Roll-Out of Xpert MTB/RIF Through CDC-PEPFAR

Heather Alexander
International Laboratory Branch
Division of Global HIV/AIDS
Centers for Disease Control and Prevention

WHO Workshop on Xpert MTB/RIF Implementation
7-8 April 2011
Xpert MTB/RIF in PEPFAR-Supported Programs

- Opportunity for implementation in >40 countries
- Driven by global and country-specific factors
  - WHO normative guidance
  - National TB program and national AIDS control program priorities
  - National (laboratory) strategic plans
- Emphasis on scale-ability and sustainability
- Focus on integration and health systems strengthening
  - Enhanced coordination at the clinic-laboratory interface and between TB and HIV programs
Strengthening Laboratory Health Systems

- Effective, Functional & Sustainable Laboratory Systems
  - Policies, Plans & Financial Systems
  - Training & Human Resource Systems
  - Quality Management Systems
  - Biosafety Systems
  - Equipment Procurement, Validation & Maintenance Systems
  - Supply Chain Management Systems
  - Laboratory Information & Data Management Systems

Laboratory Services
- Serology
- Molecular Testing
- Hematology
- Chemistry
- CD4
- Culture
- Microscopy

Care and Treatment, PMTCT, VCT, Early Infant Diagnosis, Tuberculosis, Malaria, STDs, ---etc
“With the Xpert MTB/RIF rapid diagnostic test, we will be able to quickly and reliably detect TB and identify drug resistance to rifampicin, start appropriate treatment, and ultimately reduce TB transmission. Cost-effectiveness data are promising and this technology could be an example of a smart investment that will help us become more effective in our mission to save lives. PEPFAR is committed to working with other partners to support the scale-up, appropriate use and evaluation of this new technology.”

-Ambassador Goosby, US Global AIDS Coordinator
Programmatic Implementation

- **Malawi**
  - District hospital laboratory serving high volume urban HIV and TB treatment center
  - Electronic data system for TB/HIV integration in development
  - Laboratory quality management systems and fluorescent microscopy training

- **Namibia**
  - MDR TB treatment center(s)

- **Rwanda**

- **South Africa**
  - NHLS

- **Other (unreported or in earlier stages of planning)**
Public Health Evaluations

- **EMRG**
  - Enhanced TB case finding to reduce 6-month morbidity/mortality
  - RCT
  - 52 clinics in 5 countries; ~8000 patients
  - Xpert placement:
    - Botswana: 2 district labs
    - Cote d’Ivoire: 1 reference lab
    - Nigeria: 1 reference lab, 1 clinic lab, 1 training center/lab
    - Uganda: 1 reference lab, 1 clinic lab
    - Zambia: 1 reference lab

- **Kenya ICF**
  - Intensified TB case finding in Nyanza province
  - 15 patient support centers; ~1000 patients
  - Xpert placement: KEMRI-CDC TB laboratory
OGAC TB/HIV Activity

- Demonstrating TB prevention, screening, diagnosis, and care “to scale” in PEPFAR-supported sites

Objectives:
- Develop a systematic and replicable approach to implementing a package of TB/HIV activities
  - Three I’s
  - Access to quality treatment for both diseases.
- Document impact on TB-related morbidity and mortality among those co-infected

- Full country cooperation and coordination with existing partner and funding organizations

- 8 countries invited to submit proposals
  - Botswana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Tanzania and Zambia.
Next Steps

- Continued coordination with WHO/GLI
- Guidance to PEPFAR-supported field staff and programs*
- Coordinated survey of PEPFAR-supported programs
- Technical assistance

* CDC, USAID, and OGAC
Acknowledgements

- Bill Coggin
- Bess Miller
- John Nkengasong
- Amy Piatek
- Tom Shinnick