

# BANGLADESH TUBERCULOSIS ROADMAP OVERVIEW, FISCAL YEAR 2021

This is an overview of the USAID/Bangladesh FY 2021 Tuberculosis (TB) Roadmap, implemented with FY 2020 budget. It was developed in consultation with the National TB Program (NTP) and with the participation of national and international partners involved in TB prevention and care in the country.

Among the 30 high TB burden countries, Bangladesh is ranked seventh; and among the high multidrug-resistant TB (MDR-TB) burden countries, Bangladesh is ranked 14th. Some of the country's TB indicators have shown a positive trend over time: TB treatment coverage increased to 81 percent in 2019; deaths among TB/HIV-negative patients decreased to 24 per 100,000 in 2019; and a high treatment success rate (TSR) of more than 90 percent for drug-susceptible TB (DS-TB) cases has been maintained. However, while there has been an increase in TB treatment coverage, an estimated 70,000 TB patients remain undiagnosed each year. Additionally, only an estimated 40 percent of drug-resistant TB (DR-TB) cases are being enrolled on proper treatment regimens.

Recently, the NTP developed a National Strategic Plan (NSP) for TB control 2021-2025. This NSP focuses on: integrated, patient-centered care and prevention; bold policies and supportive systems; and intensified research and innovation. Furthermore, the NSP emphasizes the importance of: following the key principles of government stewardship and accountability; a strong coalition with civil society organizations and communities; protecting and promoting human rights, ethics, and equity; and adaptation of the strategy and targets at the country level. In order to achieve the key milestones of reducing TB deaths by 75 percent and TB incidence rate by 50 percent by 2025, the NSP outlines a set of key interventions for implementation: introduction of innovative active case finding approaches (with special attention to patients with DR-TB and comorbidities and pediatric TB); expansion of the diagnostic network; integration of TB services into the health service delivery system by using the existing health structure; and improvement of clinical management systems for DS-TB and MDR-TB.

The proposed FY20 USAID TB budget for Bangladesh is about \$16.1 million. With this level of funding, USAID will support the following technical areas with these funds:

<sup>&</sup>lt;sup>1</sup> World Health Organization. Global Tuberculosis Report, 2020.

<sup>&</sup>lt;sup>2</sup> Ibid

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>4</sup> Ihid

<sup>&</sup>lt;sup>5</sup> National TB Program. National Strategic Plan, 2021-2025.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Ibid.

## **REACH**

# TB diagnosis

By finding, diagnosing, and enrolling more individuals with TB on treatment early, USAID will support the reduction in TB transmission rates. In order to increase case detection, the country will need to accelerate the uptake of rapid molecular diagnostics. Furthermore, the NTP will expand the diagnostic network by introducing and scaling-up molecular technology for second-line drug-susceptibility testing (i.e. line probe assay [LPA]). USAID has supported the increase in Xpert® MTB/RIF (GeneXpert) use by introducing the GX Alert connectivity system, developing terms of reference for National and Regional TB Reference Laboratories, and working to develop a national diagnostic network strategy. Moving forward, USAID will conduct a diagnostic network assessment and support the installation of LPAs and the automated BD BACTEC<sup>TM</sup> MGIT<sup>TM</sup> system (liquid culture testing) in peripheral laboratories. Additionally, special attention will be afforded to diagnosing pediatric and extrapulmonary TB cases which are not easily detected by the current available diagnostics.

### Engaging all care providers

In order to accelerate TB control efforts, multilateral collaboration across the government and private sector will be required. Furthermore, to sustain and capitalize on programmatic gains, the public sector needs to recognize the important role of the large private sector and its contributions to TB care in the country. As such, the NTP, as part of the TB control efforts, plans to prioritize private provider engagement and optimize TB care by developing standard operating procedures for the TB service delivery referral system between public, private, and non-governmental organization health facilities. To support these efforts, USAID introduced the Find Actively, Separate and Treat (FAST) strategy at tertiary level facilities, establishing three specialized pediatric TB centers and two social enterprise models to boost the public-private partnership. Moving forward, USAID will continue to support innovative interventions focusing on creating viable value propositions for the private sector to ensure robust and sustainable engagement. More specifically, by establishing automated notification systems, providing systematic training, and involving private providers in community actions, the barriers to working with private providers can be overcome.

# Community TB care delivery

The NTP's active case finding (ACF) efforts heavily rely on community engagement. USAID has supported these efforts by providing basic training to pharmacy owners and blue star providers (BSPs). Moving forward, USAID will expand this training model; continue to work on ensuring the engagement of communities in hard-to-reach and priority areas; and continue to improve the readiness at primary health facilities to ensure access to high-quality TB service delivery.

#### **CURE**

### Drug-susceptible TB (DS-TB) treatment

Through thoughtful engagement of both public and private healthcare providers in urban, rural, and hard-to-reach populations, USAID will increase access to high-quality TB treatment management by ensuring the implementation of international treatment guidelines, establishing an active drug safety monitoring system (aDSM), implementing bacteriological treatment monitoring, and ensuring access to patient-centered social support services. Ultimately, these activities will result in improved treatment outcomes because by engaging with patients, they will be more likely to stay on track with the difficult treatment regimens and be cured, thus preventing the development of more aggressive DR-TB strains and ending the spread of TB disease. Moving forward, USAID will support:

- Building the capacity of the NTP and private and public healthcare providers to diagnose patients and link them to immediate treatment; and
- Introduce digital solutions to improve surveillance, supervision, and monitoring of TB treatment and patients' welfare during the treatment.

### Multidrug-resistant TB (MDR-TB) treatment

Bangladesh pioneered the shorter treatment regimens currently approved for use in MDR-TB patients, and due to these efforts, the country continues to report good treatment outcomes. To capitalize on the positive results already seen in MDR-TB and support the programmatic management of DR-TB (PDMT), USAID will support the NTP by:

- Helping to decentralize MDR-TB treatment, including access to novel treatment regimens, like bedaquiline, and repurposed drugs, like linezolid and clofazimine, for peripheral health centers; systematically scaling up full outpatient treatment for suitable patients; and increased PMDT capacity building for healthcare providers at all levels;
- Minimizing referral delays through strengthening coordination between laboratories and clinicians;
- Aiding the scale-up of all-oral MDR-TB treatment regimens while taking into account programmatic environments and patients' preferences;
- Implementing an aDSM system for all DR-TB patients and standardizing the reporting mechanism;
- Ensuring that drug and buffer stocks at the facility-levels are adequate and managed to ensure there are no stock-outs; and
- Improving MDR-TB recording and reporting and the routine use of the e-TB manager for making clinical decisions.

#### **PREVENT**

#### Prevention

Given the high TB burden in Bangladesh, intensifying ACF and TB infection (TBI) interventions in the country remain challenging. However, progress is possible with careful evidence-guided national policy development, planning, and implementation. In order to effectively implement TB preventive treatment (TPT), there needs to be an increase in the number of trained healthcare providers and patients, as well as reliable systems for the procurement of diagnostic and drug resources (i.e. TB skin test, pyridoxine, isoniazid, rifapentine, rifampicin) to further develop and expand surveillance mechanisms (like e-TB manager). Because TB in Bangladesh is very heterogeneous, both from an epidemiological perspective and in terms of programmatic performance, there is substantial variation in utilization of TB services in public and private sectors as well as differences between urban and rural areas. As such, USAID will need to support the development of easy-to-use algorithms for determining TPT eligibility, appropriate regimen and length of treatment based on individual risk, local epidemiology and programmatic factors. USAID activities will focus on:

- Building the technical capacity of the NTP to develop and revise standard operating procedures and guidelines for contact investigation and TPT;
- Coordinating with TB stakeholders at all levels (i.e. the NTP, the Global Fund to Fight AIDS, Tuberculosis and Malaria [Global Fund], provincial health offices, private sector, and other non-government organizations) on ACF and TBI activities;
- Establishing training and mentorship systems for healthcare workers;
- Creating systems for screening under-five children who are close contacts of index cases, referring children who have signs and symptoms to health facilities for further evaluation and diagnosis, and referring those without signs and symptoms for TPT;
- Intensifying contact investigation and TPT coverage among adolescents and adult contacts; and
- Collaborating with specialized HIV services and private providers to ensure TB screening and TPT management for HIV-positive individuals.

#### **SELF-RELIANCE**

#### Commitment and sustainability

Increasing local ownerships and sustainability of TB interventions is a top priority. USAID will implement a series of interventions to strengthen government commitment and capacity in TB. USAID will work closely with the Government of Bangladesh (GOB) to develop its capacity to meet its needs for first-line TB medicines. The GOB is committed to achieving the global commitment and the United Nations General Assembly High-Level

Meeting on TB (UNGA) targets. The NTP has already incorporated the country specific UNGA targets into its NSP, and has intensified its efforts in pediatric TB, MDR-TB detection and in scaling-up TPT interventions in Bangladesh. To expand the country's commitment to end TB, the NTP will create a multisectoral accountability framework for TB by engaging high-level ministries, donors, and other development partners and affected communities. In addition, USAID will support the NTP to mobilize more resources from the private sector to strengthen the TB response in the country. USAID will also support efforts to improve the efficiency in the budget utilization of the NTP.

# Capacity and functioning systems

The NTP plans to strengthen the procurement and supply chain management (PSM) system. USAID has already provided technical inputs to the PSM section of the country concept note on TPT, as the country adopted the global TPT targets. USAID is supporting the NTP in finalizing the quantification of second-line drugs (SLDs) through December 2020 and assisted in coordinating Global Fund and Global Drug Facility (GDF) advisors to develop the supply planning and ordering process. Additionally, USAID supported the NTP in developing forecasting and budgeting exercises for SLD needs up to September 2021. USAID plans to continue its efforts to support the NTP by strengthening PSM and other digital solutions.