Institutionalizing Community Health Conference

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#HealthForAll
ichc2017.org
360° Supervision
Within the ProCCM Framework
Child Mortality In Mali

25% 1990

11% 2015

Child Mortality With Pro-CCM

15.5%

2008

1.7%

2011

Comparative Child Mortality Rates

Rate per 1,000 Live Births


- National Estimates, UN
- Urban Estimates, DHS
- Southern Mali estimate, DHS
- Urban Trend Projection
- Yirimadjo estimates, Muso
Mali’s National CHW Scale-Up
TIME MATTERS
Hidden costs: The direct and indirect impact of user fees on access to malaria treatment and primary care in Mali

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\begin{abstract}
About 20 years after initial calls for the introduction of user fees in health systems in sub-Saharan Africa, a growing coalition is advocating for their removal. Several African countries have abolished user fees for
\end{abstract}
THE MODEL

PROACTIVE SEARCH

DOORSTEP CARE

RAPID-ACCESS CLINICS
Patients treated by CHWs within 24 hours

82%
Improving CHW Performance

Our CHWs are the vanguard of Muso’s model. Can supervision with mobile health tools help CHWs continuously improve the quality, speed, and quantity of services they provide?
Muso uses a 360° Supervision system to actively and regularly mentor Community Health Workers for improved performance, including quantity and quality of care. A dedicated cadre of CHW Supervisors each support 15 to 20 CHWs with monthly one-on-one sessions in their villages. Each 360 Supervision visit includes four parts:
1. **CHW Dashboard**

Supervisor reviews data analytics summarizing CHW performance along three metrics: quantity, speed and quality of care.
2. Patient Feedback Audit

Supervisor reviews data analytics summarizing CHW performance along three metrics: quantity, speed and quality of care.
2. CHW Shadowing

Supervisor directly observes as the CHW provides care during home visits.
One on One Feedback

Supervisor and CHW sit down together to set goals and identify areas of strength and improvement.
360° Supervision

- CHW Dashboard
- One on One Feedback
- Patient Feedback Audit
- CHW Shadowing
CHW Dashboard

Monthly Data for CHW

- Number of monthly visits made
  - AIM: 17
  - Most efficient CHW: 18

- Number of children assessed at home
  - AIM: 17
  - Most efficient CHW: 18

- Patients treated within 24 hours
  - AIM: 56.8%
  - Most efficient CHW: 100.0%

Summary of Errors

- 7 Visits without protocol error: 41.2%
- 10 Total protocol errors
- 12
CHW Dashboard

Evaluation errors

- Cleaner sign not COCIDM
- Symptoms of malaria not tested
- Fever not tested
- CTA without positive test
- CTA incorrect dosage
- Severe diarrhea not COCIDM
- Diarrhea without ORS / Zinc
- Dosage BRD / Desermet Zinc
- Pneumonia without Amoxicillin
- Amoxicillin without Pneumonia
- Incorrect Amoxicillin Dose
- Malaria not Antimalarial Treatment 1st D
- Vitamin A Dose Incorrect
- Albendazole Dose Incorrect
- Praziquantel Dose Incorrect
- No 54 hour follow-up for malaria, danger sign or respiratory infection
- No 48 hour follow-up for malaria or danger sign
Android-Based CHW App

Assess Patient

Cough
Does the patient have a cough?
- Yes
- No

How long has this cough lasted?
- less than 3 days
- 4 days - 1 week
- 1 - 2 weeks
- 2 - 3 weeks
- 3+ weeks

Is there chest indrawing?
- Yes
- No

Next>

Patient Summary
Abba Douglas
2 years and 2 months old

Symptoms
- Cough for 4 days - 1 week
- Fast breathing

Diagnosis & Treatment
Pneumonia
Treat with Cough Syrup
- 5 ml
- 3 times a day
- For 5 days

Treat with Amoxicillin
- 3 tablets (125mg each)
- 2 times a day
- For 5 days
- Total of 30 tablets
Testing the Model

CHW performance was evaluated on three key indicators: the quantity (number of households visited), the quality (the proportion of children treated without protocol error), and the speed (the proportion of children treated within 24h of symptom onset) of care delivered.
The Cost

Scale-up of the 360° Supervision Model

<table>
<thead>
<tr>
<th>Cost of the Model</th>
<th>Initial Cost</th>
<th>Annual Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorcycle</td>
<td></td>
<td>CHW Salary</td>
</tr>
<tr>
<td>Tablets</td>
<td></td>
<td>Fuel</td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td>Motorcycle insurance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Replacement equipment</td>
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<tr>
<td></td>
<td></td>
<td>Communication Package</td>
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<tr>
<td></td>
<td></td>
<td>Ongoing Training</td>
</tr>
<tr>
<td>Total Scale-up</td>
<td>419,763,111 FCFA</td>
<td>831,682,224 FCFA</td>
</tr>
<tr>
<td>(1 Supervisor: 18 CHWs)</td>
<td>123 FCFA per person covered</td>
<td>245 FCFA per person covered</td>
</tr>
</tbody>
</table>

- The performance of 75 CHWs, measured on three key indicators: Quantity, Speed and Quality of Care saw a linear improvement (p<0.01)
- Other supervision models did not result in universal supervision coverage
- Integrated into the National Plan, the 360° Supervision Model would cost 363 FCFA per person covered by the plan in the first year and 245 FCFA in subsequent years