



## IMPLEMENTING THE FAST APPROACH TO IDENTIFY TUBERCULOSIS CASES IN VIETNAM

### Background

**TB** (Tuberculosis) caused 9.6 million people to fall ill in 2014, and killed 1.5 million people.<sup>1</sup> In Vietnam, there were 130,000 incidences of TB and about 19,000 deaths from TB in 2014. Vietnam ranks 12th among the 22 countries that bear 80% of the global TB burden. In addition, Vietnam is also 12th out of the 27 countries that bear the highest burden of Multi-Drug Resistant TB (MDR-TB). The estimated MDR-TB rates were 4% among new patients and 23% among retreatment patients.<sup>1</sup> The case detection rate for TB was 77% in 2014. The HIV testing rate for TB patients rose from 59% in 2012, to 73% in 2014. In order to continue this positive trend, TB projects in Vietnam must work to create sustainable programs that strengthen the capacity of the healthcare system.

### FAST in Vietnam

In order to improve early detection, diagnosis, and treatment initiation of TB and MDR-TB cases, the USAID TB CARE II Project introduced the FAST strategy in Vietnam in 2014. The FAST strategy, which stands for: Finding TB cases Actively, Separately safely, and Treating effectively, is an infection control strategy aimed at stopping the spread of TB in congregate settings. Global stakeholders and experts in TB and infection control developed a package of infection control practices, which were designed to be easily implemented and incorporated at health facilities in high burden areas.

### Objectives

In 2014, the USAID TB CARE II project began working with the National TB Control Program to initiate the FAST strategy in two provincial hospitals. The project used these two sites for an intensive

**F**inding TB cases  
**A**ctively  
**S**eparately, safely  
**T**reating effectively

30 month pilot project that focused on increasing early detection and diagnosis of TB and MDR-TB cases. This would in turn increase early detection and effective treatment initiation and there by reduce TB transmission among healthcare workers and patients. The objectives were to:

- **Strengthen screening and triaging** at the hospital's outpatient department (OPD) and intensive care unit (ICU) to identify presumptive TB and MDR-TB cases;
- **Use GeneXpert technology** to rapidly detect and diagnose TB and MDR TB cases for early and effective treatment initiation; and
- **Strengthen patient tracking and management system** to manage TB and MDR TB cases more effectively.

### Key Activities

Reduced infection transmission at OPDs and ICUs: Masks were provided to patients visiting OPDs and ICUs at points of entry that are usually crowded with undiagnosed/unsuspected cases and people with other diseases.

### SEPTEMBER 2016

TB CARE II is funded by United States Agency for International Development (USAID) under Cooperative Agreement Number AID-OAA-A-10-0021. The project team includes prime recipient, University Research Co., LLC (URC), and sub-recipient organizations Jhpiego, Partners In Health, Project HOPE along with the Canadian Lung Association; Clinical and Laboratory Standards Institute; Dartmouth Medical School: The Section of Infectious Disease and International Health; Euro Health Group; and The New Jersey Medical School Global Tuberculosis Institute.

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**Improved screening and triaging:** Incoming patients to the both OPDs and ICUs were actively screened to capture and document patients' hospitalization history, previous TB treatment, exposure, symptoms, and lab tests from referring facilities. Patients were divided into four main categories: presumptive TB, presumptive MDR-TB, TB patient, and others for appropriate test requests and triage. Presumptive MDR-TB patients were prioritized for testing through GeneXpert. The project provided the two hospitals with 4,000 GeneXpert cartridges and 1,200 falcon tubes to support GeneXpert tests for presumptive MDR-TB and TB.

**Patient recording, tracking and reporting system:** At the beginning of FAST implementation, project staff designed a simple MS Access database for each hospital to record, track and report incoming patients. All patient information forms were entered into the database. On a monthly basis, database records were merged with other existing data recording systems maintained by different hospital departments. This allowed hospital staff to track key information of the patient such as diagnosis and times of registration, diagnostic tests and treatment initiation. The generated reports were used to monitor FAST implementation as well as to provide public-private mix reports and feedbacks to referring facilities and to assist in hospital supervision efforts.

Additionally, the project collaborated with Provincial Health Departments to support development and deployment of more comprehensive hospital software at both hospitals to allow all departments to access to the same patient record on a network. Instant access to patient information assisted doctors in making more accurate decisions, proper diagnoses and effective treatment plans in compliance with the FAST strategy. Data entry into one database increased completeness, accuracy and consistency of patient records with less errors and manpower than in the previous system.

**Capacity strengthening:** Staff capacity was continuously strengthened to implement and monitor FAST activities, use the hospital databases, and manage and utilize patient data through training and technical assistance during TB CARE II monitoring trips. More than 200 staff, half of them female, participated in trainings.

**Monitoring and Evaluation:** Each hospital organized routine meetings to review and improve quality of form completion, improve data quality, utility and exchangeability, and strengthen collaboration among departments. The USAID TB CARE II Project staff made frequent field visits to both hospitals to monitor activity implementation, review performance and discuss solutions to issues with the hospital staff.

**Scaling up FAST strategy implementation in Vietnam:** FAST strategy implementation was widely presented and discussed with international and national partners including USAID and CDC representatives, and directors and staff from the National and Provincial TB Programs



2,080 patients diagnosed with TB  
153 patients diagnosed with MDR TB

## Results

Diagnosis of TB and MDR-TB not only allows for the commencement of treatment for the patients, but also contributes to the prevention of transmitting TB to others, and thus greatly reduces the TB burden.

In the first year of implementation, 9,714 people were screened for TB. Of those, 7,034 were identified as presumptive TB cases and 576 as presumptive MDR-TB cases. A total of 353 TB cases and 50 MDR-TB cases were diagnosed. 49 MDR-TB cases were enrolled in treatment. Staff capacity was strengthened through 7 different training courses that reached 205 healthcare professionals.

In the second year, 24,002 people were screened for TB. Of those, 13,223 were identified as presumptive TB cases and 1,727 as presumptive MDR-TB cases. A total of 2,057 TB cases and 103 MDR-TB cases were diagnosed.

## Next Steps

Due to the immense success of this pilot program, TB CARE II is currently working on implementing the FAST method in many other areas with a high TB burden. A meeting held in September, 2016 will bring together key stakeholders from many different countries to learn from FAST implementation in Vietnam and discuss introducing FAST in other countries.

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1. 2015 Global Tuberculosis Report (Rep.). (2015). Retrieved July 13, 2016, from World Health Organization website: [http://apps.who.int/iris/bitstream/10665/191102/1/9789241565059\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/191102/1/9789241565059_eng.pdf)

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The **USAID TB CARE II** project, which began in 2010, implements activities in 15 countries. The project, led by University Research Co., LLC (URC), aims to provide global leadership and support to national TB programs and other in-country partners to decrease TB rates through the implementation of new technologies, the integration of TB and HIV diagnosis and treatment, better programmatic management of drug resistant TB, and through health systems strengthening.