# **Approach to the Assessment of Financing of New TB Diagnosis and Treatment Interventions**

Authors: Chutima Suraratdecha, PhD;<sup>1</sup> Alaine Umubyeyi Nyaruhirira, PhD;<sup>1</sup> Fred Matovu, PhD;<sup>2</sup> Claude Bernard;<sup>3</sup> David Collins;<sup>1</sup> Catherine Mundy, PhD;<sup>1</sup> and Andre Zagorski<sup>1</sup>

1Management Sciences for Health; <sup>2</sup>Makerere University, Uganda; <sup>3</sup>TB and TB/HIV Evaluation and Research, CDC/ Rwanda Bio-Medical Center, Rwanda; <sup>4</sup>Systems for Improved Access to Pharmaceuticals and Services

# **BACKGROUND**

While the progress in reducing tuberculosis (TB) cases and mortality has been impressive, the global TB burden remains high. The increasing number of multidrug resistant (MDR) TB cases, low detection and cure rates, longer treatment period, and slow progress in MDR-TB treatment remain critical stumbling blocks toward TB control. An improvement for TB patient care requires not only new interventions but also an expansion of existing interventions, while strengthening TB programs overall. TB programs in most countries are heavily dependent on international donor funding, which is expected to decrease greatly over the next few years.

Successful uptake of TB interventions will require viable financing strategies and mechanisms. Therefore, we developed an approach to assess financing of new TB diagnosis and treatment interventions, and identify financing gaps and barriers to maintaining existing TB interventions and introducing additional TB interventions. The approach aims to assist countries to determine the scope and impact of interventions on other TB program components, and what additional costs to the TB program would be incurred with the TB interventions, and financing requirements for new interventions and affected TB components. By using the approach, countries will identify financial barriers and financing options for introducing and maintaining new and existing TB interventions.

### METHODS

We carried out case studies in Rwanda and Uganda from July to September 2012 to develop the assessment approach. The studies conducted included a desk review of the Uganda National Tuberculosis and Leprosy Program (NTLP), the Rwanda National TB Program (NTP), and ministry of health documents and budgets from both countries. In addition, there were consultations with key stakeholders involved in TB control on decision-making and planning processes, resources requirements for diagnosis and treatment, introduction plans of new TB interventions, and challenges to TB financing.

Identify TB diagnostics and treatment interventions to be assessed

Estimate incremental unit costs to implement affected components and interventions

Review of policies, introduction or roll-out plans, guidelines, protocols, algorithms, strategic plans, budget and expenditures, and decision making processes in introducing TB interventions

Identify the components of TB program affected by the introduction of interventions

Estimate financial requirements and gaps

# Acknowledgment

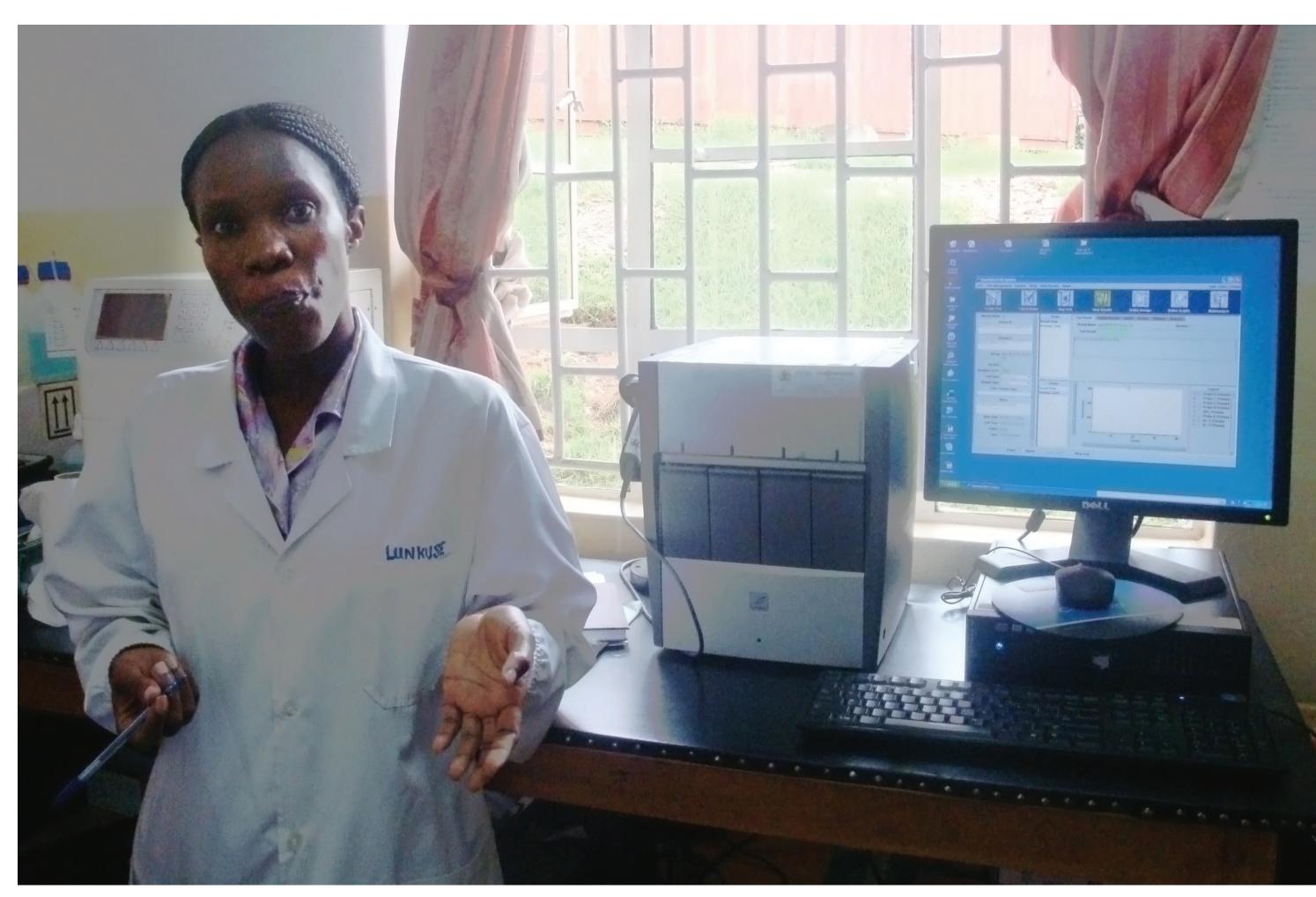
Rwanda and Uganda Ministries of Health; TB Program/Division in Rwanda and Uganda; National Reference TB Laboratory; Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria; local partners; and health facilities for their collaboration and technical support.

For more information, please contact:
Chutima Suraratdecha
Management Sciences for Health
4301 N. Fairfax Drive, Suite 400 • Arlington, VA 22203, United States
+1-703-310-3458 • csuraratdecha@msh.org

### RESULTS

The Uganda NTLP planned to roll out the MDR-TB treatment and GeneXpert (100 machines by FY 2014) for the first time in 2012. In Rwanda, a total of 16 GeneXpert machines are expected to be rolled out by FY 2013. An introduction of GeneXpert diagnostics would expect to affect the treatment budget because of an increase in the case detection rates for both TB and MDR-TB; these will require laboratory tests and treatments.

Based on the number of tests per day, number of TB and MDR-TB cases, costs of TB and MDR-TB treatment, and GeneXpert system implementation projected by the study team, only 13 percent of the estimated financing requirements for MDR-TB treatment were included in the Uganda NTLP budget. The World Bank has committed 570,000 US dollars to the Uganda GeneXpert roll-out plan from 2012 to 2016, representing 25 percent of the projected financial requirements for FY2012/13. In Rwanda, only 50 percent of total financial requirements were committed by the government and partners.



Josephine Lunkuse, laboratory staff—GeneXpert system at TASO, Entebbe, Uganda

# CONCLUSION

Determining and ensuring adequate financing for TB diagnostics and treatment interventions will be a recurring challenge, as governments are increasingly expected to contribute financially to their health care programs in an environment of competing needs and scarce resources. In both Uganda and Rwanda, the Global Fund represented a significant source of funding for their TB programs. Estimating financing requirements and financing gaps is not part of routine planning process in Uganda. Although Rwanda appeared to have a well-functioning partner coordination process in comparison to Uganda, financing gaps remain.

The evidence to support the introduction plan of new interventions, such as the number of expected suspected TB cases to be tested by GeneXpert, the number of machines needed, where the machines should be located, and impact of the intervention on TB control is limited. In addition, there is a lack of connection between the plans and budgets for treatment and diagnostics. Our approach assisted countries in identifying such information, which is crucial in coordinating TB activities and determining financing requirements and sustainability of the new interventions and TB program.





The SIAPS Program is funded by the US Agency for International Development under cooperative agreement AID-OAA-A-11-00021 and implemented by Management Sciences for Health.