Test all exposed infants: The use of mobile technology (IQSMS) to Improve Distribution and Availability of Dry Blood Spot Kits for testing exposed infants in Tanga and Mara Regions, Tanzania.

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Background

- LEAD project support prevention of mother-to-child transmission (PMTCT) services at 509 facilities in Mara and Tanga regions of Tanzania.

- Most are health centers and dispensaries in remote locations with unreliable or no sources of funds to transport reports and travel to collect medical supplies.

- These factors contribute to regular stock-outs of Dry Blood Spot (DBS) kits needed for HIV testing of children (exposed infants) born by HIV positive women.

- LEAD introduced the use of International Quality Short Message Software (IQSMS) to support facilities to share DBS kits information without traveling.
• IQSMS received Honorable Mention in Stockholm Challenge 2010 award in Health category as a best e-health system in improving health in over 300 facilities in Tanzania
International Quality SMS. IQSMS is software technology that uses mobile phone to report data to a dedicated centralized computer.

This will help coordinating medical care in various part of Tanzania. IQSMS uses mobile phone SMS to report data in a predetermined format to a dedicated centralized computer server. IQSMS enables timely and accurate reporting by using real-time report validation and data access through SMS and desktop application.

Key IQSMS Features:

1. Easy and on time reporting using SMS
   A Software package technology that uses mobile phone SMS to report data in a predetermined format to a dedicated centralized computer server

2. High Quality Data
   Server perform data quality check against reports business rules and responds to sender immediately

3. Easy Reporting
   Can output several reports based on selected indicators from different reports like PMTCT Track 1.0 report, PMTCT monthly reports and SAPR. Offline data analysis using queries
Methods: Testing Tools Stock Reporting

• IQSMS is equipped with a feature used for reporting the available stock of testing tools i.e. dry blood spot (DBS) at the end of every month.
• It uses pre-defined SMS format for sending the data.
• Reporting text consists of site code, reporting month, reporting year and testing tools code.
• Example of reporting text is 20010100,4,2013,DB24
Methods:

- Heath Care Worker trained on how to send exposed infants enrolled and tested.
- DBS stock reports on message format.
- Data check is performed at the server to validate format of report received from facility and give feedback message to the sender.
### Testing Pregnant Women and Testing Tools Availability

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<tr>
<th>FacName</th>
<th>Total Deliveries</th>
<th>Known Status</th>
<th>Unknown Status</th>
<th>Tested at Labour Ward</th>
<th>Determine at Month Start</th>
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</tbody>
</table>

Records: 818
Results

N = 467 sites

October-December 2014
- HEI ENROLLED: 800
- HEI TESTED: 584 (73%)
- SITES WITH NO DBS: 40

October-December 2015
- HEI ENROLLED: 666
- HEI TESTED: 626 (94%)
- SITES WITH NO DBS: 0
Lessons learned

- Early identification of sites that require testing tools.
- Assists with decision making about the distribution and re-distribution of DBS test kits to avoid disruption in the testing of exposed infants.
- Compare the number of clients tested against available tools.
- Help analyzing testing problems that are directly or indirectly associated with testing tools.