Rapid Diagnostic Tests for Malaria in Burkina Faso

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Background

- Burkina Faso’s treatment policy changed to emphasize ACTs in 2005, though use was not fully implemented immediately
- Round 7 Global Fund support was obtained to begin using rapid diagnostic tests (RDTs)
- Originally, training for RDT use was rolled out from national to regional to district to facility levels in six pilot regions
- USAID provided 950,000 RDTs for all regions in 2010
- Assessment was needed of RDT use

Methodology

- This assessment was “rapid” with a primarily qualitative approach
- Some quantitative data were collected in terms of RDT use and supplies
- Since Burkina Faso has three different malaria transmission zones, effort was made to visit districts and health facilities in each
- Actual locations were then selected by convenience

Selected Districts

![Map of Burkina Faso showing malaria transmission zones]

Sampling for PHC Facilities and Staff

- In each district, choose one front-line PHC facility (6 total)
- In each facility, examine records and collect summary statistics
- In each chosen PHC facility:
  - Interview someone with RDT training
  - Interview someone who did not attend training (12 total)
  - Learn about training, use, perceptions
- Also, examine RDT storage conditions

Practical Training Rolled Out from National to Regional to District to Facility

- 3-day training was stressed—focusing on performance, but not health management, like storage and record keeping

New Training Needs Assessed

- Better job aids and SOPs needed to accompany training
- Skills on effective teaching/training methods are needed for those in TOT
- Even the ICPs need skills on how to train staff back in their facilities
- Policy changes will require RDT for all age groups, not just those over 5 years
- All persons involved in integrated supervision need to learn about RDTs so they can pass this information on while supervising

Variety of Storage Conditions, But Not All Were Appropriate

- Ideally stored at <40 °C
- Fridge is good (top), but office cupboard (bottom left) and poorly ventilated store room (bottom right) are far from ideal

Some Older Stock Still Found

- Staff were not aware of expiry dates
- Some packs had one month left
- Few had collected new stock, which was sitting in District Medical Stores
Supervision Weak
- There are no specific supervisory protocols for RDTs
- Malaria is generally included in the “integrated” supervision procedures and tools
- There is a separate PNLP supervisory checklist that includes 3 items on RDTs
- Basically there is no quality control monitoring
- Two teams—regular district supervisory team and a separate malaria program supervisor

Monitoring and Evaluation Ad Hoc
- No formal RDT record keeping
- Left shows a separate register that one clinic made
- Right shows how another clinic wrote RDT results in treatment register

Summary Statistics
- It is difficult to link RDT use/results with ACT use, treatment
- One can get a general idea that most people are treated without RDT
- Or if tested, most still get ACTs
- Similar results in Dori, Gorom-Gorom (see table)

<table>
<thead>
<tr>
<th>Age &gt;5 Years</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria Simple</td>
<td>4,734</td>
</tr>
<tr>
<td>Malaria Severe</td>
<td>412</td>
</tr>
<tr>
<td>Microscopy Done</td>
<td>139</td>
</tr>
<tr>
<td>Microscopy +</td>
<td>113</td>
</tr>
<tr>
<td>RDT Done</td>
<td>1,460</td>
</tr>
<tr>
<td>RDT +</td>
<td>975</td>
</tr>
<tr>
<td>ACTs Given</td>
<td>4,844</td>
</tr>
</tbody>
</table>

Toma District Q2 2010 Mouhoun Region

Staff Attitudes Were Reserved—Some Barriers Identified
- Few said anything against RDT use, but a few complaints:
  - Staff said test results take a “long time” (though only 15 minutes)
  - “We have to buy gloves we use” (but are not reimbursed)
  - Some said “We just need time to get used to RDTs”
  - Some surprised at more negative tests in dry season

Summary of Key Concerns
- Health workers are not using RDTs when they should:
  - Still preferring clinical diagnosis or IMCI clinical algorithms
  - New policy including children <5 for RDTs will increase workload and challenge existing ways of treating
- Health workers are prescribing ACTs when they should not:
  - Majority of negative RDT results ignored
- Health workers believe RDT results are probably wrong

Next Steps
- MCHIP is integrating improved RDT use with in-service training in comprehensive malaria case management
- Job aids are being revised
- Training will place more stress on storage and record keeping
- Professional associations will reinforce RDT use
- Supervision will incorporate an on-the-job RDT training element