UGANDA

COUNTRY EXPERIENCES FROM SCALING UP ICCM WITHIN COMMUNITY HEALTH SYSTEMS

MONDAY, 22 July 2019
<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Total Population (millions)</td>
<td>16.7</td>
<td>24.2</td>
<td>28</td>
<td>34.6</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Growth Rate (%)</td>
<td>2.5</td>
<td>3.2</td>
<td></td>
<td></td>
<td></td>
<td>3.0</td>
<td></td>
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<tr>
<td>Total Fertility Rate (children)</td>
<td>7.4</td>
<td>6.9</td>
<td>6.9</td>
<td>6.7</td>
<td>6.2</td>
<td>5.8</td>
<td>5.4</td>
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<tr>
<td>Teenage pregnancy (%)</td>
<td></td>
<td>43</td>
<td>31</td>
<td>25</td>
<td>24</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Contraceptive Prevalence Rate (%)</td>
<td>7.8</td>
<td>14.8</td>
<td>22.8</td>
<td>23.7</td>
<td>30.0</td>
<td>33.7</td>
<td>39.0</td>
</tr>
<tr>
<td>Infant Mortality Rate (per 1,000 live births)</td>
<td>122</td>
<td>81</td>
<td>87</td>
<td>76</td>
<td>54</td>
<td>53</td>
<td>43</td>
</tr>
<tr>
<td>Under Five Mortality Rate (per 1,000)</td>
<td>203</td>
<td>174</td>
<td>156</td>
<td>137</td>
<td>98</td>
<td>80</td>
<td>64</td>
</tr>
<tr>
<td>Neonatal Mortality (per 1,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>33</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Maternal Mortality Ratio (per 100,000)</td>
<td>523</td>
<td>506</td>
<td>505</td>
<td>435</td>
<td>438</td>
<td>438</td>
<td>336</td>
</tr>
<tr>
<td>Full Immunization (%)</td>
<td>37</td>
<td>47</td>
<td>37</td>
<td>46</td>
<td>52</td>
<td></td>
<td>55</td>
</tr>
<tr>
<td>Stunting (% children under five years)</td>
<td></td>
<td>38</td>
<td>39</td>
<td>38</td>
<td>33</td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>HIV Prevalence Rate (%)</td>
<td>30</td>
<td>18.5</td>
<td>6.1</td>
<td>6.4</td>
<td>7.3</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Poverty (%)</td>
<td>56</td>
<td>44</td>
<td>34</td>
<td>38</td>
<td>24.5</td>
<td>19.7</td>
<td>21.4</td>
</tr>
<tr>
<td>GDP per capita (USD)</td>
<td>184</td>
<td>280</td>
<td>240</td>
<td>337</td>
<td>506</td>
<td>719</td>
<td>740</td>
</tr>
<tr>
<td>Dependency Ratio</td>
<td>102</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>103</td>
</tr>
<tr>
<td>Literacy Rate (%)</td>
<td>54.0</td>
<td>69.6</td>
<td>69</td>
<td>71</td>
<td>74.2</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Life Expectancy at birth (years)</td>
<td>43.1</td>
<td>50.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>63.3</td>
</tr>
</tbody>
</table>
Trends in Childhood Mortality

Deaths per 1,000 live births for the five-year period before the survey

[Graph showing trends in Under-5 and Infant mortality from 1988-89 to 2016.]
What drives this strategy?

...... 1) Under 5 Child Mortality

Source: 2014 Uganda HHS

* 26% of neonatal deaths are due to severe infections
Progress in Implementing ICCM
National Implementation phases

• Introduced HBMF in 2002 and by 2006 all districts were covered

• 2004 Early implementation: 12-18 months
  20/80 districts

• 2010 Transition to Expansion: 18-24 months
  34/112 districts

• Scale Up/improve: Initial implementation review in 2013

• 2014 Accelerated Expansion phase: 33 districts selected for the GF to expand ICCM district
  • Currently total of 71 districts implementing ICCM
  • 35 implement new expanded package (TB, HIV, Maln)
Trends in annual malaria mortality
Trends in malaria morbidity
Malaria Prevalence Rate, 2009-2018

[Source: Malaria Indicator Survey]

- Program management support
- Scale up of ‘Test’ ‘Treat’, ‘Track’
- Surveillance strengthened as core

2009: 42%
2014: 19%
2018: 9%
Uganda ICCM model
ICCM Uganda

**Aim:**

Improve correct use of life-saving treatments by making them available, assuring their delivery, good quality, and mobilizing demand for them

**Target:**

**0-28 days:** identify danger signs and refer immediately

**2-59 months:** treat malaria, pneumonia, diarrhea

screen and refer malnutrition, HIV and TB

? Expanding the age cut off – school children
What is contained in the Village Health Team - iCCM package?

- **Medicine**: Prepackaged color coded for each age group (AMOX, ACT, Zinc & ORS co-pacK)

- **Diagnostics/equipment** Respiratory timer, MUAC tapes, Malaria RDTs, medicine storage boxes, safety boxes, gloves

- Laminated pictorial **sick child job aid** (also for postnatal care)

- Patient **paper based register** – cases managed, referred & outcome

- m-phone (**mTrac**) – weekly reporting cases, drug stock, symptoms

- Variable **modalities of incentives** – mostly non monetary
VHT training roll out model...

- Community VHT selection
- Households Registration
- Community mobilization

District Trainers
Health Facility Trainers

- National/regional master trainers

At the Health Facility:
1. Quarterly Supervision Meeting
2. Medicine re-supply
3. Monitoring performance of VHTs

SUPPORT ACTIVITIES:
- Advocacy
- M&E
- Supply chain management
- Digital Health
- Resource mobilization etc.
- Private sector models

- Train HW on IMCI, IMM
- HWs train/certify VHT on ICCM
- Compile VHT data – entered into DHIS2
BEST PRACTICE-SERVICE INTEGRATION

- Inclusion of screening of children for HIV exposure by VHTs as part of ICCM implementation;

- Inclusion of screening of children for TB exposure by VHTs as part of ICCM implementation;

- Inclusion of screening of children by VHTs for acute malnutrition using MUAC as part of ICCM.

2b. ASK FOR TB OR HIV INFECTION

Does the child have any contact or exposure?

- Tested for HIV
- Mother's test positive for HIV
- Positive test
- Father's test positive for HIV
- Unknown
- Living with someone on TB treatment
- Unknown

2c. LOOK FOR MALNUTRITION

Check for Wasting or Swollen feet?

- MUAC Measurement
  - Red
  - Green
  - Yellow
- Swelling of BOTH feet
ICCM operationalizes several national policies and strategies
Operationalizes the following national Strategies

- **Child Survival Strategy**: prioritized use of VHTs to control diarrhea, malaria, pneumonia, malnutrition etc.

- **Village Health Teams (VHTs) = HCI**: established to health educate the population on a basic health care package of services

- **National Malaria Reduction strategy**: prioritizes case management and home based management of fever

- **Prevent Protect and Treat Pneumonia and Diarrhea Strategy (PPT/GAPPD)**: part of package, which includes treatment at community level

- **Newborn Implementation Framework**: prioritized post natal home visits and registering pregnancies

- **Medicine Supply Chain Management**: especially the last mile
Operationalizes the following national Strategies

• **Community Based HMIS**: including digital health component and Community HW Information System (CHRIS)

• **Home Based Records/Hand Held Passport**: expected to complete post natal visits and complete referral note

• **HIV Reduction Strategy**: including eMTCT, Early Infant Diagnosis

• **Tuberculosis Control Strategy**: including community based child TB management and notification

• **Community Health Strategy/ Framework**: work ongoing
Who are our main partners in this

**Major partners:** UNICEF, WHO, World Vision, DFID, Global Fund, USAID and KOICA, World Bank, Global Financing Facility

**Implementing partners & NGOs:** Malaria Consortium, World Vision, CHAI, PACE/PSI, IRC, IMC, Medicine Teams, AMREF, CUAMM, Save the Children Fund, IRC, MSH, M-CHIP, TASO, Healthy Child Uganda

**Academia:** Mbarara University of Science and Technology, Makarere University/ Infectious Disease Institute,

**Private Sector ICCM:** Living Goods, BRAC, Makerere University/ Oraflame, Healthy Entrepreneurs
Progress and some of the effects of Implementing ICCM
### Why iCCM matters - Treatment Gaps

<table>
<thead>
<tr>
<th>Disease</th>
<th>Episodes per child per year</th>
<th>Episodes per year (000,000)</th>
<th>Treatment or Care-Seeking</th>
<th>Treatment Gap</th>
<th>Deaths per year (000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>3</td>
<td>17.5</td>
<td>62% treated</td>
<td>6.7 million untreated episodes</td>
<td>43</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>0.3</td>
<td>1.8</td>
<td>67% sought care</td>
<td>Perhaps ~1 million untreated episodes (Rx &lt; care-seeking)</td>
<td>39</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>6</td>
<td>35</td>
<td>29% ORT</td>
<td>25 million untreated episodes</td>
<td>33</td>
</tr>
<tr>
<td>NB Sepsis</td>
<td>~0.14 of newborns</td>
<td>0.2</td>
<td>? (42% SBA)</td>
<td>High</td>
<td>14</td>
</tr>
</tbody>
</table>

NB=newborn; ORT=oral rehydration therapy; Rx=treated; SBA=skilled birth attendant
Access to Health Services
Cases seen Facility vs. VHT 2Qtrs in 2019
ICCM COVERAGE

- Total population: 44.27 million
  - Population of U5s: 8.8 million

- iCCM is not only targeted to hard to reach areas, cover the entire districts.
- 71/134 districts implementing iCCM – and 72,000 VHT trained on ICCM
- VHT attrition rate 10%

<table>
<thead>
<tr>
<th>Year</th>
<th>Malaria</th>
<th>Pneumonia</th>
<th>Diarrhea</th>
<th>Malaria Positivity rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>358,162</td>
<td>141,179</td>
<td>133,427</td>
<td>51%</td>
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<tr>
<td>2017</td>
<td>688,382</td>
<td>335,355</td>
<td>300,590</td>
<td>46%</td>
</tr>
<tr>
<td>2018</td>
<td>1,069,292</td>
<td>474,193</td>
<td>479,276</td>
<td>38%</td>
</tr>
<tr>
<td>Total</td>
<td>594,200</td>
<td>1,449,821</td>
<td>1,973,335</td>
<td></td>
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<tr>
<td>Disease</td>
<td>Episodes per child per year</td>
<td>Episodes per year (000,000)</td>
<td>Treatment or Care-Seeking</td>
<td></td>
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<td>--------------</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td><strong>2018 (88%)</strong></td>
<td></td>
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<tr>
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<td>0.3</td>
<td>1.8</td>
<td>67% sought care</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td><strong>2016 (80%)</strong></td>
<td></td>
</tr>
<tr>
<td>Diarrhea</td>
<td>6</td>
<td>35</td>
<td>29% ORT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>2016 (55%)</strong></td>
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NB=newborn; ORT=oral rehydration therapy; Rx=treated; SBA=skilled birth attendant
Progress: Coverage of interventions (including gaps, reaching the unreached)

(Source: Malaria Indicator Survey, 2018/9)
Cases seen – geographical variation
Major Causes of Under five Mortality

Main causes of Under Five Mortality in Uganda
Challenges and moving forward
CHALLENGES

Financing

• iCCM is costed in different strategies i.e. Child survival strategy, Malaria Strategic plan, TB control strategy. There is no harmonized costed iCCM implementation plan

• Funding not aligned for all the components/ elements of ICCM strategy including supervision, etc.

• Limited funding for commodities causes stock outs affecting implementation and scale up

Supervision

• Limited support for intensified supervision of VHTs - mostly attributed to lack of transport, high numbers of VHTs/ low health worker staffing levels

• Lack of regulatory framework for the volunteer cadre
CHALLENGES

Supply chain management
• Inadequate quantification capacity – weak LMIS,
• As a results stock -outs in some places as well expiry in others especially ORS/Zinc

Data for decision making
• There is low usage of iCCM data for program improvement at all levels due to irregularities in reporting.
Malaria RDTs and AL 6*2 are fairly stocked with more than 3 MOS. 2.0 MOS of mRDT are expected from GF in December 2019.

Both pack sizes of Amoxicillin 250mg are stocked out with shipments expected from UNICEF in July 2019.

Examination gloves and safety boxes are well stocked with more than 3 MOS.
Challenges- HMIS

Low monthly reporting rates in routine HMIS - reasons:

• Parallel data systems

• Inadequate capacity especially at point of compilation – Health facility

• Non availability of reporting tools

• Paper –based reporting systems

• Low demand from users
BEST PRACTICE/ MOVING FORWARD

- Motivation of VHTs and availability of drugs is critical for proper implementation

- Partners who work with health a facilities right from the start – better integration in the health systems, mobilization of resources

  - Introduction of medicine re-distribution policy – across Health facilities, districts and VHT to Health facilities
  - Catchment Area Mapping, Planning and Action Initiative – population based data
  - Integration of PSM through one National Medical Supply System and warehousing increases efficiency
  - Leveraging digital health solutions including social media application
BEST PRACTICE/ MOVING FORWARD

- Broadening stakeholder involvement – private sector, manufacturers, political leaders, funders including non health, GFF

- Performance based financing at facility level – exploring opportunities for extension to community

- Proper costing, resource mapping and articulation of resource gap - advocacy for investments

- Peer VHT supervisors filling the gap in shortages of facility based supervisors and transport challenges

- Development of a comprehensive community health strategy
MWEBARE NNYO
ASANTE SANA