Analyze & Improving care across the continuum for Febrile Illnesses in Malawi

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Malawi: At what scale are we working?

- MOH (National Malaria Control Program)  
  2 out of 28 districts (Febrile Illnesses)

- HIV/AIDS (including OVC)

- 14 QI teams (Malaria)-2 districts  
- 24 QI teams(OVC)-7 districts  
- 27 QI teams (VMMC)-19 districts

- 247,780 U5 children presenting with febrile illnesses  
- 128,283 confirmed cases of Malaria

USAID Applying Science to Strengthen and Improve Systems
### Malawi: What are we trying to accomplish?

<table>
<thead>
<tr>
<th>What are we trying to accomplish?</th>
<th>At what scale?</th>
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</thead>
<tbody>
<tr>
<td>1. Institutionalize the capacity to examine and improve neglected health care processes: Phase I</td>
<td>2 Intervention districts (Balaka and Mchinji) and Machinga - Control district</td>
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### Background

- In FY15, the USAID ASSIST Project was requested by USAID’s Office of Health Systems to support the PMI to scale up high-quality diagnosis and treatment services for febrile illnesses

- Support the MOH, NMCP to improve the care of
  - Children under the age 5
  - Pregnant women
“What are we trying to accomplish?”

- Defining indicators:
  “How will we know if a change is an improvement?”

Adapted from:
T. Nolan et. al.
The Quality Improvement Guide
Improvement work at all levels of care

2 DHO
• nurses, clinicians, health surveillance assistants, pharmacy technicians, Health Management Information System (HMIS) Officers, and hospital attendants

6 HC
• nurses, clinicians, health surveillance assistants, pharmacy technicians, Health Management Information System (HMIS) Officers, and hospital attendants

6 VHC
• Health Surveillance Assistants, community volunteers and local leaders

Febrile Illnesses activities phases

<table>
<thead>
<tr>
<th>Phases</th>
<th>Focus Activity</th>
<th>Period</th>
<th>Scale</th>
</tr>
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<tbody>
<tr>
<td>Phase 1</td>
<td>Baseline assessment</td>
<td>Dec 2015 – March 2016</td>
<td>14 QI teams 7 Sites</td>
</tr>
<tr>
<td>Phase 2</td>
<td>Improvement in 2 intervention districts collection of data in control district</td>
<td>April 2016-March 2017</td>
<td>14 QI teams 7 Sites</td>
</tr>
<tr>
<td>Phase 3</td>
<td>Support the scale up of improved health care processes for managing patients with febrile illness</td>
<td>April 2017 – July 2017</td>
<td>4 Districts- Machinga, Nkhata-Bay, Nkhotakota Phalombe</td>
</tr>
<tr>
<td>Phase 4</td>
<td>Support global learning -Scale up evidence- based best practices and lessons learned to other EPCMD countries</td>
<td>August 2017-September 2017</td>
<td>EPCMD countries-Global dissemination through conferences, technical reports, presentations, and sharing through USAID and the PMI</td>
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</table>
Accomplishments

• **Baseline data collection:** Baseline assessment tool and core indicators developed and field tested, December 2015 – February 2016.

• **4 Learning sessions conducted with** NMCP Officers in April, June, October of 2016, and January of 2017

• **Monthly Coaching visits with NMCP Officers to all 14 improvement teams.**

• **Facilitated Quality improvement training of 120 health workers from, 14 QI teams**

• **Conducted End-line assessment** for Balaka and Mchinji districts on March 6th, and for control district on March 13, 2017

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**Results:** Percentage of Under 5 children with suspected Severe malaria for whom microscopy was done, Balaka DHO

![Graph showing % of suspected severe malaria for whom microscopy was done over time]

**Changes tested**

- Use reminders
- Improve scheduling
- Agreed that lab personnel should quickly process samples and clearly label severe malaria
- Document blood smears in lab book & attach lab forms results to patient files
- Task allocations every day to deliver samples to the lab & collect the results immediately
Results: Percentage of Under 5 children with suspected Severe malaria for whom microscopy was done, Mchinji DHO

<table>
<thead>
<tr>
<th>Month</th>
<th>Jun-16</th>
<th>Jul-16</th>
<th>Aug-16</th>
<th>Sep-16</th>
<th>Oct-16</th>
<th>Nov-16</th>
<th>Dec-16</th>
<th>Jan-17</th>
<th>Feb-17</th>
<th>Mar-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Microscopy</td>
<td>33%</td>
<td>64%</td>
<td>75%</td>
<td>92%</td>
<td>97%</td>
<td>86%</td>
<td>76%</td>
<td>91%</td>
<td>91%</td>
<td>91%</td>
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Number of confirmed U5 malaria cases versus the number of ACTs courses dispensed, Kwitanda HC

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<tr>
<th>Month</th>
<th>Aug-16</th>
<th>Sep-16</th>
<th>Oct-16</th>
<th>Nov-16</th>
<th>Dec-16</th>
<th>Jan-17</th>
<th>Feb-17</th>
<th>Mar-17</th>
</tr>
</thead>
<tbody>
<tr>
<td># U5 confirmed malaria cases</td>
<td>34</td>
<td>37</td>
<td>39</td>
<td>12</td>
<td>24</td>
<td>167</td>
<td>194</td>
<td>235</td>
</tr>
<tr>
<td># ACTS dispensed</td>
<td>43</td>
<td>34</td>
<td>35</td>
<td>12</td>
<td>24</td>
<td>167</td>
<td>194</td>
<td>186</td>
</tr>
</tbody>
</table>

Changes tested
- Daily audit of the dispensed AL and the number of confirmed uncomplicated malaria cases, and compare them;
- Every two weeks, cross check data for malaria cases with AL dispensed from the AL, OPD, and mRDT registers.
Number of confirmed malaria cases versus the number of ACTs courses dispensed, Mkanda Health Center

Results: Percentage of patients with fever whom MRDT performed as per the SOPs, Chiwoshya HC

Changes Tested
- Assign a QI team member to observe the compliance to SOP for an mRDT test by using a competency based checklist
- Paste SOP for mRDT on the wall in the mRDT test room
Results: Percentage of Under five children that reported for follow up visit after 72 hours at Mozi VHC, April 2015-Mar 2017

Lessons learned

- The QI teams now believe that quality data on any public health issue can be used for lobbying for resources/equipment for their facilities

- Strongly demonstrated that when a team identifies a problem by themselves, they own and work on it diligently as evidenced by the 14 QI teams

- Team work, coordination and sharing tasks, has demonstrated to yield results

- QI teams when they were followed up for field coaching visits were very motivated by their results and wished to do more
Upcoming Activities for this work: April-June 2017

- End-line assessments in both demonstration and control districts: up to End April, 2017
- Quarterly Learning session for 2 intervention districts: April 2017
- Harvesting change ideas meeting: May 2017
- QI training for coaches for 4 scale up districts: May 2017
- Planning for a regional conference for the EPCMD countries- June-September 2017