The Tuberculosis Reference Laboratory Bamenda and the Cameroon National TB Program were awarded a TB REACH Wave 4 grant to improve tuberculosis (TB) case detection in Northwest Cameroon. Some of the challenges for TB case detection in this region are the high rate of HIV-TB co-infection (60% of those with TB also suffer from HIV) and extreme poverty. Based on our previous work and pilot activities in this region, we identified several opportunities to improve case-finding at health facilities. The project aims to increase TB case detection by improving clinical diagnosis of TB, intensifying screening for TB among patients attending health centers to ensure more patients are sent to the lab for testing, and implementing the Xpert MTB/RIF assay to increase the sensitivity of lab diagnosis. We have initiated project activities at 19 of the regional TB diagnostic and treatment centers in the Northwest region, serving a total population of nearly two million people. We have implemented testing by Xpert® MTB/RIF (Xpert) using eight Xpert instruments at twelve sites. Patients at high-risk of TB, including hospitalized patients who are HIV-infected and/or with any TB symptom, or anyone newly eligible to start anti-retroviral therapy, are referred to the laboratory for testing by Xpert. These activities have resulted in increased numbers of patients being screened for the disease, TB suspects tested in the laboratory, and TB cases detected. Under the project auspices, all patients who have TB symptoms receive free lab testing for TB. Since the start of TB REACH activities at the ten largest project sites outside of the regional hospital, the average number of TB suspects screened in the laboratory has increased from 1,674 to 4,043 per quarter, which has resulted in an increase among bacteriologically-confirmed TB cases from an average of 210 to an average of 330 per quarter at these sites.

The project activities have also helped to close the gaps in patient care pathways, by improving links between clinicians, the labs, and the TB treatment units. In addition, because the project works closely with the regional and national TB and HIV programs, personnel at the project sites have reported improved effectiveness and integration of TB and HIV program activities. As we go forward, we plan to continue to focus on follow-up of both Xpert and smear-negative patients presumed to have TB, to ensure that patients with Xpert-negative TB or extra-pulmonary TB disease are identified and treated. This will be critical since nearly 80% of the TB cases notified in this region are bacteriologically-confirmed pulmonary TB cases; this is higher than expected in this setting, where a majority of TB cases are found in HIV co-infected patients. We will also continue careful supervision and mentoring of existing activities to increase the numbers of patients screened and tested for TB. Finally, we are working with health facilities to instigate inclusion of TB education and sputum collection during their outreach activities in communities with limited access to healthcare facilities and TB testing.

The project activities have also helped to close the gaps in patient care pathways, by improving links between clinicians, the labs, and the TB treatment units. In addition, because the project works closely with the regional and national TB and HIV programs, personnel at the project sites have reported improved effectiveness and integration of TB and HIV program activities. As we go forward, we plan to continue to focus on follow-up of both Xpert and smear-negative patients presumed to have TB, to ensure that patients with Xpert-negative TB or extra-pulmonary TB disease are identified and treated. This will be critical since nearly 80% of the TB cases notified in this region are bacteriologically-confirmed pulmonary TB cases; this is higher than expected in this setting, where a majority of TB cases are found in HIV co-infected patients. We will also continue careful supervision and mentoring of existing activities to increase the numbers of patients screened and tested for TB. Finally, we are working with health facilities to instigate inclusion of TB education and sputum collection during their outreach activities in communities with limited access to healthcare facilities and TB testing.

The Tuberculosis Reference Laboratory Bamenda & National TB Programme

Cameroon
More than nine and a half 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 these people 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 identify people who have TB, avert deaths, stop TB from spreading, and halt the development of drug resistant strains.

TB REACH has supported a total of 142 projects in 46 countries. To date, 33 million people have been screened for TB in project areas, of which, 1.7 million have received TB treatment, accounting for 856,000 lives saved. Some projects have seen increases in TB notifications of more than 100%.

Our partners are providing evidence for new case finding approaches and are working with community and policy leaders as well as donors such as The Global Fund to integrate those approaches into national strategies that improve TB case detection.

TB REACH was launched in 2010 thanks to a CAD$ 120 million grant from Global Affairs Canada.

TB REACH acts as a pathfinder, providing fast track funding for innovative projects, monitoring effectiveness and leveraging funding for scale up.