



Uganda

The Foundation for Innovative New Diagnostics (FIND)

In Uganda, TB is the number one killer of people with HIV. HIV-prevalence (7.2%) and TB-incidence (193/100,000 people) are high and diagnosis of TB is difficult. Smear-negative TB is common, and most diagnostic tools lack sensitivity so the disease often goes undetected until the advanced stages when treatment outcomes are poor and the risk of death is great.

To help correct this situation, The Foundation for Innovative New Diagnostics (FIND), along with the National TB and Leprosy Program (NTLP), collaborated on a TB REACH project to introduce the molecular Xpert MTB/RIF test to confirm TB in HIV-infected patients at six district-level health facilities, thus creating regional 'hubs'. To overcome the difficulties and expense involved in getting patients to these health centres, a sputum transportation network has been established, using local 'boda-boda' motorcycles to deliver patient specimens from 24 districts to these hubs for testing. A SMS reporting system for data entry and results feed-back is also being introduced in collaboration with Interactive Research and Development (IRD), which is also implementing this system under another TB REACH project in Pakistan.

Since earlier operational research by FIND had found that access to uninterrupted and quality electricity would be a major obstacle to successful employment of the new technology, an energy delivery system based on solar power has been established. This system is used effectively at sites where the national grid fails to supply stable and quality electricity.

A story that highlights both the challenges of TB diagnosis in resource-limited settings and the benefits that well-placed diagnostic interventions can bring is that of two young HIV-positive mothers, neighbors living on an island in Lake Victoria, accessible only by motorboat. Their homes are small and unventilated, encouraging TB transmission amongst household contacts, including their HIV-positive toddlers. Access to health care is complicated and often unaffordable for both these women. Despite these similarities, their stories are very different: Namagembe couldn't afford the trip to the central laboratory in Kampala for definitive testing when she was first suspected for TB. Fortunately, Xpert MTB/RIF had been introduced at the more accessible TASO Entebbe clinic through this TB REACH project, and she was among the first to be tested. With a positive result in less than two hours, treatment started immediately. Namutebi's diagnosis, however, preceded the arrival of Xpert and followed the defined national algorithm. Smear negative, with inconclusive X-ray results, she endured numerous clinic visits and delays. Losing confidence in the health system, she defaulted on her TB treatment and unknowingly transmitted TB to her son.

With the success of this project in terms of increasing case detection, even amongst vulnerable and difficult-to-reach communities, Namutebi's story could have a different outcome. In only seven months 3,802 people with suspected TB were tested with Xpert with a very high positivity.

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FINDING AND TREATING PEOPLE WITH TB IN THE WORLD'S POOREST COMMUNITIES

TB REACH

The first wave of projects
increased case detection
by an average of 26%
compared to
the previous year

More than nine million people around the world become ill with tuberculosis (TB) each year. About one-third of them fail to get an accurate diagnosis or effective treatment and are more likely to die from this curable disease.

By supporting the many partners working in the field, TB REACH offers a lifeline to people among this missing 3 million by finding and treating people in the poorest, most vulnerable communities in the world. In areas with limited or non-existent TB care, TB REACH supports innovative and effective techniques to find people with TB quickly, avert deaths, stop TB from spreading, and halt the development of drug resistant strains.

- TB REACH was launched in 2010 and will run until 2016, thanks to a CAD\$ 120 million grant from the Canadian International Development Agency.
- TB REACH is committed to getting funds to our partners with a very short turnaround time.
- TB REACH has committed nearly \$50 million to partners working on 75 projects in 36 countries covering a wide range of interventions.
- Preliminary analysis from Wave 1 shows that efforts of partners led to an increase of 26% in TB case detection over an area of 100 million people, while some areas saw increases of more than 100%. The average cost per person covered is US \$0.15.

Stop TB Partnership Secretariat
World Health Organization
HTM/STB/TBP
20, avenue Appia CH-1211 Geneva 27
Switzerland

Email: tbreach@who.int
Phone: + (41) 22 791 46 50
Fax: + (41) 22 791 48 86

