mHealth: Smarter Systems for the Community Health Workforce

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“Extending the reach of the public health system through a well-trained and supported community health workforce is a crucial step in meeting the MDGs, strengthening health systems, and increasing quality health care.”

One Million Community Health Worker Campaign Technical Task Force Report
mHealth for Community Health Workers

- Health records
- Patient ID & tracking
- Supply tracking
- Monitoring & Evaluation
- Checklists & Protocols
- Surveillance
- Counselling Messages
- Data Collection
- Education & Training
“We deliver open and innovative technology to help underserved communities everywhere.”

- Open source software company
- Leader in developing mobile solutions for frontline workers in low-resource settings
- 170+ active projects in 40 countries
- Work across multiple sectors, including health, agriculture, microfinance, etc.
- Partners: Foundations, governments, NGOs, and grassroots organizations
Dimagi’s mHealth Tools

**CommCare**
- Data and Workflow
- Design and manage mobile data collection & case management projects

**CommConnect**
- SMS Communication
- SMS-based system for frontline workers or end users

**CommTrack**
- Logistics & Supply Chain
- Mobile tool for supply chain and logistics management
What Makes Our Tech Special?

- Open source
- Longitudinal client tracking
- Offline usage
- App builder for non-programmers
- mHealth App Store (CommCare Exchange)
- Designed for low-literacy health workers
- Works on Android & Nokia phones
- Remotely manage workers
- SMS for performance improvement
What Can You Do With CommCare?

Step 1: Build or customize a mobile app

Step 2: Download the app onto a phone

Step 3: View real-time data in online reports
The result? Stronger healthcare workers

Data collection

Counseling

Training reinforcement

Workflow support
Measuring Impact

Access

Pregnant women that have access to CommCare are 20% more likely to access antenatal care & 22% more likely to have skilled deliveries.

[Afghanistan, 2013]

Quality

With CommCare, health workers completed 20% more of protocols and increased their knowledge of health danger signs by 22%.

[India, 2012]
[India, 2012]

Experience

CommCare improves health workers’ credibility, as well as client and family members’ engagement.

[multiple studies]

Accountability

CommCare reduced the average time it took to submit data to a program coordinator from 45 days to 8 hours.

[India, 2012]
Examples of Dimagi Projects

**Maternal Health:** Pathfinder is deploying CommCare to 2,400 health workers in Haiti to register, track, and treat pregnant women.

**Child Health:** Terre Des Hommes is rolling out eIMCI application to 400 health clinics in Burkina Faso to strengthen referral systems.

**Nutrition:** World Vision has deployed a maternal health CommCare application in nine countries to screen children for nutrition status and related illness, plus immunization status.

**Logistics/Supply Chain:** John Snow International is tracking medical supplies in 8,600 facilities in Tanzania, Malawi, and Ghana with CommTrack.

**Family Planning:** University Research Coalition is using CommCare in Benin to promote family planning and track FP commodities and pricing.
Scaleable mHealth for Frontline Programs (1/2)

### Criteria and Definition

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Definition</th>
<th>Value</th>
<th>Alternatives</th>
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<tbody>
<tr>
<td>Cloud Product</td>
<td>Hosted by the software provider and made available over the internet through a website</td>
<td>Essential for low-cost continued operation, scale, Enables &quot;do it yourself&quot; projects without software development capacity</td>
<td>Desktop Products &amp; Customizable Codebases</td>
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<tr>
<td>Complex Workflows</td>
<td>Ability to track people or other entities over time, and often include complex branching logic and rules for parsing or responding to messages</td>
<td>Important for tracking entities over time and include complex logic</td>
<td>Simple Tasks (e.g., basic data collection, and simple SMS)</td>
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<tr>
<td>Open Source</td>
<td>Original source code is made freely available</td>
<td>Necessary for local ownership, national scale</td>
<td>Proprietary Software</td>
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*Not all technologies are included*
Scaleable mHealth for Frontline Programs (2/2)

STAGE 1: Proof of Concept

Cloud Product Advantages
- Fast start-up
- Low cost
- Ability to do it yourself

STAGE 2: Scale & Improve

Cloud Product Advantages
- Advanced features available
- Lower cost for scaling and iterations

Open Source Advantages
- Avoids lock-in or commitment to one partner

STAGE 3: National Scale & Government Ownership

Open Source Advantages
- Makes local ownership possible

Cloud Product Advantages
- Non-programmers can maintain apps
- Proven technology
Smarter Community Services

- Technology Platform
- Innovation & Research
- Services & Adoption

Advance

Transform

Measure
Contact: Carter Powers (cpowers@dimagi.com)

Additional Videos:
CommCare Overview Video: http://youtu.be/ZpfvISKxylE
CommCare Demo with multi-lingual support from India: http://youtu.be/30Ftk6STM3U

Additional Resources:
http://groups.google.com/group/ict4chw
http://www.commcarehq.org
http://www.dimagi.com

Thank you!