Scaling up RDTs at health facility and community levels in Uganda

December 2012
SUCCESSFUL ROLL-OUT OF RDTs

TRAINING

MONITORING & SUPPORT SUPERVISION

SUPPLY CHAIN MANAGEMENT

SENSITISATION & BEHAVIOUR CHANGE
## A few numbers

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of health workers trained</td>
<td>1,090</td>
</tr>
</tbody>
</table>
| Number of VHTs trained                                     | 6,774  
97% of villages covered in 9 districts                  |
| Number of health facilities supported with RDTs             | 126  
100% of HFs without microscopy in 7 districts           |
| Average monthly consumption of RDTs per health facility    | 375                                        |
Impact of RDTs on Consumption of AMDs

- Total fever cases tested
- Total RDT positive

No. of Cases

District
Impact of RDTs on Consumption of AMDs

No. Malaria cases diagnosed

Average Feb-april, 2010
Average Feb-April, 2011

Health Facility

- Bwikara
- Muhoro
- Nalweyo
- Kisita
- Masaka
- Kigando
- Kasambya
- Mabaale
- Kyaterekera
- Mpefu II
- Rugashale
- Matala
- Nkooko
- Igayaza
- Kiyanga
- Galiboleka
- Kyebando
- Kyabasara
- Kihungya
- Kigwera
- SOFAAD
Impact of RDTs on Integrated Community Case Management

100% treated

61% treated

Fever cases seen
Fever cases treated

ICCM - Clinical Diagnosis
ICCM w/ RDTs

Fever cases

522816
522816
300751
183089
TRAINING (1)

• Cascade method
  National trainers → District trainers → Health workers / VHTs
  All level of the health system simultaneously endorse RDTs

• Selection of district trainers (clinical officers) according to:
  - technical competency
  - teaching abilities

• Training of ALL staff involved in the management of patients

• Planning of sessions, selection of health workers and selection of sites to maintain health facilities running at all times
TRAINING (2)

- Participatory adult learning methods, including practical sessions (user’s manual + facilitator’s manual). It requires trainers to be trained in these methods.

- Training key points:
  - when and how to perform an RDT
  - how to manage (negative) cases
  - how to communicate to the patients
  - how to keep proper cases record and manage stocks

- Particular attention to low level health workers and VHTs who lack requisite technical background
“With the use of RDTs, we are able to do proper diagnosis and give the right drugs to the right patients. And more so all health workers have undergone a capacity building training to conduct RDTs.”

Isingoma Tomson, Malaria Focal Person, Hoima

Health workers practicing RDTs during the training
TRAINING (3)

• Focus on holistic fever case management: develop a small guide to help manage cases of negative results
  This is the only way to achieve more rational use of drugs and adherence to test results.
  For VHTs, negative results (if no fast breathing) = referral

• Focus on interpersonal communications:
  improve user’s manual section “patient education” with packaged messages

• Focus on infection control (incl. waste management)
External Quality Assurance (1)

• Why?
  - Ensure the competent use of RDTs by health workers.
  - Monitor the accuracy of RDT stocks.
  - Enhance health workers/VHTs and patients’ confidence in the test results

• How?
  - Field stability monitoring using positive and negative controls
  - Comparative smear method-microscopy
External Quality Assurance (2)

• Lessons Learnt

  - Technicians need to identify and prepare good quality control samples
  - The same day results can be achieved with the method of field stability even by VHTs
  - District trainers should physically monitor the process of staining and reading of slides by the different readers
  - Need to roll out RDT EQA in all districts using RDTs to monitor the accuracy of the RDTs
  - Districts should be involved in guiding partners with the right quality of RDTs to be purchased
MONITORING

- Improvement of record keeping at all levels of the health system is needed
  - achieved through training and support supervision.
  - sensitisation to ensure data is compiled and analysed at central level

- Inform disease control activities through better disease surveillance
SUPPORT SUPERVISION (1)

- Changing mindsets of health workers requires a long-term approach with consistent support tailored over time.
- Supervision methods and mentoring skills need to be part of the training of district trainers.
- Crucial to have well-trained health workers as they become VHT supervisors.
- Supervisors have to be guided by checklists but also be able to adapt to specific needs of health facilities / workers / VHTs.
“The Pioneer project has involved us all as the district health team in support and supervision of both the VHTs and health workers to ensure that RDTs as well as medicines are given well.”

Edith Karugaba, District surveillance focal person, Kibaale
SUPPORT SUPERVISION (2)

Need to tailor the content of the support supervision over time.

- immediate follow-up: make sure knowledge and acquired are set into practice; assistance for setting up workplace and store; observing quality of RDT performing

- 6 weeks follow-up: go through immediate follow-up focus areas; on-the-job support in case management, ordering of supply

- quarterly support supervision: on-the-job guidance to improve case management (incl. rational use of drugs) and organisation of service delivery (incl. relationship with patients)
Service provider’s adherence to RDT results at HF level

<table>
<thead>
<tr>
<th>Year</th>
<th>Patients tested</th>
<th>RDT Positive</th>
<th>RDT Negative</th>
<th>RDT Negative treated</th>
<th>% of Negative treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>182,314</td>
<td>100,722</td>
<td>81,592</td>
<td>373</td>
<td>0.5</td>
</tr>
<tr>
<td>2012</td>
<td>147,075</td>
<td>84,891</td>
<td>62,184</td>
<td>1,878</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Adherence to RDT results by VHTs

<table>
<thead>
<tr>
<th></th>
<th>Fever cases</th>
<th>RDT positive</th>
<th>RDT Positive Treated</th>
<th>RDT Negative treated</th>
<th>RDT Negative</th>
<th>% of Negative treated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>300,751</td>
<td>181,515</td>
<td>183,089</td>
<td>1,574</td>
<td>117,662</td>
<td>1.34</td>
</tr>
</tbody>
</table>
“It was the first time I saw a test on a baby like this; because before, we used to go to the health centre, where we get the treatment, but we do not get the test. I was surprised, because the VHT treat only if she has found malaria in the body. She does not give out Coartem without the test being positive.”

Mariam Massa, caretaker
SUPPLY CHAIN MANAGEMENT (1)

• Need to explore solutions to introduce more flexibility in the current push system for ordering supplies of drugs and tools like RDTs.

• Quantification can be informed through monitoring (e.g. average monthly consumption of the past three months inform the quantity of the quarterly supply)

• Buffer stocks:
  - first roll-out: two months buffer stock is necessary
  - over time: one month buffer stock of independent test kits
### Monthly consumption of RDTs
#### Example of Buliisa District

<table>
<thead>
<tr>
<th>Health Facility Name</th>
<th>September 2011</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Children Under 5 Yrs</td>
<td>5 Yrs and Above</td>
<td>ANC Register</td>
<td>HF Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health Facility Name</td>
<td>RDT +ve</td>
<td>RDT -ve</td>
<td>Invalid</td>
<td>RDT +ve</td>
<td>RDT -ve</td>
</tr>
<tr>
<td>Kihungya HC II</td>
<td>116</td>
<td>44</td>
<td>0</td>
<td>247</td>
<td>138</td>
<td>0</td>
</tr>
<tr>
<td>Sofaad HC III</td>
<td>63</td>
<td>19</td>
<td>0</td>
<td>138</td>
<td>141</td>
<td>0</td>
</tr>
<tr>
<td>Kigwera HC II</td>
<td>190</td>
<td>66</td>
<td>2</td>
<td>344</td>
<td>178</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>369</td>
<td>129</td>
<td>2</td>
<td>729</td>
<td>457</td>
<td>2</td>
</tr>
</tbody>
</table>
## Stock Card Example

<table>
<thead>
<tr>
<th>health facility name</th>
<th>balance carried forward</th>
<th>total received from mc</th>
<th>total received from nms</th>
<th>total in store</th>
<th>total used</th>
<th>balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>sofaad HC III</td>
<td>1250</td>
<td>1125</td>
<td>0</td>
<td>2375</td>
<td>525</td>
<td>1700</td>
</tr>
</tbody>
</table>
SUPPLY CHAIN MANAGEMENT (2)

- Food for thought

- How to avoid simultaneous stock outs and excess stock in the same area?

- Can e-health approaches like mTrac be used to inform supply chain management?

- What scope is there for changing to a push & pull system?
SENSITISATION OF POLITICAL LEADERS

- Involvement of political leaders at all levels

- Training and sensitisation of District Health Teams is crucial

- District and community leaders have a dramatic impact on the behaviour of the health workers / VHTs and the community members: need to explain the positive impact of RDTs on the health of their communities and how they can be involved
BEHAVIOUR CHANGE COMMUNICATION

• BCC activities need to be considered in the planning and budgeting of the roll-out

• Activities should start from the onset of the RDT roll-out to ensure uptake and adherence by community members

• Proven and innovative activities need to be undertaken, e.g.:
  - Radio talk shows and radio spots
  - Community Dialogues
“It is now my responsibility with the LC1 chairman to make sure that we have community dialogues every month where we discuss about prevention of diseases such as malaria, diarrhea and pneumonia. These dialogues have yielded good results, in fact I can now spend a whole month without getting a child suffering from malaria, diarrhea or even pneumonia.”

Ssuuna Godfrey, VHT
Thank you

www.malariaconsortium.org