SUCCESS STORY

ELECTRONIC HEALTH SYSTEMS SAVE LIVES IN TAJIKISTAN

USAID Supports the Nationwide Rollout of an Electronic TB Register for Tuberculosis Recording and Reporting

Nigora Eshonkulova is receiving on-the-job training from USAID in E-TB Register data entry.

"The E-TB Register is the greatest achievement of our partnership with USAID. It is a powerful tool not only for health providers, but also for public health managers at the national and regional levels who can now – with minimal resources – collect accurate data to monitor, evaluate, and improve TB care and prevention services nationwide."

Asliddin Rajabzoda

Director, Tajikistan National TB Center

For Nigora Eshonkulova, a nurse at a tuberculosis (TB) clinic in northeastern Tajikistan, maintaining patient records is a breeze. It takes just a few minutes a day to record patients' test results, treatment regimens and other important data in the electronic TB (E-TB) register database. With this system, doctors at her clinic and health managers in the National TB Program's central and regional offices have all the information they need at their fingertips.

Yet in Tajikistan, where the incidence of TB and its drug-resistant forms is among the highest in the world and a major public health concern, a centralized repository of data seemed like impossible until very recently. Exchange of information among TB laboratories, clinics and the National TB Program's central office took months, especially in Tajikistan's remote mountainous areas, some of which are inaccessible during winter. This delay negatively impacted treatment outcomes: with lab results taking as long as six months, doctors could not enroll patients in appropriate treatment; and without prompt and accurate reporting of TB cases, the Tajikistan National TB Program could not design or evaluate the effectiveness of its TB prevention and care interventions or report accurate data to the World Health Organization.

To address this challenge, USAID's TB Control Program has supported the Tajikistan National TB Program since 2015 in the nationwide rollout of an E-TB Register database for collecting, managing and analyzing TB epidemiology and patient data. In four years – much faster than originally anticipated – USAID and its national partners together evaluated the country's needs and supplied the necessary infrastructure: computers, software, and Internet connectivity to 82 TB care facilities across Tajikistan.

Computerization alone is not a panacea to building sustainable recording and reporting systems. The strength of information technology depends on people using it properly. To this end, USAID has trained nearly 200 lab and health personnel across the country in data entry, analysis and reporting in both formal and on-the-job settings. Many of the trained health providers, like Eshonkulova, had no prior computer experience, Now, however, they can easily input, report and interpret information about patients' TB test results, current and prior treatment regimens, TB drug inventory, adverse side effects of powerful TB drugs, patients' contacts to be screened for TB and other critical information.

Having a centralized reporting and recording system like the E-TB register is particularly important in Tajikistan where, due to the stigma

associated with TB, patients are often not comfortable sharing their information with doctors, especially if they hadn't completed a full course of treatment. However, with the E-TB register, doctors can now see a patient's prior TB history to ensure appropriate treatment, minimizing the development of drug-resistant forms of TB and further transmission in communities.

"Thanks to the E-TB register, doctors and nurses have more time to spend with patients," reflects Eshonkulova. "Before, it took me hours to collect and record information on paper forms. Now, I can do this in a matter of minutes."

As a result of the nationwide implementation of the E-TB register and other initiatives supported by USAID in Tajikistan – such as new treatment protocols, expansion of rapid TB testing technology throughout the laboratory network and community engagement – the time between the initial testing, diagnosis and initiation of treatment has shortened from months to just days. With early and appropriately designed treatment, patients have a much greater chance of being fully cured and minimizing the spread of infection.

"The E-TB Register is the greatest achievement of our partnership with USAID," reflects Tajikistan's National TB Center Director Asliddin Rajabzoda. "It is a powerful tool not only for health providers, but also for public health managers at the national and regional levels who can now, with minimal resources, collect accurate data to monitor, evaluate, and improve TB care and prevention services nationwide." With the E-TB Register fully implemented, Tajikistan is much better positioned to stem and reverse the rising tide of TB.

USAID supports the Ministry of Health and Social Protection of Population of the Republic of Tajikistan in implementing its National TB Program by providing more effective and accessible TB prevention, diagnostics, treatment, and care for all, including vulnerable populations. The main objective of the five-year USAID TB Control Program is to reduce the burden of TB and prevent drug-resistant forms of the disease in Tajikistan. The USAID TB Control Program runs from 2014 to 2019 and covers a wide range of technical areas, including training medical workers to strengthen the health system, improving interagency coordination and cooperation, and increasing access to diagnosis and treatment.