Supporting National Tuberculosis Programs with TB DIAH's Assessment of Data Collection, Reporting, and Analysis Capacity (ARC) Tool

Background

In October 2021, USAID released the Performancebased Monitoring and Evaluation Framework (PBMEF), a tool designed to track progress against tuberculosis (TB) and consolidate USAID's TB investments into a unified platform. With its robust set of indicators, the PBMEF emerged as an instrument for comprehensive monitoring and evaluation (M&E) of TB programs in high-TB burden countries. However, for countries to effectively implement this framework—and to ensure it would serve as a basis for global comparisons—they needed to assess their readiness to report against PBMEF standards. Thus, the Assessment of Data Collection, Reporting, and Analysis Capacity (ARC) Tool was born.

The USAID-funded TB Data, Impact Assessment and Communications Hub (TB DIAH) project developed the ARC Tool to bolster USAID's efforts to strengthen country TB M&E systems. This assessment assists USAID Missions and national TB programs (NTPs) with mapping the readiness and capacity of countries' existing TB M&E and surveillance systems to collect, report, analyze, and use the data generated to improve their TB response.

The ARC Tool draws from the PBMEF and systematically reviews TB programs' capacity to measure outputs and outcomes against standardized indicators in the framework. This process is a critical initial step in developing a comprehensive landscape analysis by identifying strengths and weaknesses in a country's surveillance system. Findings from each country are compiled in a detailed report with visuals from the TB DIAH Data Hub (https://hub.tbdiah.org).



Staff from Armenia's NTP conducting a TB indicator mapping exercise.

ARC Components

The ARC reports inform the development of each country's PBMEF implementation plan and serve as a baseline for other assessments. The report comprises three main sections:

- An overview of the TB M&E and surveillance system in the country based on a desk review of relevant and publicly available documents;
- Findings from implementing the ARC, including a summary of PBMEF data elements collected and reported at the health facility level, including issues encountered;
- A comprehensive list of PBMEF data elements that are currently reported to the World Health Organization (WHO). (Approximately 65 PBMEF data elements are currently included in the WHO TB database.)

Implementation

USAID Missions, in collaboration with the NTPs and TB DIAH, applied the ARC Tool in 22 of USAID's 23 TBpriority countries in May 2021. The ARC was implemented in an additional five non-TB priority countries in 2023 and 2024. The Mission TB point of contact(s) or TB DIAH collected data through a desk review and in-depth interviews with NTP staff. ARC data analysis activities included examining if particular PBMEF data elements captured at health facilities providing TB services were collected by the NTP, a specific Ministry of Health department other than the NTP, non-NTP private providers, or not at all. TB DIAH also gathered information related to the administrative levels to which data is reported, the method of data reporting, and reporting coverage. Finally, the project entered the data into the ARC Tool on the Data Hub.

Usefulness of the ARC Tool

Implementing the ARC Tool has provided TB DIAH (and USAID) key findings to inform the strengthening of the TB M&E and surveillance system in 22 countries. The visuals in the ARC Tool deliver a holistic view of available TB data and existing gaps in reported TB data. NTPs now have the opportunity to review how TB programs are working and identify resources needed. Following application of the ARC Tool, countries are selecting high-priority TB challenges and developing solutions.

One example of how ARC influenced changes in the TB M&E system is from the Kyrgyz Republic. The ARC Tool helped the NTP identify that a number of important TB indicators were not collected by the country, particularly those related to contact investigation and TB preventive treatment. In the Kyrgyz Republic, a high percentage of data relevant to PBMEF indicators is collected at the medical organizations and reported to the NTP. Overall, 144 of 230 PBMEF data elements were recorded in the Kyrgyz Republic, and 86 data elements related to PBMEF indicators were not collected in the country.



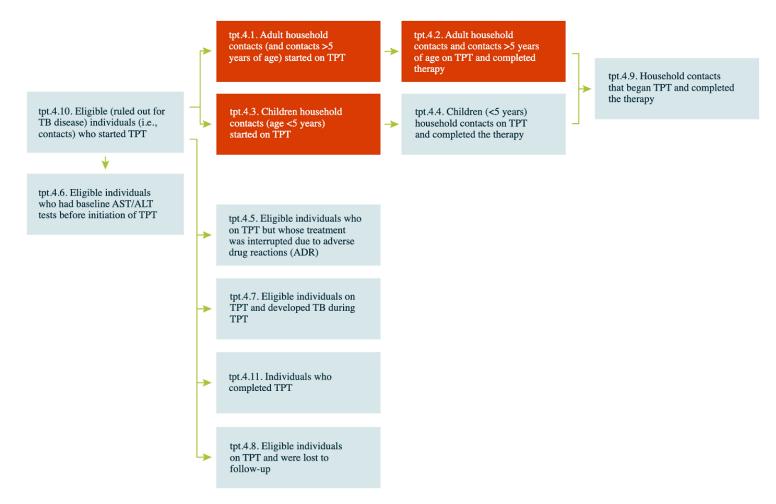
TB DIAH's Country Director for the Kyrgyz Republic at a TB DIAH event focused on TB in Eastern Europe and Eurasia. © TB DIAH

The Kyrgyz Republic NTP was revising the reporting and recording forms that year (2021). The gaps exposed by the ARC Tool helped to identify which missing indicators needed to be included in the new forms approved by the Ministry of Health at the end of 2021. Later, at an NTP Technical Working Group meeting, the NTP decided to incorporate those missing indicators in the TB M&E plan and request necessary changes in the electronic TB Management Information System to capture data on those indicators.

The usefulness of the ARC Tool also encouraged three non-TB-priority countries in Eastern Europe that are supported by USAID to implement the ARC Tool. The ease of using the online tool made it possible for these countries to implement the ARC Tool and get instant results and reports on the status of PBMEF data collection and reporting in their respective countries.

In 2023, Pakistan's experience with implementing the ARC Tool was unique. In all other countries, the ARC Tool was implemented at the national level. However, in Pakistan, the NTP is decentralized to provincial and regional levels, who are responsible for data collection, analysis, and decision making. TB DIAH adjusted the online ARC Tool to create online accounts for each of the seven provinces/regions in Pakistan. These provinces/regions were able to implement the ARC Tool with only a day of orientation. They completed the sub-national implementation of the ARC Tool in a workshop setting within two days.

Figure 1. TB preventive treatment diagram



Note: As participants complete the ARC, they can see the specific elements they collect in various PBMEF-based reporting pathways.

An important aspect of the TB M&E system that the ARC Tool highlights is that almost all of USAID's TB priority countries have a hybrid system of TB data recording and reporting, comprising both paper and electronic systems working in parallel. This is creating an unnecessary burden on the staff, compromising data quality, and hampering a complete transition to a digitized TB M&E and surveillance system.

With a move towards greater emphasis on sustainability of NTPs, the ARC Tool was also able to show how these high TB-burden countries are capturing and monitoring data on important aspects of program sustainability, including engagement of civil society and sensitization of health staff towards TB and gender.

Through the synergy of the ARC Tool and the PBMEF framework, USAID remains committed to driving tangible advancements in TB M&E, fostering collaboration, and ultimately creating a world free from TB.

The ARC <u>paper-based tool</u> and <u>guidance</u> document can be found on the TB DIAH website.



