Three Years of ICCM in Uganda

Highlights of Results from Monitoring & Evaluation Data from 17 Districts

September 2013
Outline

- Project briefs
- Routine data:
  - Data transmission processes
  - Results & highlights
- Evaluation data:
  - Methods, results & highlights
- Way forward?
Projects Briefs
Programme Implementation Approach

• Embedded project within Ministry structures and systems
• From start-up engage with existing processes to instil strong Ministry involvement and ownership
• Provide additional technical knowledge to strengthen national policies, guidelines and implementation
• Participation in relevant national technical working groups
Programme Implementation

Key Intervention activities

• Community-based case management of malaria, pneumonia and diarrhoea
• Diagnosis at community level
• Drug formulations, unit dosed pre-packaged for community level
• Refresher training of health facility staff
• Training for CHWs including job aids
• Supportive supervision for CHWs
• ICCM data management
• Demand creation through Behaviour Change Communication
• Programme evaluation
Malaria:
- Diagnosis: RDTs – not Central
- Treatment: Artemether / lumefantrine

Pneumonia:
- Diagnosis: Respiratory timers
- Treatment: amoxycillin dispersible tablets

Diarrhoea:
- Treatment: Low osmolarity ORS and zinc supplement

Danger signs of severe illness:
- Refer to health facility
Project Area – Mid-West

- Funded by CIDA
- Project started April 2009
- Est total pop. 1.8 Million
- Est. 360,000 children <5 yrs
- Approx. 3,500 villages
- Malaria treatment based on RDT result

- MoH target of 2/5 VHTs per village trained in ICCM achieved
- Training target 6,800 VHTs
- 7,098 trained (100%)
- Attrition rate 2%, as at Mar 2013
Project Area – Central

- Funded by UNICEF
- Project started July 2010
- Est. total pop. 2.45 Million
- Est. 530,000 children <5 yrs
- Approx. 2,980 villages
- Presumptive treatment of Malaria (no RDTs)

- MoH target of 2/5 VHTs per village trained in ICCM achieved
- Training target 5,600 VHTs
- 5,586 trained (100%)
- Attrition rate 3.8%, as at Dec 2012
Routine Data
Routine Project Monitoring

Monitoring & reporting system structured to align with routine HMIS structures and adapted based on needs

- No incentives for reporting
- Routine data collected
  - VHT patient data
  - Stock monitoring data
- Entry and processing at Malaria Consortium office
- Feedback to districts at a quarterly basis
## Treatments Provided

<table>
<thead>
<tr>
<th>Treatments (doses)</th>
<th>Midwest</th>
<th>Central</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTs</td>
<td>610,048</td>
<td>971,418</td>
</tr>
<tr>
<td>Amoxicillin</td>
<td>590,667</td>
<td>340,616</td>
</tr>
<tr>
<td>ORS</td>
<td>252,401</td>
<td>138,782</td>
</tr>
<tr>
<td>Zinc</td>
<td>263,156</td>
<td>127,230</td>
</tr>
<tr>
<td><strong>Total Treatments</strong></td>
<td><strong>1,716,272</strong></td>
<td><strong>1,450,816</strong></td>
</tr>
<tr>
<td><strong>Total cases seen</strong></td>
<td><strong>1,406,342</strong></td>
<td><strong>1,437,030</strong></td>
</tr>
</tbody>
</table>

- **Midwest**: Average cases seen per VHT per month: Median (IQR) 12.5 (9.9-15.6)
- **Central**: Average cases seen per VHT per month: Median (IQR) 15 (9-23)
Mid-west: Malaria treatment based on RDT result

Central: Presumptive treatment of Malaria (no RDTs)
Midwest: Compliance to diagnosis for malaria and pneumonia

- ACTs should be dispensed based on positive RDT results
- Amoxicillin should be dispensed based on high RR

Treatment according to diagnosis improved over time and is now as expected
Project evaluation
Surveys - Design & Methods

- Cross sectional household survey at each round (baseline & endline)
- Mortality sample required 4000 households (100 clusters)
  - Mortality survey only conducted at endline (using birth history)
- Child health sample required 1600 households (40 clusters)
  - Same clusters at baseline with random households surveyed at endline
- Used 2-stage cluster sampling technique
  - Sample clusters using probability proportionate to size of village, then households
- Data collection, processing & analysis followed standard Demographic & Health Surveys procedures
Surveys - Timelines

Midwest

2 yrs, 7 mths

Central

2 yrs, 2 mths
Surveys results: Treatment Seeking

Mid-western

Central

<table>
<thead>
<tr>
<th></th>
<th>Fever</th>
<th>ARI</th>
<th>Diarrhoea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midterm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endline</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Fever</th>
<th>ARI</th>
<th>Diarrhoea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endline</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Graphs showing treatment seeking rates for different conditions in Mid-western and Central regions.
Surveys results: Treatment within 24 hours

Seeking treatment within 24 hours improved
Appropriate treatment for all three diseases improved, except for ARI in the Central Region; which may be due to stock outs of Amoxicillin.
Surveys Results: Source of treatment

⇒ Mid-west: 1st place for seeking treatment

1st choice in seeking treatment shifted from both public and private to VHT
Surveys Results: Source of Treatment

Central: 1st place in seeking treatment

1st choice in seeking treatment shifted from both public and private to VHT
Malaria parasite prevalence has reduced; may also be due to the distribution of LLIN in 2010 in half of the project area.
LiST: Modelling Impact of ICCM

- **LiST (Lives Saved Tool)**
  - Part of a compendium of modelling modules (SPECTRUM) that aid projection of impact of existing interventions
  - Software focusing on child survival - projects changes in child survival based on changes of coverage of child health interventions

- **Model Inputs**
  - Population covered by age category, population growth rate
  - Child health indicators before & after ICCM implementation
  - Expected trend in non implementation areas

- **Model outputs**
  - Changes in mortality estimates during the period
  - Lives saved (deaths averted)
  - Projected changes over a longer period (5 years)
## LiST: Modelling Impact of ICCM in Mid-west

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Implementation Period</th>
<th>Projections</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mid west</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U5 Mortality rate</td>
<td>100</td>
<td>96</td>
</tr>
<tr>
<td>Lives saved (0-59 months)</td>
<td>0</td>
<td>151</td>
</tr>
<tr>
<td>% deaths averted</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Learning

- ICCM can be a mechanism for health systems strengthening
  - The 1st source of treatment has shifted to VHTs
- Access to **timely** treatment and **appropriate** of sick children has increased with the introduction of ICCM
- The implementation model has essential elements as well as contextual variations that ensure feasibility of implementation
- Model projections illustrate a potential for mortality reductions with sustained ICCM
Way forward?
The scale up vision

- Establish
- Evaluate
- Sustain and Expand
Sustainability

**What?**
- Sustain current coverage and use
- Scale up to high coverage

**Why?**
- Beneficial effects on child health
- Optimise the use of limited resources

**How?**
- Political & financial commitment from:
  - Central Government
  - Donors
  - Local Governments
www.malariaconsortium.org

Thank You

For More Information:
g.magumba@malariaconsortium.org