Integrated Community Case Management
Rapid Access Expansion Programme

Lessons from scaled, multi-context iCCM implementation

Institutionalizing integrated community case management (iCCM) to end preventable child deaths
Addis Ababa
22-26 July 2019
Dr Salim Sadruddin
Global Malaria Programme

World Health Organization
Presentation Outline

• Background
• Objectives and Programme Implementation
• Results
• Key Lessons learned
Child mortality in sub-Saharan Africa

- In 2016 there were 5.6 million deaths of children under five globally
- More than half of child deaths (53%) occurred in sub-Saharan Africa
- 30% of those deaths were from malaria, pneumonia and diarrhoea
- Coverage of life saving interventions, especially in sub-Saharan Africa is still low due to inaccessible or poor quality of care.
Rapid Access Expansion Programme (RAcE)

WHO-Global Malaria Programme, funded by Global Affairs Canada (2012 – 2018) to:

1. Contribute to the reduction of child mortality by increasing access to treatment for common childhood illnesses in five African countries; and

2. Stimulate policy updates and catalyze scale-up of iCCM.
Overview

- **Country selection criteria:**
  - high disease burden;
  - enabling policy; and
  - potential for scale-up.

- **NGO selection and review:**
  - independent Project Review Panel.

- **Target under-5 population:**
  - 1.5 million children

- **Community health workers trained and deployed:**
  - almost 8 500

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<table>
<thead>
<tr>
<th>Country</th>
<th>Geographic scope</th>
<th>CHWs trained</th>
<th>Children covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Tanganyika Province</td>
<td>1 732 (Volunteer)</td>
<td>150 000</td>
</tr>
<tr>
<td>Malawi</td>
<td>8 Districts</td>
<td>1 192 (Salaried)</td>
<td>386 802</td>
</tr>
<tr>
<td>Mozambique</td>
<td>4 Provinces</td>
<td>1 470 (fixed stipend)</td>
<td>319 250</td>
</tr>
<tr>
<td>Niger</td>
<td>4 Districts</td>
<td>1 426 (Volunteer)</td>
<td>230 833</td>
</tr>
<tr>
<td>Nigeria – Abia State</td>
<td>15 LGAs</td>
<td>1 351 (Volunteer)</td>
<td>407 057</td>
</tr>
<tr>
<td>Nigeria – Niger State</td>
<td>6 LGAs</td>
<td>1 320 (Volunteer)</td>
<td>1 493 942</td>
</tr>
</tbody>
</table>
RAcE: Roles and Responsibilities

**Ministry of Health**
- Overall leadership and establishment of iCCM programme standards; and
- Operations management and quality assurance.

**WHO**
- Project management;
- Policy guidance and technical support for development of curriculum/implementation guidelines and operations research;
- On-site supervision and quality assurance;
- Facilitate programme learning.

**Implementing Partners (NGOs)**
- Support for training, supervision, supply chain, M&E and community mobilization;
- Support for routine data collection and reporting results;
- Conducting baseline and end line surveys; and
- Conducting operations research and quality of care assessments.
Cases treated by RAcE-supported CHWs: 8.2+
Malaria positivity rates in RAcE sites

- Abia State
- Malawi
- Mozambique
- DRC

Assessment period:
- Jul-15
- Aug-15
- Sep-15
- Jul-16
- Aug-16
- Sep-16
Policy and Programmatic Contribution

• Introduced iCCM in Niger and Nigeria

• Introduced/strengthened iCCM task forces in DRC, Mozambique, Niger and Nigeria

• Introduced amoxicillin (replacing cotrimoxazole) as first line antibiotic for treatment of pneumonia in DRC, Malawi and Niger

• Introduced malaria rapid diagnostic tests at community level in DRC, Malawi and Niger

• Introduced WHO *Caring for the newborn at home* training package in Malawi
List of papers published as RAcE Collection: Journal of Global Health June 2019 edition

1. Evidence of Impact: iCCM as a strategy to save lives of children aged under five.
2. Integrated community case management: Planning for sustainability in five African countries.
4. Improving access to appropriate case management for common childhood illnesses in hard-to-reach areas of Abia State, Nigeria.
5. Community engagement and mobilization of local resources to support integrated community case management of childhood illnesses in Niger State, Nigeria.
6. iCCM Data Quality: An approach to assessing iCCM reporting systems and data quality in 5 African countries.
8. Achievements and challenges of implementation in a mature iCCM program: Malawi Case Study.
9. Home visits by community health workers for pregnant mothers and newborns: coverage plateau in Malawi.
10. Barriers on the pathway to survival for children dying from treatable illnesses in Inhambane province, Mozambique.
13. Clinical evaluation of the use of an mHealth intervention on quality of care provided by community health workers in southwest Niger.
• Review of grantee reports showed higher number of cases of pneumonia compared to expected incidence for a defined population.

• A structured register review was conducted in Nigeria to collect data directly from CORP registers.

• In Abia and Niger State Lot Quality Assurance Sampling (LQAS) methodology was used to determine the data needed to identify issues at the LGA level.

• The results demonstrated that the high number of pneumonia cases treated was due to CORPs over diagnosing cases two to three times the expected rates.

Assessment of quality of pneumonia case management through register review

<table>
<thead>
<tr>
<th>Pneumonia Indicator</th>
<th>Niger State</th>
<th>Abia State</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of cases of cough or difficult breathing of all cases</td>
<td>15% (369 / 2528)</td>
<td>49% (955 / 1969)</td>
</tr>
<tr>
<td>% of cases of cough or difficulty breathing with a high respiratory rate for their age</td>
<td>77% (204 / 264)</td>
<td>64% (615 / 955)</td>
</tr>
<tr>
<td>% of cases of pneumonia that received amoxicillin</td>
<td>95% (193 / 204)</td>
<td>98% (604 / 615)</td>
</tr>
</tbody>
</table>
Results

1. Household survey - care seeking and treatment coverage
2. Evaluation of the plausible contribution of RAcE on decreasing child mortality
Endline Survey Results: Care seeking and treatment for malaria and diarrhoea
Management of Fever: DRC

Overall

<table>
<thead>
<tr>
<th>Week</th>
<th>Other Provider</th>
<th>CHW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>14%</td>
<td>84%</td>
</tr>
<tr>
<td>3</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3%</td>
<td>76%</td>
</tr>
<tr>
<td>5</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>3%</td>
<td>89%</td>
</tr>
</tbody>
</table>

Global Malaria Programme
## Estimated lives saved by iCCM scale-up: 4938 (LiST analysis)

<table>
<thead>
<tr>
<th>RAcE Sites</th>
<th>Under-five mortality rate (deaths per 1,000 live births) 2013 and 2016</th>
<th>% change between 2013 and 2016</th>
<th>Lives saved through increases in intervention coverage</th>
<th>Estimated lives saved by CHW-provided treatment</th>
<th>% Lives saved by CHW treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRC</td>
<td>121 to 103</td>
<td>18%</td>
<td>2182</td>
<td>1728</td>
<td>79%</td>
</tr>
<tr>
<td>Malawi</td>
<td>124 to 118</td>
<td>5%</td>
<td>4181</td>
<td>216</td>
<td>5%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>94 to 94</td>
<td>0%</td>
<td>2811</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Niger</td>
<td>137 to 120</td>
<td>14%</td>
<td>2290</td>
<td>965</td>
<td>38%</td>
</tr>
<tr>
<td>Nigeria Abia</td>
<td>131 to 115</td>
<td>14%</td>
<td>1815</td>
<td>967</td>
<td>53%</td>
</tr>
<tr>
<td>Nigeria Niger</td>
<td>100 to 86</td>
<td>17%</td>
<td>1649</td>
<td>1062</td>
<td>64%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Average 10% reduction in child mortality  RAcE supported sites
- Baseline data entered for 2013 and end line data for 2016 | Interpolated linearly from 2013 to 2016.
- Lives saved by malaria, pneumonia and diarrhoea treatments were adjusted proportionally to the percentage of cases treated by CHWs.
Key Lessons

Availability

• The strength of the intervention lies in the availability of a trained, supplied, supervised CHW in the village when a child falls ill:
  • Malawi – non residency, limited service days, large service population
  • Mozambique: 80% preventive/promotive services, stockouts, kit system, push system, large service population

Community engagement is key for quality and sustained implementation

• Efforts to create community awareness in support of iCCM informs the population of the intervention only
• Community needs to be engaged from the planning stage for effective implementation
Key Lessons

Availability of diagnostics and medicines

• Effective iCCM requires that quality commodities be supplied to CHWs reliably, promptly and in sufficient quantities
• Commodity forecasting for CHWs and health facility should be combined to avoid stock-outs
• Formulations, packaging should be similar for CHWs and health facility
• Replenishment should be consumption based
• No implementing partner parallel procurement and distribution system

Supervision is essential to delivering quality iCCM services

• Designated supervisor from the health facility contributes to quality of care, reporting and CHW motivation and serves as a critical connection between CHWs and the health system
• Ministries must budget and plan for supervision, including transportation, refresher training and supervisory health worker incentives
• Avoid parallel supervision system
Key Lessons

Functional Referral System

- Cases with IMCI danger signs need inpatient care and need to be referred by CHWs to district/LGA hospitals
- District/LGA hospital should be ready to receive and manage cases referred from the community
  - Availability of trained staff
  - Availability of diagnostics and medicines
- Referral facility staff should be engaged in CHW trainings
  - Entertain CHW referral slips
  - Back refer to CHWs for community follow-up

Monitoring and Health Information System

- Health facility and CHW recording and reporting system should be harmonized – Challenge!
- No parallel reporting system from implementing partners
- Need to develop culture of use of information
Many thanks for your kind attention