

Bangladesh

International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b)

In Bangladesh, strengthening of public private mix (PPM) initiatives is essential to increase the accessibility to care, to improve the quality of diagnostics in the private sector and for overall improvement of tuberculosis (TB) management as part of the national TB control strategy.



With support from TB REACH Wave 3 funding and using a large donation of GeneXpert systems with cartridges, International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) is implementing a social enterprise model for strengthening TB control in Bangladesh, including involvement of the private sector. Three TB Screening Centres (SCs) are being established by icddr,b across Dhaka, the capital city of Bangladesh. The sites of these SCs were selected for maximum geographical coverage and accessibility of care to patients. These centres are equipped with the Delft X-ray system, GeneXpert systems and the Spirometre and Blood Glucose Monitoring system. The SCs are designed according to the architectural guidelines for airborne infection control established by experts in the field.

In collaboration with Bangladesh Lung Foundation (BLF), icddr,b established a network of physicians (chest consultants and general practitioners) in the private sector. As they wait to be seen, patients and their attendants are verbally interviewed by Community Screeners using an android smart phone-based dedicated application to identify TB suspects. These suspects are then referred by the physician to the nearest icddr,b TB SC for low cost, high quality digital chest X-ray. The integrated CAD4TB software with this Delft X-ray system automatically scores every X-ray for any abnormality consistent with TB. TB suspects with abnormal CXR are provided free GeneXpert testing to identify confirmed TB patients. A detailed communication strategy has been developed by icddr,b to promote and explain the project activities among the local stake holders and to the physicians, including posters for pharmacy and GP chambers, brochures, calendars and referral pads for GPs.

In the first three months of project operation, over 25,000 individuals have been screened for TB symptoms and over 250 new TB cases have been detected. Patients testing positive are counseled by the health workers when they return to collect their results and are either enrolled for TB treatment under the referring physician in the private sector or registered for free treatment with a DOTS centre near their home, following the National TB Control Programme (NTP) guidelines. Patients with a Rifampicin resistance result on the GeneXpert test are linked to the National Institute of Chest Diseases Hospital (NIDCH) for further confirmatory diagnostic testing, clinical evaluation by the DOTS-plus coordinator and second-line treatment initiation.

Stop TB Partnership
TB REACH