Scaling CommCare in India
Business Plan

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Overview - CommCare in India

- **Market:** 750,000 CHWs already trained and incentivized by National Rural Health Mission, and in need of support and monitoring

- **Value:** Growing evidence base that CommCare improves: access to care, quality of care, experience of care, and data-driven management

- **Adoption:** Rapidly engaged 11 orgs in 2011 in India. 8 already scaling. Gates-funded effort in Bihar using CommCare. Already in 10 countries world-wide

- **Scale:** Cash-flow positive within 3 years and can reach 50 orgs, 25K CHWs, millions of beneficiaries

- **Evaluation:** Rigorous studies planned for 2012 with Harvard Business School and Mathematica, 5 PhD projects working on CommCare
CommCare: Product Overview

- CHWs use CommCare during each home visit and to register each client.
- CHWs get SMS reminders for visits and encouragement to register every eligible client (improving access to care)
- CHWs use electronic checklists, decision support, and educational training materials (improving quality of care)
- CHWs use audio clips, pictures, and videos to enhance credibility and discuss sensitive topics (improving the experience of care)
- CHW programs extensively leverage data on CommCareHQ to improve supervision and monitoring of their programs (improving data-driven management)
- See online video demo
CommCare: CHW Challenges

**Access To Care**
- Many eligible women not enrolled
- Missed visits
- Workforce inefficiency
- High CHW attrition

**Quality of Care**
- Visits short and informal
- Sensitive topics skipped
- Insufficient training on protocols and referral conditions

**Experience**
- CHWs do not bring flipbooks to meetings
- Messages are not engaging
- CHWs credibility doubted

**Traditional Monitoring and Evaluation**
- Monitoring reports often delayed
- Only aggregate data delivered
- Data quality is suspect
CommCare: Benefits

Access To Care
+ Reminders increase timeliness of visit
+ Encouragement to increase enrollment
+ Increased retention

Quality of Care
+ Checklists improve performance
+ Decision support increase adherence to protocols
+ Video & audio convey sensitive topics in authoritative voice
+ Audio prompts help low-literate

Experience
+ Audio, images, and video are easy to carry on phone
+ Phone adds credibility to CHWs
+ Audio and video engage clients more than paper materials

Data Driven Management
+ CommCareHQ provides real time monitoring of daily activity of each CHW
+ Dimagi’s Active Data Management improves workforce performance
+ Increase Efficiency
CommCare: Evidence

Access To Care
Reminders increase timeliness of visit by 85% [DeRenzi et. al., to appear ICTD 2012]

Quality of Care
Decision support increase adherence to protocols by 20% [DeRenzi et al. CHI 2008]

Experience
Multimedia improves CHW performance, confidence, & ability to engage clients [Ramachandran et. al. ICTD 2010; Florez-Arango et. al., JAMIA 2011; Treatman et. al, to appear M4D 2012].

Data Driven Management
Funded to implement and evaluate benchmarking and Active Data Management with three organizations using CommCare in India in 2012-2013.
India Scale-up Strategy

- Build pipeline of prospects
  - Providing 10 free phones and field support for proof of concepts (POC)
  - 50 total by 2013
- Work with partners to create scale model after POC
- Current 11 POCs led to 8 scale-up opportunities (72% conversion)
Business Model and Financials

- $996,424 investment required over 2 years to cover:
  - Software development for the CommCare platform
  - Field operations costs to scale with our implementation partners
- Cash flow positive from product revenues after reaching ~25,000 users in year 3, and scaling steadily to 50,000 users in 5 years
## CommCare Product: Pricing Packages

### CommCare BASIC
- Open Source
- Community Support

### CommCare PLUS
- Application Creation & Iteration
- Multimedia Content
- Direct Email Support

### CommCare FULL
- Application Creation & Iteration
- Multimedia Content
- Active Data Management
- New Feature Development
- Full Support
- More...

<table>
<thead>
<tr>
<th>COST</th>
<th>CommCare BASIC</th>
<th>CommCare PLUS</th>
<th>CommCare FULL</th>
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<tbody>
<tr>
<td>CommCare CHW User Fee up to 20 users</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
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<tr>
<td>CommCare CHW User Fee after 20 users</td>
<td>$0.75 per user / month</td>
<td>$0.75 per user / month</td>
<td>$0.75 per user / month</td>
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<tr>
<td>Implementation Fee</td>
<td>Free</td>
<td>$25,000</td>
<td>$100,000</td>
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Summary

- India represents huge opportunity for impact and scale for mHealth applications for CHWs
- CommCare is best fit technically for this market
- CommCare is best positioned technology in this market
- Dimagi is established and growing in India
- Dimagi has 3 year strategy to
  - Rigorously evaluate of cost effectiveness of CommCare
  - Develop pipeline of over 50 client organizations
  - Be cash-flow positive based on low user fees
  - Provide improved access, quality, and experience of care to millions.
Thank you!

Contact: nlesh@dimagi.com or jjackson@dimagi.com

We are very grateful for funding received from our partners

Additional Resources:
http://groups.google.com/group/ict4chw
http://www.commcarehq.org
http://www.dimagi.com
APPENDIX
CommCare Technology Collaboration

- **Fully Open Source, available as SaaS**

<table>
<thead>
<tr>
<th>CommCare Tech Stack</th>
<th>Planned Integrations</th>
<th>Possible Integration</th>
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<tbody>
<tr>
<td>• XForms</td>
<td>• MOTECH</td>
<td>• OpenMRS</td>
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<tr>
<td>• JavaRosa</td>
<td>• External MySQL</td>
<td>• RapidSMS</td>
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<tr>
<td>• Open Data Kit</td>
<td>custom reports</td>
<td>• MCTS</td>
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<td>• CouchDB</td>
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<td>• DHIS</td>
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<tr>
<td>• Django</td>
<td></td>
<td>• Any system that</td>
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<tr>
<td></td>
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<td>can consume Xforms</td>
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DRAFT - 11/18/2011
CommCare: J2ME
CommCare: Android

CommCare ODK

CommCare ODK > Details

- Initials: FRE
- ID: 242
- Sex: Male
- DOB: 23/09/04
- Age: 6
- Village: Sdf

Select Client

CommCare ODK > Pathfinder registration

Disease which led to registration

- HIV Infection
- Sickle cell disease
- Heart diseases
- Diabetes
- Mental retardation
- Cancer
- Tuberculosis(TB)
- Others

ODK Collect > Progress Note

PACT Office Visit

Activity Time
Enter a Time for this activity in minutes, skip if no time was spent

Other Visit

Accompaniment Time

Phone Call/Leave Message

Username: ctsims
Password: ********
Synchronize with Server

Log In
CommCareHQ Server: Example Reports

- All encounters sent to central server
- HQ supports standard reports and custom reports
  - Available via internet or can be automatically sent out
  - APIs to integrate with existing 3rd Party System

- Data collection and aggregation
- Health Surveillance
- Workforce management and improvement
CommCare: Data Flow

Data Collection ➔ Supervisor Reports ➔ Feedback ➔ Quality Improvement

CommCareHQ
SUPERVISOR/DISTRICT/PROVINCE
PROGRAM MANAGERS

SMS
- Alerts
- Activity reports
- Health stats
- Coordination

GPRS
- Form Submission
- Work Management
- Activity reports

CLINIC/SUPERVISOR

CHW

CLIENT
CommCare: Team can start pilots in 30-days

1. Planning / Set-up
   - Define Protocol in Excel Template 4 weeks
   - Create images or video content 4 weeks
   - Review messages with CHWs 3 days
   - Build Application 3 days

2. Iterate and Field Test
   - “Design and Refine” with CHWs 4 weeks
   - Improve usability 4 weeks
   - Pre-pilot and field test 8 weeks

3. Deploy
   - Run Study with CHWs during 3 to 6-month pilot 3-6 months
   - Meet with select CHWs bi-weekly to gather feedback Ongoing
   - Provide weekly reports and feedback to all stakeholders Ongoing
   - Call under-performing CHWs to understand barriers Ongoing
   - (Can’t charge phone, no coverage, etc).

4. Monitor and Improve
   - Evaluate data for changes needed, deploy updated technology Ongoing
   - Enroll additional cohort of CHWs Ongoing