# KENYA TUBERCULOSIS ROADMAP OVERVIEW, FISCAL YEAR 2022

This is an overview of the USAID/Kenya FY 2023 Tuberculosis (TB) Roadmap, implemented with the FY 2022 budget.

In 2021, the estimated TB incidence in Kenya was 133,000, and an estimated 32,000 people died from TB. Kenya notified 76,010 incident TB cases, and 64 percent of total notified bacteriologically confirmed individuals with TB were tested for rifampicin resistance. A total of 486 individuals with drug-resistant TB (DR-TB) were put on treatment. The National TB control strategy (NSP), Kenya aims to achieve a Kenya free of TB and leprosy, and a reduced burden of lung disease. Its mission is to ensure the provision of quality care and prevention services for all people in Kenya with TB, leprosy, and lung disease.

### Strategic focus of the NSP:

1. Close gaps along the care continuum to find and cure all people with TB.
2. Differentiated response by counties to address TB within the local context.
3. Optimize the implementation of TB, leprosy, and lung health services within Universal Health Coverage (UHC).
4. Prevent infection, active disease, morbidity, and mortality from TB and related co-morbidities.
5. Provide a person-centered approach that promotes quality of care.

The proposed FY2022 USAID TB budget for Kenya is $10 million, and with this level of funding, USAID will support the following technical areas:

## REACH

### *TB diagnosis*

Key obstacles to high-quality diagnostics during 2021 were:

- Stock outs of GeneXpert cartridges.
- Suboptimal and unintegrated sample referral systems with low county ownership.
- Long turnaround time (TAT) for culture and drug-susceptibility testing (DST) results.
- Manual External Quality Assurance (EQA) management systems.
- Inadequate resources for World Health Organization-recommended rapid diagnostic (WRD) rollout.
- A lack of fully integrated laboratory data systems.
- Poor referral systems of patients for drug susceptibility testing (DST).

- Delay between TB diagnosis and treatment initiation due to weak clinical-laboratory interphase.
- Suboptimal engagement of private laboratories in TB care,
- Inadequate human resource capacity to support regular training, mentorship, monitoring, and supervision.

To overcome these obstacles, USAID will support following activities:

- Support and strengthen sample referral systems for GeneXpert, culture, DST, and line probe assay (LPA).
- Support sub-national laboratory external quality assurance (EQA) systems, refresher training for super users and new staff on WRDs and AFB testing.
- Assist in supervising GeneXpert sites, strengthen national and county commodity and GeneXpert task forces, and support national annual GeneXpert data review and best practice sharing meetings.
- Support a diagnostics network analysis (DNA), GeneXpert Technical Assistance (TA) missions, WRDs scale-up interventions, including the rollout of digital chest x-ray (CXR) coupled with computer-aided Detection software (CAD), lateral flow urine lipoarabinomannan assay (LF LAM), and stool sample testing using GeneXpert for children.
- Support GeneXpert use for bi-directional screening and testing for TB and COVID-19.
- Continue supporting active case finding (ACF) at the community level through outreach interventions using digital X-ray devices with CAD software coupled with portable Truenat instruments for hard-to-reach and marginalized populations.
- Support meetings of national TB diagnostic committees of experts, operational research for laboratory-related questions, baseline and follow-up laboratory investigations for individuals with DR-TB, and analysis of diagnostic capacity.

*Engaging all care providers*

The National TB Program (NTP), in collaboration with various partners, engaged private providers—both for-profit and not-for-profit—faith-based organizations (FBOs) and NGO facilities in TB response activities. USAID supported the development and launch the Public-Private Mix (PPM) action plan 2021 – 2023. Strategies in the PPM action plan 2021-2023 have been aligned to the lessons learnt in the implementation of the previous PPM action plan (2017 – 2020). The focus is engaging all providers, including other non-NTP providers who have not been previously engaged in TB activities like private chemists/pharmacies, private stand-alone laboratories, the corporate sector, and informal service providers.

Interventions that will be supported with the FY22 funds include:

- Training health workers from private and FBO-owned facilities on FAST (Find cases Actively, Separate safely, and Treat effectively).
- Quality improvement in TB case finding through monthly data reviews at the facility level.
- Monthly facility support supervision.
- Dissemination of updated TB screening and diagnostic algorithms for both adults and children and the revised 2021 guidelines on the management of TB with a focus on TB ACF and contact management.
- Advocate and facilitate integrated TB screening at all service delivery points, including at outpatient departments, intensified TB case finding in maternal child health (MCH) and HIV clinics, and TB screening in diabetes and nutrition clinics.
- Conduct differentiated TB screening and testing in key community hotspots with integration of COVID-19 testing.
- Support implementation of the NTP's policy on bi-directional screening to enable screening of individuals with COVID-19 for TB in the private sector.
- Continue supporting implementation of new tools to support case finding efforts at the community and health facilities; these include digital X-rays for screening and Truenat for diagnosis of DS TB and DR TB, a few will be in FBO health facilities.

*Community TB care delivery*

The COVID-19 pandemic provoked social stigma and discrimination against people perceived to have had contact with the virus, leading to people hiding illnesses such as TB, with similar symptomatology to COVID-19; many chose not to seek health care promptly. Inadequate motivation of Community Health Care workers, lack of equipment for Infection Prevention and Control, and inconsistent engagement continue to be large barriers to community TB case finding. Other barriers include inadequate resource allocation to conduct outreaches and sensitization activities, inadequate equipment for screening—e.g., X-rays, knowledge gap about TB, and weak referral linkages when health facilities are far from the client.

With FY 2022 funds, USAID will support community-based ACF through TB screening activities outside of health facilities, including outreach to vulnerable and marginalized populations in multiple counties. These will include community-based education, identification, and referral of community members with TB symptoms to diagnostic facilities, specimen collection, and transport by community workers to improve access to diagnosis. Interventions to alleviate TB and COVID-19 stigma, gender-based analyses, mass education, population-based advocacy campaigns, and other efforts in social and behavior change communication will be supported. Support will also be provided to package information addressing both TB and COVID-19

prevention measures at the community level. These will also leverage other mechanisms aiming to increase COVID-19 service uptake. USAID will support the uptake of digital CXR for the screening of various key populations such as people living with HIV (PLHIV), intravenous drug users, and men within their workplaces.

## CURE

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

Persisting barriers to increasing DS-TB treatment success include suboptimal monitoring and follow-up of people with DS-TB, minimal assessment of non-communicable diseases (NCDs), including mental health and diabetes, inadequate education and counseling for individuals with TB, and suboptimal focus on differentiated approaches for TB care that lead to high loss to follow-up and death rates.

In FY2023, USAID will support a national rollout of differentiated service delivery approaches to TB treatment, including the implementation of the guidance on longer drug refills for people with TB, dissemination of the revised TB guidelines, incorporation of quality improvement approaches into routine programming, and regular data review and validation of care cascades at national and county levels. To strengthen and improve TB treatment success with financial support from the introducing New Tools Project (iNTP), USAID will lead the introduction of digital adherence technologies in the capital to improve treatment compliance and address loss to follow-up. Other activities to be supported include the dissemination of healthcare worker job aids and tools to improve access to treatment-supportive services such as counseling, nutritional, and active drug safety monitoring and management (aDSM) interventions, contact management, joint work planning and program implementation and support supervision in all TB control zones, advocacy to improve patient and community TB awareness, mortality audits that explore contributors to death among individuals with TB, and the use of TB performance wall charts at the facility level to support using data at service delivery levels. USAID will also support national discussions on strengthening NCD integration, including mental health, alcohol and drug abuse, diabetes, hypertension, and post-TB lung disease care.

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

USAID plans to implement the following interventions to further strengthen the programmatic management of drug-resistant TB (PMDT): increase case finding by scaling up of DRTB surveillance services and access to second-line DST; assess and expand the diagnostic network by deploying additional molecular diagnostics such as Truenat; improve diagnostic network connectivity; implement quality improvement of DRTB treatment services through site level interventions, provider training, targeted technical assistance visits, and patient education; phase in modified short all-oral regimens; and among children, integrate DR TB approaches with

other childhood services. In addition, the program will work with stakeholders to strengthen pharmacovigilance in the country, including coordination between relevant agencies.

## PREVENT

*Prevention*

The major challenge hindering TB preventive therapy (TPT) uptake is inadequate stocks of TPT drugs. In addition, more resources are also needed to (re)build 'the capacity of more healthcare workers to administer the new molecules in line with the revised guidelines and for the expanded population. This includes the relevant recording and reporting and monitoring of adverse events and breakthrough TB.

A major focus with FY22 funds will be ensuring TPT commodity security by supporting adequate forecasting and quantification, timely submission of consumption reports, automation and timely allocation and distribution of TPT commodities, and multi-stakeholder TPT commodity security meetings. Additional efforts will look towards increasing the uptake of the shorter TPT regimens in all the counties through contact tracing and management and capacity building the health care workers at all levels in the health system. Further demand creation efforts will be through advocacy for the engagement of the Community Strategy to provide community-led, patient-centric TPT that includes capacity building and sensitization of eligible patients and care providers to improve buy-in for the newer TPT regimens.

## SUSTAINABLE SYSTEMS

*Commitment and sustainability*

USAID will help the NTP finalize and disseminate the TB Multi-sectoral Accountability Framework to track engagement of other non-health sectors investments to TB; meaningful engagement and capacity building of the TB Champions, representing TB Community, to advocate and monitor resource prioritization and allocation towards TB response in their respective counties and at the national level.

*Capacity and functioning systems*

Kenya will implement the following strategies to strengthen procurement and supply chain management of TB commodities: strengthen quantification, forecasting, procurement, distribution, and regulatory systems for TB medicines and supplies; develop county staff capacity for commodity management and reporting; adopt more efficient strategies and mechanisms to distribute commodities, including reverse logistics that facilitate re-distribution; enhance early warning systems for stock levels by counties to ensure timely requests; enhance

pharmacovigilance for individuals with TB and adopt a patient pack approach to distribute pediatric formulations.

USAID will strengthen the pharmacovigilance system by scaling active drug safety and monitoring (aDSM) activities. The sub-county and county training of pharmacists on aDSM will occur in conjunction with monitoring and evaluation of aDSM through post-market surveillance. USAID will also support quarterly meetings with commodity technical working groups (TWGs)/committees of experts to streamline the forecasting, quantification, and distribution of laboratory and drug commodities.

*Research*

Barriers to implementing research activities include an inadequately defined research agenda with no repository for ongoing or proposed country research, inadequate funding and human resource constraints, competing priorities that limit program officers to focus on research, suboptimal data use to identify areas of further studies, unstructured collaboration with research organizations and academia, and lack of data and research findings dissemination plan.

The NSP identifies research priorities in each thematic intervention, but a lack of focus on research and inadequate funding for research hampered the implementation. USAID intends to boost Kenya's research agenda in FY2023 with the following objectives: helping further outline clear, implementable co-owned research priorities, supporting steps to building research repositories, supporting structured dissemination and knowledge translation plans; working with other donors (especially the Global Fund) to build capacity of research offices, and continuing research-capacity-building activities for the counties. USAID will also support the implementation of a few nationally agreed surveys such as a Drug Resistance Survey.