Stronger health systems. Greater health impact.
The critical role of technical assistance in expanding access to Xpert MTB/RIF

*MSH’s experience in 5 countries in Sub-Saharan Africa*

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Short technical assistance provide by MSH for implementation and scale up of the Xpert MTB/RIF

<table>
<thead>
<tr>
<th>Source of Fund</th>
<th>Countries supported</th>
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<td>ASLM/ UNITAID</td>
<td>Congo Brazzaville</td>
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<td>Kenya</td>
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<td>USAID /TB CARE I</td>
<td>Ghana</td>
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<td>USAID/TB Heal</td>
<td>Ethiopia</td>
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<td>Global Fund/ MOH</td>
<td>Eritrea</td>
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47 Xpert GX4 Machines installed and 189 Laboratorians staff trained and 220 Clinicians sensitized.
MSH support for Xpert MTB/RIF Implementation and Scale up

- Provide technical assistance to develop national Xpert MTB/RIF scale-up plans
- Increase awareness of global policy guidance on Xpert MTB/RIF for country implementation
- Support Training and Installation of Xpert machine in collaboration with Cepheid
- Support development of QA systems, mechanisms for troubleshooting and maintenance
- Support development of tool to monitor the consumption and procurement of cartridges
Demonstration and installation of the GeneXpert

At each hospital / facility, SOP for pulmonary and EPT sample, procurement and maintenance log sheet are provided. Training material given (in collaboration with Cepheid) for each staff trained and USB key with electronic version. WHO check list explains and disseminated as a Poster of Xpert process.
Sensitization of medical doctors, nurses and other health care workers (Ghana)

The Ghana NTP team and TB CARE I in an open lecture session on the GeneXpert technology at the Faculty of Medicine at Kole –Bu Teaching Hospital
Sensitization of medical doctors on Xpert diagnostic test (Congo Brazzaville)

Training on Xpert technology and development of new algorithm by Clinicians, Congo Brazzaville
Challenges and Critical role of technical assistance: Observations from 5 countries
Prerequisites to country implementation of XpertMTB/RIF and key action points at country level.

- MSH used the WHO guidelines in all five countries
- However, the countries did not use it to prepare for Xpert implementation.
Preparation at country level not in line with the WHO checklist

- Epidemiological data not used to make correct decisions on placement and optimization of Xpert use
- Case finding practices of clinicians not aligned to the recommended use of Xpert
- Correct supplies for specimen collection and transport not available at health facilities
- No proper specimen referral system implemented
- Power outages interrupt Xpert use:
  - Underuse of Xpert machines
  - Delays in test results
  - Expiration of cartridges
Leadership, Partnerships and Coordination

Lack of MOH/ NTP leadership results in:

• Poor coordination of donors and partners involved in the Xpert purchase, cartridge management, roll out, monitoring and data collection

• Different impact of Xpert results due to different algorithms, and referral system

Some countries using Global Fund money to purchase Xpert machines and cartridges without having first made an implementation plan and budget
Low dissemination of WHO Xpert policies and guidelines by WHO country office and MOH / NTP

- Is there a formal mechanism for countries to receive Guidelines?
- Until recently, GLI dissemination targeted members who attended the annual meeting.
Detection of RIF-R – not well linked with MDR Treatment program

Some countries still require confirmation by LPA and/or Culture, delaying treatment

Don’t know what to do when TB culture/DST is not available
  - Where to send the sample
  - No close relationships with nearby countries
  - >6 months delay in obtaining culture results
  - Patients may have to travel at their own expense

Donor plans & budgets to strengthen culture/DST not always linked to the Xpert scale up and vice versa
Lessons learned from providing technical assistance in 5 countries

**Xpert introduction** requires funding for **strong technical assistance** to countries.

**Post implementation support** required for monitoring progress & impact on case detection, MDRTB management TB/ HIV integration.
Recommendations

• Countries must plan and budget for technical assistance for Xpert preparation, implementation and follow up.
• Ensure TB LAB strategic plan development and Budget with a Xpert roll out plan integrated
• Countries must coordinate donors and partners financial and technical support
• WHO/ GLI needs to ensure efficient mechanism for disseminating Xpert policies and guidelines
• Support needed for countries to customize WHO Xpert implementation manual for local used.
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• ASLM
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• TB HEAL/ ETHIOPIA
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• MOH/NTP ERITREA
• MOH/ NTP ETHIOPIA
• MOH/ NTP CONGO BRAZZAVILLE
• MOH /NTP GHANA
• MOH/ NTP KENYA
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Saving lives and improving the health of the world’s poorest and most vulnerable people by closing the gap between knowledge and action in public health.