# **ENGAGE TB**

## Providing a tool for self-screening for tuberculosis in Tanzania SERVICE DELIVERY

Implementation date: June 2014

With funding from Bristol-Myers Squibb Foundation, Pathfinder International (PI) in collaboration with the Tanzanian Ministry of Health and Social Welfare (MoHSW) through the National Tuberculosis and Leprosy Program (NTLP) and the Kinondoni Municipal Council are working jointly to intensify activities to "Stop TB" at the community level. This initiative is done through Pathfinder International's new project called ENGAGE TB.

### About Engage TB

Tuberculosis (TB) is an airborne disease associated with overcrowding and poverty. Kinondoni Municipality is densely populated municipality in Dar es Salaam, with over 1.2 million inhabitants. It is estimated that over 4,000 people contracted TB in Kinondoni Municipality in 2011. To address this health challenge, Pathfinder International contracted an SMS Aggregator (a company called Push Mobile) to develop a self-screening mobile application. The software enables the inhabitants of Kinondoni Municipality to do TB self-screening and access the basic health information related to TB via short messages (SMS) through their phones by sending a code word "TB" to a network neutral toll free short code (15077) free of charge. The application asks a series of questions, according to the WHO TB Screening Protocol including basic information such as the symptoms and signs of TB.

Apart from giving the client information, the mobile application also provides a list of health facilities that have

the capability to conduct laboratory tests to confirm TB, using a web login can confirm if clients test TB positive through sputum testing into the system that were referred using the SMS service. Once a client has been confirmed as TB positive, the Lab Technicians will register the client back into the application and hence enable the client to receive reminders about Directly Observed Therapy (DOT) to help with adherence to TB medication for a period of six months.

Clients, who are TB Negative, will receive messages about behavior change to help them avoid the spread of TB and or being infected by TB.

In addition to these direct benefits, Pathfinder international is taking part in the global campaign of attaining the sixth Millennium Development Goal (MDG) through the provision of vital TB information...

Age Category	Overall	Completed	Referred	ТВ
Male clients				
Under Five	27	18	16	5
Above Five	207	166	118	20
Sub-Total	234	184	134	25
Female Clients				
Under Five	22	15	13	1
Above Five	196	147	107	11
Sub-Total	218	162	`120	12
Overall result	346	254		37

#### **Evaluation and Results**

Pathfinder began implementing ENGAGE-TB in June 2014. A total of 540 mobile respondents (inquiring about under-five and above five, males and females) have been registered into the systems, and a total of 254 were referred of which. Of these referrals, 37 respondents were diagnosed to be TB positive and have started treatment.

#### **Lessons Learned**

- Introduction of the TB Self-Screening mobile application has increased access to services by community members in the Kinondoni Municipality; the system is simple and easy to use and has been received well by community health workers, health facility workers and Municipal officials
- Shortage of health care workers in health facilities has increased the work load of laboratory staff and health facility staff in uploading the testing results of mobile users in the system
- The Engage TB Self-Screening Mobile application increased the work load of community health workers, District Staff and lab technicians and no incentives or additional motivation was provided to them, thus affecting project performance
- Integrating of TB Self -Screening mobile application and referral services into existing community structures, using the community health workers as ambassadors, enabled fast start-up and acceptance of the project into the community; This approach delivers TB Screening services directly to the households of clients thus ensuring access to TB screening services without barriers of direct and opportunity costs to the client

#### Conclusion

Engage TB project has been a learning process for Pathfinder, Kinondoni District Staff and community health workers in general. The introduction of an m-Health intervention to successful identifying the TB cases early through Self-Screening services and offer the required assistance to gain access to treatment and reduce TB cases and multi drug TB resistance in the communities is seen as a great and innovative way of achieving this goal by both the Ministry of Health and Social Welfare, The National Tuberculosis and Leprosy Program and the Kinondoni Health Management Team. Lack of funding for maintaining the Self Screening Mobile Application system as the project is coming to an end means the system will not be online again after end of project just a short time after launched.

Geographic Coverage: Kinondoni District, Dar Es Salaam in Tanzania

Implementation Partners: Pathfinder International, Ministry of Health and Social Welfare (MOHSW), National Tuberculosis And Leprosy Program (NTLP), Kinondoni Municipal Council and Push Mobile

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