Stop TB Partnership
TB REACH

# Tanzania

## University of Maryland Baltimore

The University of Maryland Baltimore (UMB) has been implementing a TB REACH wave 3 project, TUNAWEZA ("WE CAN"), since April 2013 in support of the Tanzanian TB and Leprosy program. The project is being implemented in an area with a population of 2,627,320 in Manyara and Tanga regions as well as two districts in the Geita region. The TUNAWEZA project approaches include (1) intensified case finding targeting high risk groups (pastoral and mining communities), HIV/AIDS affected populations and children under the age of 15; (2) enhanced TB diagnosis involving novel sputum processing techniques and Gene X-pert technology; and (3) strengthened data collection, reporting and information use through integration of traditional electronic and manual information systems and mHealth technology.

UMB is partnering with Catholic University of Health and Allied Sciences and Interactive Research and Development (IRD). Through the use of high quality TB diagnostics, the project estimates that 4,974 TB cases will be detected over the first year of project implementation.

Significant progress has been achieved after 9 months of implementation in terms of increased numbers of TB cases detected, and improved TB services in the project area. By the end of the December 2013, 80,433 individuals were screened and 17,314 had signs and symptoms indicative of TB. In the same time, a total of 1,271 SS+/B+ TB cases and 3,788 all forms cases were detected, reflecting respective increases of 11% and 16% compared to the number of TB cases detected over the same period of time in the year before the project started.

Apart from working to augment laboratory staff's technical capacity in the use of conventional light microscopy for laboratory TB detection, the project provided GeneXpert machines for TB detection in four facilities in the project area. By the end of March 2014, a total of 443 sputum smear negative (SS-) samples were analyzed with GeneXpert, of which 8.4% were found to be bacteriologically positive.

The positive impact of the project over the first year of implementation went beyond the number of TB cases detected. For the first time a system for community TB screening, complete with tools and a functional referral system for TB suspects to access health facilities for laboratory and clinical TB diagnosis, was established in the participating districts. A total of 58 community health volunteers were identified, trained, and later mentored on community TB screening and effective referral of TB suspects to TB diagnosis facilities. This is a human resource asset for the project districts, as they will be available in their respective districts and will continue community TB screening beyond the life of the project.

TUNAWEZA has introduced mobile phone based data collection activities in the project districts in Manyara. The mHealth activities are meant to improve TB screening data capture at the community level, which is expected to simplify monitoring and reporting of community TB activities. Apart from improvements of lab physical infrastructure and provision of TB diagnosis equipment, a number of health care workers, clinicians, nurses and lab staff have been trained on several aspects of TB diagnosis and management. As the project celebrates a year of operation, there are already eight TB Clinical Mentors available to continue building clinical capacity of their colleagues to improve TB related services in their districts.

Revolutionizing facility based TB detection by combining proactive screening of high risk individuals for signs and symptoms along with community based screening that is effectively linked to the facility will go a long way in increasing TB case detection and diagnosis in Tanzania. New locally sound ideas and innovations are required to increase coverage for active TB screening and improving capacity for TB testing. As demonstrated by this project, the contribution of novel, effective TB testing technologies like GeneXpert in the lower health facilities is significant. The project recommends the introduction of these interventions into routine NTP activities to improve access to TB testing and management.