UGANDA TUBERCULOSIS ROADMAP OVERVIEW, FISCAL YEAR 2021

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

TB presents a public health problem in Uganda. In 2019, an estimated 88,000 people fell ill with TB in Uganda, and an estimated 15,600 people died.\(^1\) While men make up the majority of TB cases (56 percent) in the country, children account for 13 percent.\(^2\) In 2019, 65,897 TB cases were diagnosed and notified to the NTLP (75 percent); this means that approximately 25,000 cases were either not diagnosed or diagnosed and not notified to the NTLP.\(^3\) Furthermore, in 2019, of the estimated 1,500 drug-resistant TB (DR-TB) cases, only 559 were diagnosed and notified to the NTLP.

Through the new National Strategic Plan (NSP) 2020/2021-2024/2025, the NTLP aims to address the persisting challenges with TB in Uganda. More specifically, the goal of the NSP is to reduce TB incidence by 20 percent. To achieve this, the NTLP will focus on: strengthening community systems with a focus on reaching high-risk populations and scaling-up TB preventive therapy (TPT); enhancing the public-private collaboration; improving diagnostic and treatment services, including the adoption of new technologies and medicines; supporting information management, including digital technologies; strengthening supply chain management; and increasing leadership, accountability, multisectoral collaboration, and resource mobilization for TB.

The proposed FY20 USAID TB budget for Uganda is $7 million. With this level of funding, USAID will support the following technical areas:

**REACH**

*TB diagnosis*

USAID will continue to support Uganda’s comprehensive TB diagnostic network (100 laboratory/transport hubs) and 236 facilities with Xpert® MTB/RIF (GeneXpert) instruments. The support will include expanding the coverage of rapid diagnostics recommended by the World Health Organization (WHO). In line with the NTLP’s NSP goals, this will also include increasing GeneXpert coverage, the initial diagnostic test for all persons with presumed TB, to at least 50 percent of health facilities. Additionally, USAID support will help to improve the utilization of smear microscopy for following-up with patients on TB treatment, or patients who have had a Chest X-ray (CXR), first and

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\(^2\) Ibid.

\(^3\) Ibid.
second-line line probe assay (LPA), culture (solid and liquid), and urinary lateral flow lipoarabinomannan assay (LF-LAM). Strengthening an integrated sample referral system to improve access and connectivity solutions will also be a priority. Laboratory staff will be trained, and the quality management systems will be rolled out to all level IV health centers in the network.

**Engaging all care providers**
With support from USAID and the Global Fund to Fight AIDS, Tuberculosis, and Malaria (Global Fund), the NTLP implemented an active case-finding (ACF) strategy using quality improvement (QI) approaches in nine districts in the central and eastern regions that contribute to one-third of the missed TB cases nationally. Lessons learned from the initial implementation period informed the scale-up of the intervention to 50 more districts in the country. An ACF tool kit (standard operating procedures [SOPs], algorithms, training materials, etc.) was developed and disseminated to guide, train, and mentor health providers on using TB screening, access to diagnostics, and linkage to treatment along the care cascade. Moving forward, USAID will continue to support the NTLP and partners to scale-up ACF in supported districts to ensure systematic screening for TB for all patients presenting at health facilities, link presumptive TB patients to molecular TB diagnostics, and ensure prompt initiation of TB treatment for those found to have TB. This support will be directed to both the public and private sectors with a focus on engaging diverse private-for-profit (PFP) facilities to further expand ACF.

**Community TB care delivery**
With support from USAID, the NTLP implemented a National TB Civil Society Organization (CSO) Engagement strategy. Additionally, in October 2019, the Ministry of Health (MOH) approved the National Community TB Operational Guidelines. These national-level policy milestones provide a conducive environment for USAID implementing partners (IPs) to support community-level interventions at the sub-national level. USAID activities demonstrated the potential for community actors to contribute to increased TB case-finding, TPT uptake, TB treatment support and retention, and awareness about TB. For example, in 2019, 25 percent of TB cases notified in three USAID-supported districts were referred by community actors. Moving forward, USAID investments will focus on addressing the challenges that the community TB care delivery systems are facing, such as lack of centralized reporting for community TB activities, the small scale of implementation of high-yield activities like contact tracing, limited or lack of engagement of TB survivors, and proactive patient adherence support measures. USAID will work with the NTLP and partners to strengthen coordination and build the capacity of community health workers (CHWs) and CSOs to scale-up high impact TB case-finding, address stigma, promote awareness, and implement treatment adherence activities.
CURE

Drug-susceptible TB (DS-TB) treatment

While treatment coverage has improved, the number of bacteriologically-confirmed cases and the treatment success rate (TSR) remain low. To address the low TSR, USAID implemented a national TSR QI package in three USAID-supported districts (Kampala, Wkiso, and Mukono); early results from this activity show promising outcomes. Moving forward, USAID will support the NTLP in the scaling-up of the TSR QI package nationally. Additionally, ensuring that patients complete treatment is a priority. To increase treatment adherence, USAID will help implement various activities, such as introducing dedicated TB clinic days, using digital adherence technologies (e.g., 99DOTS and video directly observed therapy [V-DOT]), and implementing monthly cohort tracking. At the sub-national level, USAID will also help to strengthen district leadership on TB, implement quality improvement practices, and increase capacity of using data for decision making.

Multidrug-resistant TB (MDR-TB) treatment

Preliminary data indicated that there has been an increase in TSR for MDR-TB patients. This is largely due to the roll-out of over 260 GeneXpert instruments, decentralization of MDR-TB care to 17 regional referral hospitals, and improvements made to the specimen transport system. However, the NSP targets for MDR-TB were not achieved because further optimization of the GeneXpert instrument network and strengthening of the specimen transport system are required. Moving forward, USAID will continue to support MDR-TB care through a set of key interventions, including the introduction of an all-oral bedaquiline-containing shorter treatment regimen and other new, novel regimens (e.g., bedaquiline, pretomanid, and linezolid [BPaL]). USAID will also strengthen health worker capacity through clinical mentorship activities, implementation of facility-based cohort reviews and mortality edits, supportive supervision, increasing use of virtual ECHO platform for MDR-TB experts panel meetings to support clinical management, and strengthening active TB drug-safety monitoring and management (aDSM) systems. Additionally, USAID will support the management and utilization of the DR-TB management information system (DR MIS) in addition to supporting appropriate infection prevention and control measures, including the provision of personal protective equipment (PPE).

PREVENT

Prevention

Strategies to prevent active TB transmission include: TB screening at all entry points in health units, prisons, and other congregated settings; promoting cough hygiene and respiratory protection; separating and fast tracking of coughers for same day diagnosis and treatment initiation; developing an SMS platform to expedite test results to patients and clinicians; advocating for improved ventilation in public spaces and transport
services; procurement and supply management of PPE; and engagement of other sectors in TB control (e.g., the Ministry of Education and Sports). Preventing progression to TB disease (of those who are already infected) will be key for the effective management of TB infection (TBI). To accomplish this, USAID will support the scaling-up of TPT to all people living with HIV (PLHIV); expanding contact investigation interventions and TPT provision to all contacts of TB patients; rolling-out of interferon-gamma release assays (IGRAs) testing among children under-five who are household contacts of TB patients; and transitioning to shorter, safer TPT regimens.

**SELF-RELIANCE**

*Commitment and sustainability*

The Government of Uganda (GOU) is committed to ending TB and renewed its commitment by adopting the targets made at the United Nations General Assembly (UNGA) High-Level Meeting on TB. USAID joined other stakeholders in supporting the NTLP’s advocacy efforts to raise TB awareness among politicians and civil society in order to increase domestic funding for TB control. For the first time, domestic contributions towards TB control increased from Uganda shillings (UGX) 1,270bn in FY 2015/2016 to UGX 2,589.59bn in FY 2019/2020, a 104 percent increase. USAID played a pivotal role in the development of the new people-centered NSP and the associated application process for the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) grant. The TB National Coordination Committee (NCC) in the MOH has enhanced TB policy development and programmatic guidance. For example, the successful ACF strategy and the accelerated TPT 100-day scale-up plan were endorsed by the NCC for implementation after critical review.

*Capacity and functioning systems*

TB medicines and laboratory commodities are currently funded by the GOU, the Global Fund, and the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) for selected supplies. The NTLP procurement and supply chain management (PSM) team collaborates with the Quantification and Procurement Planning Unit (QPPU) of the MOH’s Pharmacy Department to quantify TB and leprosy medicines and supplies. USAID has helped build the capacity of the QPPU in procurement planning, quantification, and inventory management. USAID, through an embedded NTLP advisor, has further built the capacity of the National Medical Stores (NMS) in improving its procurement planning and distribution.

Significant progress has been made in the implementation of the District Health Information Software 2 (DHIS2). DHIS2 provides information on health indicators, including TB service indicators. Through partners’ support, the NTLP strengthened its program’s monitoring and evaluation (M&E) through the recruitment of M&E officers who have enabled improved coordination of M&E activities as well as fostered strong
collaboration efforts with partners. USAID will continue to support the NTLP to address M&E challenges and support priorities to strengthen TB program M&E. Persisting challenges in human resources for health (HRH) include staffing norms, which are limiting and unresponsive to the changing epidemics, as well as the increase in demand for health services. All these broader HRH issues affect TB control program performance at all levels. To help address this issue, USAID is working with the MOH to improve the human resource information management systems (HRIS) to guide the MOH in improving staffing rates and capacity and increasing productivity.