e-TB Manager: Strengthening Health Systems, Improving Public Health

Weak health information systems are a bottleneck for effective tuberculosis (TB) control. The emergence of drug-resistant TB (DR-TB) increases the need for tools that allows effectively managed information on diagnosing, prescribing practices, treatment, and rational medicines use, while also supporting uninterrupted availability of anti-TB medicines. e-TB Manager is a system-strengthening, comprehensive electronic web-based information system, developed by the US Agency for International Development (USAID)-funded Systems for Improving Access to Pharmaceuticals and Services (SIAPS) Program, that meets the acute information management needs of national TB programs.

Challenges for TB Control in Ukraine

Ukraine has the second highest burden of TB in the European region. According to the Ukraine’s Ministry of Health (MoH), TB is the leading cause of death from infectious diseases in the country. However, managing information that is critical for effective TB control has been a significant challenge for Ukraine’s National TB Management Program. The poor quality of data on TB and a weak monitoring and evaluation system within the NTP hinders a more successful control program.

What is e-TB Manager?

e-TB Manager is web-based information system that integrates data from all components of TB control. This includes information on persons with presumptive TB, TB cases, medicines, diagnosis, laboratory testing, treatment, and its outcome. What makes e-TB Manager such an effective tool in the fight against TB is its capacity to integrate all components in one database. The system generates standard and customizable reports on the different aspects of TB control and TB and MDR-TB surveillance; the reports can be used for a decision making purposes by the NTP.

From Pilot Stage to Official Registry

USAID-funded SIAPS piloted e-TB Manager in Ukraine with impressive results, leading the MoH to recognize the tool as an information management solution for Ukraine’s efforts at TB control. On October 19, 2012, the ministry issued ordered No. 818, “Order on Electronic TB Registry (e-TB Manager) Operations” and following the order’s enactment, e-TB Manager received official certification for data security compliance to manage TB patients’ personal data according to national legislation.
The Results

e-TB Manager in Ukraine allows effective TB data to be effectively managed country-wide. It is used in all 27 regions of the country and data is entered on a regular basis according to approved standard operating procedures. There are more than 1,200 users of the system at 650 TB facilities. Currently, 119,000 TB/MR-TB cases have been entered into the system. The electronic system is used for regular and ad-hoc reporting, monitoring and evaluation, epidemiological surveillance at regional and national levels, identifying gaps in national and regional TB programs implementation, monitoring medicine use, and providing data for forecasting pharmaceutical needs. With e-TB Manager, the amount of time needed for routine TB report preparation has decreased from 1–5 days to 1–3 hours. Compliance between national standardized quarterly reporting and the same report generated by e-TB Manager increased from 77 percent (third quarter 2013) to 85 percent (fourth quarter 2013) and then to 98 percent (first quarter 2014). Moreover, the use of e-TB Manager has contributed to increasing adherence to the national standard TB treatment protocols through functionalities monitoring the use of non-standard treatment regimens.

The e-TB Manager has improved data quality and its processing and use significantly. Ukraine’s experience of transitioning from paper-based to an electronic TB information system can be used by other countries in the region.

For more information about the rollout in the 27 regions of Ukraine, please visit http://ucdc.gov.ua/en.