum providing a brief overview of how NTPs receive funding. He highlighted that DQAs are mandatory for every country’s TB program to ensure the reliability and accuracy of the data collected.



Attendees were introduced to a group activity that involved a case study related to TB treatment registers. The purpose of the activity was to apply the concepts discussed. Groups filled out sample DS-TB treatment registers based on the case study provided. This hands-on exercise allowed participants to practice data collection and assess data quality in a simulated setting. Each group shared their findings, observations, and challenges encountered during the activity, fostering peer learning and discussion.

Overall, the session aimed to reinforce the importance of maintaining high standards of data quality in TB programs and provided practical experience through the group activity.

Discussion about How Data Quality is Ensured at the Mission, Project, and NTP Levels



Augustine Idemudia, Project Management Specialist at USAID/Nigeria, led a facilitated discussion on how data quality is addressed in the field. Uganda suggested that DQAs and RDQAs need to include an evaluation of other components of M&E, such as capacity-building efforts.

Zambia conducts planned DQAs quarterly, although they face challenges due to the bulkiness of the activity.

Mozambique highlighted their strong systematized DQA system, aiming for biannual assessments due to operational constraints. They prioritize using DQA results to develop action plans to address challenges.

Tanzania conducts DQAs at different levels: monthly at the district level, quarterly at the regional level, and annually at the national level. They ensure that data quality reports are accessible at the facility level and address discrepancies promptly. Additionally, they conduct RDQAs based on program performance.

Zimbabwe emphasized the importance of empowering and mentoring facilities to conduct RDQAs effectively, thereby minimizing data discrepancies and ensuring high-quality data.

Nigeria conducts quarterly DQAs at various levels; annual assessments at the national level; monthly DQAs at the district level; and monthly, quarterly, and annual assessments by IPs. They have developed a national tool to guide DQA implementation across all levels.

Report Back on the Cascade Analysis Group Work

Zambia, Uganda, South Africa, Malawi, and Kenya presented their findings on their DS-TB cascade. They found the cascade analysis to be straightforward and had a positive experience working with it.

Tanzania, Ethiopia, and Nigeria shared their presentations on their TB contact investigation cascade analyses. They provided insights into their findings and experiences with the cascade analysis process.

Mozambique, Zimbabwe, DRC, and the international group presented their findings on their TPT cascade analysis. Although they found the cascade analysis exercise to be useful, DRC faced challenges due to the lack of tools to assess the end of treatment, impacting their analysis.

The presentations provided insight into the effectiveness and utility of cascade analysis in different contexts, highlighting both successes and challenges faced by attendees.

Looking Toward the Future: Country Support, Collaboration, and Partnership

Sevim Ahmedov spoke about the direction of TB support in Africa from USAID's perspective. The focus is on advancing the PBMEF and developing an extended list of indicators to enhance M&E. IPs need to closely monitor and align their M&E plans with USAID's strategy to ensure consistency and effectiveness. USAID recommends including PBMEF language in initial funding notices to provide clear guidance and support for NTPs and align M&E efforts with government policies and NSPs, considering the priorities and challenges outlined by stakeholders.



Efforts are underway to finalize WHO guidelines, but the operationalization process may take up to a year.

M&E system data should fully reflect the priorities of TB interventions, aiming to achieve the TB 2030 goals. There is also a need to differentiate cascades according to the audience and levels of implementation, tailoring them to specific needs and objectives.

The purpose of EMR systems should be clearly defined and differentiated based on their intended use.

Efforts should be made to engage a diverse range of experts, including economists, social behavior scientists, and communications professionals, to enhance collaboration and bring fresh perspectives to TB control efforts.



Workshop Wrap Up and Closing



In the final session, **Bridgit Adamou** offered closing remarks to conclude the workshop. She shared that a total of 97 individuals were invited to the workshop, with 84 participants in attendance.

On behalf of TB DIAH, Adamou extended her heartfelt gratitude to all participants, presenters, partners, and organizers for their valuable contributions and active involvement throughout the workshop.

Attendees were encouraged to visit the workshop's webpage to access the workshop resources, including photos, presentations, and the evaluation form.

Certificates of participation were distributed to all the attendees as recognition of their involvement and contribution to the workshop.



Appendix A. Agenda



Africa Regional Workshop on Strengthening TB Monitoring & Evaluation Systems

April 16 – 19, 2024
 Dar es Salaam Serena Hotel
 Dar es Salaam, Tanzania

DAY 1 TUESDAY, 16 APRIL

Time	Duration	Agenda Item	Presenter/Facilitator	Moderator
8:30 AM	0:30	Check in and registration of participants		
9:00 AM	0:15	Welcome Remarks, Introductions and General Housekeeping	Bridgit Adamou , Senior M&E Advisor, TB DIAH	Abiodun Hassan Team Lead for Nigeria, TB DIAH / Nigeria
9:15 AM	0:30	Opening Remarks	Riziki Kisonga , Program Manager, Tanzania NTP Alexander Klaitis , Deputy Mission Director, USAID/Tanzania Charles Sagoe Moses , WHO/Tanzania Representative Sevim Ahmedov , TB/HIV, Prevention, and M&E Team Lead, Bureau for Global Health, TB Division, USAID/Washington Stephanie Mullen , Director, TB DIAH	
9:45 AM	0:15	Group Photo		
10:00 AM	0:15	Review of the Workshop Format and Objectives	Bridgit Adamou , TB DIAH	
Session 1	TB DIAH Overview of the Performance-Based Monitoring and Evaluation Framework (PBMEF)			
10:15 AM	0:20	Overview of the TB DIAH Project	Ann Fitzgerald , Deputy Director, TB DIAH	
10:35 AM	0:30	USAID Global TB Strategy, Results Framework, and Implementation Status: Updates, Discussion, and Q&A	Sevim Ahmedov , USAID	
11:05 AM	0:15	Coffee Break		
11:20 AM	0:30	Introduction to the PBMEF, Background, Updated Edition of the PBMEF with Key Changes, and Implementation Strategy	Meaghan Peterson , TB M&E Advisor, USAID/W	
11:50 AM	1:10	PBMEF In-depth, Part I: Core Indicators	Ezra Tessera , Senior TB M&E Technical Advisor, TB DIAH	
1:00 PM	1:00	Lunch		
2:00 PM	1:15	PBMEF In-depth, Part II: Core Plus, MEL National, and Project-Level indicators	Kola Oyediran , Senior M&E Advisor, TB DIAH	

Time	Duration	Agenda Item	Presenter/Facilitator	Moderator
3:15 PM	0:30	Overview of the PBMEF Guide: Basic Principles of Cascade Analyses Using PBMEF Indicators and Experience from Nigeria	Joseph Kuye , Senior TB Surveillance Advisor, TB DIAH/Nigeria	
3:45 PM	0:15	Coffee Break		
4:00 PM	1:00	Introduction to the Group Activity: Creating a Cascade and Analyzing Gaps in the Cascade Using PBMEF Indicators	Anna Meltzer , TB Country M&E Advisor, USAID/Washington Ezra Tessera , TB DIAH	
5:00 PM	0:15	Feedback Session	Facilitators	

DAY 2 WEDNESDAY, 17 APRIL

Time	Duration	Agenda Item	Presenter/Facilitator	Moderator
8:30 AM	0:30	Check in of participants		
9:00 AM	0:15	Welcome and Reflections of Day 1	Rebeca Briceño-Robaugh , TB Strategic Information Technical Advisor, USAID/Washington	Ezra Tessera Senior TB M&E Technical Advisor, TB DIAH
Session 2	Country Updates: Progress towards National Strategic Plans, Global Targets, M&E Challenges, Success Stories, & Plans			
9:15 AM	0:25	DRC	Colette Kinkela Bedi , M&E Officer, DRC PNLT	
9:40 AM	0:25	Mozambique	Raimundo Machava , M&E Team Lead, Mozambique NTP	
10:05 AM	0:25	South Africa	S'celo Dlamini , Director of Research, Information, M&E and Surveillance, TB Cluster of South Africa Department of Health	
10:30 AM	0:30	Plenary Q&A discussion with the presenting countries		
11:00 AM	0:15	Coffee Break		
11:15 AM	0:25	Malawi	Kuzani Mbendera , Deputy Program Manager, Malawi NTLEP	
11:40 AM	0:25	Tanzania	Robert Balama , Data Manager, Tanzania NTLP	
12:05 PM	0:25	Zambia	Mushota Kabaso , National M&E Advisor, Zambia NTP	
12:30 PM	0:30	Plenary Q&A discussion with the presenting countries		
1:00 PM	1:00	Lunch		
2:00 PM	0:25	Ethiopia	Taye Letta , NTP Manager, Ethiopia NTP	
2:25 PM	0:25	Zimbabwe	Nqobile Mlilo , Senior M&E Officer, TB LON Project	
2:50 PM	0:25	Uganda	Vincent Kamara , Data Manager, Uganda NTLP	
3:15 PM	0:30	Plenary Q&A discussion with the presenting countries		
3:45 PM	0:15	Coffee Break		
4:00 PM	0:25	Nigeria	Obioma Chijioke-Akaniro , M&E Manager, Global Fund Program Management Unit, Nigeria NTBLCP	
4:25 PM	0:25	Kenya	Aiban Ronoh , Head of the M&E and Research Unit and Global Fund Project M&E Officer, Kenya NTP	
4:50 PM	0:20	Plenary Q&A discussion with the presenting countries		
5:10 PM	0:10	Feedback Session	Facilitators	

DAY 3 THURSDAY, 18 APRIL

Time	Duration	Agenda Item	Presenter/Facilitator	Moderator
8:30 AM	0:30	Check in of participants		
9:00 AM	0:15	Welcome and Reflections of Day 2	Yewulsew Kassie , Senior Infectious Disease Advisor, USAID/Ethiopia	Kola Oyediran
Session 3		WHO Consolidated Guidance on TB Data Generation and Use, Module 1 - TB Surveillance		
9:15 AM	0:40	Setting the Scene: Strengthening surveillance and synthesis of reviews	Marek Lalli , TB Technical Officer, WHO Global TB Programme, Geneva	Senior M&E Advisor, TB DIAH
9:55 AM	0:20	Setting the Scene: Headline findings from epidemiological reviews conducted in the African region		
10:15	0:15	Coffee Break		
10:30 AM	0:15	Guidance on TB Surveillance: Overview of the Content of the New Surveillance Guidance	Marek Lalli , WHO/Geneva	
10:45 AM	0:45	Guidance on TB Surveillance: What's New with the WHO Consolidated Guidance on TB Data Generation and Use - New Updated Terms and Definitions		
11:45 AM	0:15	Discussion about the Updated TB Surveillance Guidelines		
12:00 PM	1:00	Lunch		
1:00 PM	0:45	Group Exercise: Completing a Patient Registration Card	Marek Lalli , WHO/Geneva	
1:45 PM	0:30	Current and Upcoming Digital Products to Support TB Surveillance and Program Planning		
2:15 PM	0:15	Coffee Break		
Session 4		Technical Updates		
2:30 PM	0:30	Stop TB Partnership: Global Plan to End TB 2023-2030 - Leave no one behind; Q&A	Enos Masini , Senior TB Advisor, Stop TB Partnership	
3:00 AM	0:30	Global Fund: Overview of the new and updated indicators in the Global Fund Modular Framework; Q&A	Nnamdi Nwaneri , TB Surveillance and M&E Focal Point, Global Fund	
Session 5		TB DIAH Initiatives to Improve TB M&E at the Country Level		
4:00 PM	0:15	TB DIAH Support in the DRC: Strengthening TB M&E Capacity	Henriette Wembanyama , President of POSAF, DRC	
4:15 PM	0:20	TB DIAH Nigeria: Launching the Automated Partners Performance Report (APPR) System and Data Quality Review	Abiodun Hassan , TB DIAH/ Nigeria	
4:35 PM	0:30	Nigeria and Zambia NTP: Implementing a TB Situation Room	Obioma Chijioko-Akaniro , Nigeria NCTBLP Mushota Kabaso , National M&E Advisor, Zambia NTP	
5:05 PM	0:10	Feedback Session	Facilitators	

DAY 4 FRIDAY, 19 APRIL

Time	Duration	Agenda Item	Presenter/Facilitator	Moderator	
8:30 AM	0:30	Check in of participants			
9:00 AM	0:15	Welcome and Reflections of Day 3	Pamela Kisoka , M&E Officer for TB Services, President's Office Regional Authority Local Government (PORALG), Tanzania	Joseph Kuye Senior TB Surveillance Advisor, TB DIAH / Nigeria	
Session 6	Improving and Ensuring Data Quality				
9:15 AM	0:30	Monitoring, Evaluation, and Learning (MEL) Plan Template and Integrating PBMEF Indicators into MEL Plans	Bridgit Adamou , TB DIAH		
9:45 AM	0:20	Standards, Expectations, Norms and Approaches to Data Quality	Andrew Goldbaum , Information Systems Advisor, USAID/W		
10:05 PM	0:40	Facilitated Discussion about How Data Quality is Ensured at the Mission, Project, and NTP Levels	Augustine Idemudia , Project Management Specialist, USAID/Nigeria		
10:45	0:15	Coffee Break			
11:00 AM	1:00	Report Back on the Cascade Analysis Group Work	Anna Meltzer , USAID/W Ezra Tessera , TB DIAH		
Session 7	Looking Toward the Future and Wrapping Up				
12:00 PM	0:25	Looking Toward the Future: Country Support, Collaboration, and Partnership	Sevim Ahmedov , USAID/W		
12:25 PM	0:20	Workshop Wrap Up and Closing	Conference Organizers and Partners		
12:45 PM	1:00	Lunch			

Appendix B. List of Participants

Country	Name	Title	Affiliation
DRC	Henriette Kasandi Wembanyama	POSAF President	POSAF
	Colette Kinkela Bedi	M&E Advisor	PNLT
	James Mashikano Kagenzi	M&E and Learning Specialist	USAID/DRC
	Fidele Kanyimbu Mukinda	Senior M&E Advisor	LEAP Project
	Brian Bakoko Selebete	TB Project Management Specialist	USAID/DRC
Ethiopia	Yewulsew Kassie	Senior Infectious Disease Advisor	USAID/Ethiopia
	Wondimu Gebrekiros	TB Project Management Specialist	USAID/Ethiopia
	Taye Letta	NTP Manager	NTP
	Amtatachew Moges	M&E Advisor	NTP
	Fasil Tsegaye	Senior TB and Global Fund Grant Advisor	LEAP Project
	Zewdu Gashu Dememew	M&E and Research Director	MSH/ETBE Project
	Teshager Worku	M&E Advisor	MSH/ETBE Project
	Admasu Teshome	M&E and Research Director	BPDO/TB LON KAP Project
Kenya	Wandia Ikua	Project Management Specialist Strategic Information	USAID/Kenya
	Ann Masese	Program Management Specialist - TB	USAID/Kenya
	Aiban Ronoh	Head of the M&E and Research Unit and Global Fund Project M&E Officer	NTP
	Dennis Oira	M&E Specialist	TB-ARC II Project
Malawi	Kuzani Mbendera	Deputy Program Manager	NTLEP
	Belaineh Girma	M&E Technical Assistant	NTLEP
	Chipariro Mbalanga	M&E Manager	TB LON 1 Project
	Gerald Siwombo	M&E Manager	TB LON 2 Project
Mozambique	Pereira Zindoga	Project Management Specialist (Infectious Disease) TB, TB/HIV, GHSA, NTD	USAID/Mozambique
	Celio Vilichane	M&E Specialist	USAID/Mozambique
	Raimundo Machava	M&E Team Lead	NTP
	Alegre Bembele	Provincial TB Supervisor	NTP
	Loide Cossa	Seconded TB Advisor to the NTP	LEAP Project
	Acacio Mugunhe	M&E Advisor	Local TB Response Project
Nigeria	Obioma Chijioke-Akaniro	M&E Manager, Global Fund Program Management Unit	NTBLCP
	Olakunle Daramola	Assistant Director and Head of TB-HIV Unit	NTBLCP
	Chidubem Ogbudebe	Director of M&E/Strategic Information	TB LON Regions 1 & 2 Project
	Ogoamaka Chukwuogo	Project Director	TB LON Regions 1 & 2 Project
	Olugbenga Daniel	Director of Technical Program	TB LON Region 3 Project
	Michael Pedro	Director of Strategic Information	TB LON Region 3 Project

Country	Name	Title	Affiliation
	Amos Omoniyi	WHO National Professional Officer - TB	WHO/Nigeria
	Debby Nongo	Program Management Specialist - TB, HIV/AIDS & TB Office	USAID/Nigeria
	Augustine Idemudia	Project Management Specialist - Strategic Information, HIV/AIDS & TB Office	USAID/Nigeria
South Africa	Tshenolo Lechuti	Senior M&E Manager	THINK South Africa
	Hlengani Mathema	Epidemiologist	NTP
	S'celo Dlamini	Director of Research, Information, M&E and Surveillance	NTP
	Phyllis Pholoholo-Mokomela	Project Management Specialist	USAID/South Africa
	Terrie Takavarasha	Senior M&E Specialist	USAID Southern Africa Regional Program and Project Development Office
	Tshidi Sopoli	TB Project Management Specialist	USAID/South Africa
	Prudence Kandi	M&E, Reporting, and Learning Manager	Aurum Institute
Tanzania	Robert Balama	TB Data Manager	NTP/MOH
	Farida Ally	M&E Specialist	NTP/MOH
	Pamela Kisoka	M&E Officer for TB services	PORALG
	Alexander Klaitis	Deputy Mission Director	USAID/Tanzania
	Riziki Kisonga	NTP Manager	NTP/MOH
	Kristopher Capella	Evaluation and Learning Advisor for TB	USAID/Tanzania
	Bhavin Jani	Project Management Specialist - TB	USAID/Tanzania
Uganda	Vincent Kamara	NTP Data Manager	NTP
	Geoffrey Amanyana	Advisor seconded by LPHS-TB	NTP
	Miriam Murungi	TB/HIV team	USAID/Uganda
	Daniel Muhire	Strategic Information Advisor	USAID/Uganda
	Philip Tumwesigye	Senior MEL Advisor	LPHS-TB Project
	Derrick Kimuli	Senior Analyst	SITES Project
	Norah Namuwenge	Strategic Information Team Lead	SITES Project
Zambia	Mushota Kabaso	National M&E Advisor	NTP
	Mwango Mutale	Chief M&E Officer	MOH
	Minyoi Maimbolwa	Strategic Information Advisor	TB-LON Project
	Kevin Zimba	PMS-TB Advisor	USAID/Zambia
Zimbabwe	Lekani M. B. Sansole	Provincial Coordinator TB TAP -Manicaland	Organization for Public Health Interventions and Development (OPHID)
	Norbert Muleya	Strategic Information & Evaluation Manager	OPHID
	Nqobile Mlilo	Senior M&E Officer	TB LON Project
	Gilton Kadziyanhike	M&E Team Lead	LEAP Project
TB DIAH	Bridgit Adamou	Senior M&E Advisor	TB DIAH project/HQ
	Ann Fitzgerald	Deputy Director	TB DIAH project/HQ

Country	Name	Title	Affiliation
	Stephanie Mullen	Project Director	TB DIAH project/HQ
	Ezra Tessera	Senior TB M&E Technical Adviser	TB DIAH project/HQ
	Kola Oyediran	Senior M&E Advisor	TB DIAH project/HQ
	Joseph Kuye	Senior TB Surveillance Advisor	TB DIAH project/NG
	Abiodun Hassan	TB DIAH Team Lead for Nigeria	TB DIAH project/ NG
USAID/ Washington	Sevim Ahmedov	TB/HIV, Prevention, and M&E Team Lead	USAID/Washington
	Anna Meltzer	TB Country M&E Advisor	USAID/Washington
	Meaghan Peterson	TB M&E Advisor	USAID/Washington
	Andrew Goldbaum	Senior Information Systems Advisor	USAID/Washington
	Rebeca Briceño-Robaugh	TB Strategic Information Technical Advisor	USAID/Washington
	Kanjinga Kakanda	Senior TB/HIV Technical Advisor	USAID/Washington
WHO	Marek Lalli	TB Technical Officer	WHO/Geneva
Global Fund	Nnamdi Nwaneri	TB Surveillance and M&E Focal Point	The Global Fund to Fight AIDS, TB and Malaria
Stop TB	Enos Masini	Senior TB Advisor	Stop TB Partnership
Non- bilateral LEAP Advisors	Helena Mungunda	LEAP Advisor, Namibia	LEAP Project
	Sein Thi	LEAP Advisor, eSwatini	LEAP Project
	Nigusa Werdofa	LEAP Advisor, Sierra Leone	LEAP Project



This publication was produced with the support of the United States Agency for International Development (USAID) under the terms of the TB Data, Impact Assessment and Communications Hub (TB DIAH) Associate Award No. 7200AA18LA00007. TB DIAH is implemented by the University of North Carolina at Chapel Hill, in partnership with John Snow, Inc. Views expressed are not necessarily those of USAID or the United States government. WS-24-74 TB