



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.

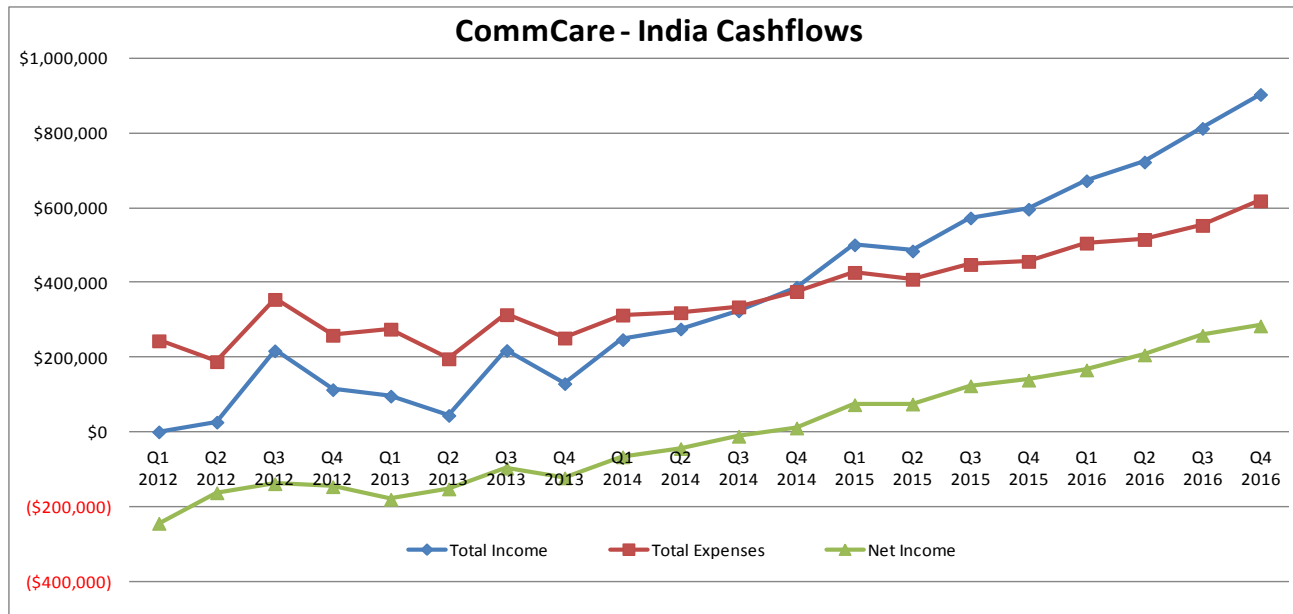
India Scale-up Strategy

- 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)

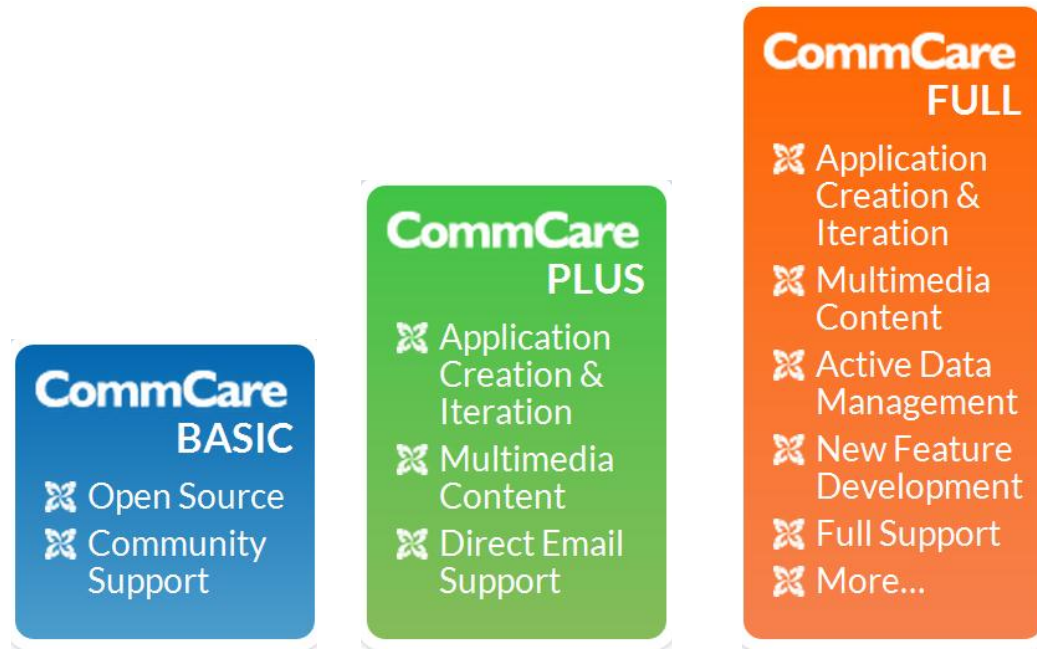


Business Model and Financials

- \$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



COST			
CommCare CHW User Fee up to 20 users	Free	Free	Free
CommCare CHW User Fee after 20 users	\$0.75 per user / month	\$0.75 per user / month	\$0.75 per user / month
Implementation Fee	Free	\$25,000	\$100,000

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*

CommCare Tech Stack

- XForms
- JavaRosa
- Open Data Kit
- CouchDB
- Django

Planned Integrations

- MOTECH
- External MySQL custom reports

Possible Integration

- OpenMRS
- RapidSMS
- MCTS
- DHIS
- Any system that can consume Xforms

CommCare: J2ME

BHOMA Mobile

Household Visit

Record Follow-ups (1)

Give Referral to Clinic

Monthly Survey

Send Data / Update Follow-up List

Select Exit



Patient Followup (1)

Name	Due
TEMBO, ELIZABETH	18/4

Find:

Options Cancel



Patient Followup Detail

Status: Open for follow-up

Due by: 18/4/11

Name: TEMBO, ELIZABETH

Sex: Female

Birth date: 10/2/91

Age: 20

Village: NDOLA

Phone: +255976123456

Details: Missed appt on 5/4

Clinic Diag-nosis: anaemia

Open on: 8/4/11

Ok Back

Record Follow-ups

patient?

Were you able to meet with the patient? Yes

Why didn't the patient go to the clinic?

Patient did go

Feeling better

Too far

Too expensive

No time

Refused to go

Other

Options Back



Record Follow-ups

patient?

Were you able to meet with the patient? Yes

Why didn't the patient go to the clinic? Feeling better

Select the Patient Outcome

Patient feeling better, primary complaint resolved

Patient still sick from primary complaint

Primary complaint resolved, but patient has other complaints

Options Back



Submit Form

Send Data Now


Send Now

Send Later

Select

CommCare: Android

CommCare ODK



Username:

Password:

Synchronize with Server

CommCare ODK, version "1.0"(3), CommCare Version 1.1, Build #CUSTOM_BUILD, built on: UNKNOWN_DATE

Log In

CommCare ODK > Details

Initials FRE

ID 242

Sex Male

DOB 23/09/04

Age 6

Village Sdf

Select Client

ODK Collect > 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

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

PACT Office Visit

Home Visit

Other Visit

Accompaniment Time

Phone Call/Leave Message


ODK Collect > Progress Note

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

PACT Office Visit

Home Visit

Other Visit




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

Reports | Applications | Messages | Users | My Domain | Admin

Signed in to dodoma as jjackson@dimagi.com (Admin) | Sign Out

Select Report

Completion Times

Start Date: 2011-06-13 End Date: 2011-07-19 Got

Previous week | Next Week

Choose Form: CHV_CommCare > Household Visit > Follow-up at household

Show 10 entries Search:

User	Average duration	Shortest	Longest	# Forms
	0:01:50.007605	0:00:04	1:23:45	2630
	0:02:03.827586	0:00:05	0:12:15	174
	0:01:47.333333	0:00:05	0:11:30	60
	0:02:24.862745	0:00:10	0:14:51	51
	0:01:17.982456	0:00:05	0:06:10	57
	0:04:03.555556	0:01:19	0:09:19	36
	0:02:28.741935	0:00:09	0:06:33	31
	0:01:31.612903	0:00:43	0:03:31	31
	0:01:15.993289	0:00:04	0:06:25	149
	0:01:35.500000	0:00:05	0:07:55	86

Showing 1 to 10 of 35 entries

Confused? Try the Help Pages or the wiki. © 2011 by Dimagi, Inc.

Reports | Applications | Messages | Users | My Domain | Admin

Signed in to dodoma as jjackson@dimagi.com (Admin) | Sign Out

Select Report

Case Activity

Show 100 entries Search:

User	Last 7 Days	Last 30 Days	Last 90 Days	Ever
flora	26 (32% of 82)	82 (38% of 142)	142 (79% of 179)	179
rose	2 (11% of 19)	19 (16% of 121)	121 (66% of 182)	182
benadeta	33 (40% of 83)	83 (71% of 117)	117 (85% of 137)	137
jemima	39 (46% of 84)	84 (70% of 110)	110 (87% of 126)	126
esther	31 (49% of 63)	63 (70% of 90)	90 (87% of 104)	104
sarah	34 (57% of 60)	60 (71% of 84)	84 (82% of 102)	102
maria	18 (29% of 63)	63 (75% of 84)	84 (85% of 99)	99
dons	0	52 (62% of 84)	84 (75% of 112)	112
esther mgongolwa	10 (20% of 49)	49 (61% of 80)	80 (73% of 110)	110
maryam	27 (35% of 78)	78 (98% of 80)	80 (93% of 86)	86
yustina	0	44 (57% of 77)	77 (73% of 106)	106
monica	30 (56% of 54)	54 (72% of 75)	75 (72% of 104)	104
catty	8 (17% of 47)	47 (64% of 74)	74 (76% of 98)	98
fatuma dunga	26 (38% of 69)	69 (95% of 73)	73 (96% of 76)	76
emelsiana	0	0	72 (70% of 103)	103
mwanadi	14 (44% of 32)	32 (44% of 72)	72 (62% of 116)	116
yusta george	28 (68% of 41)	41 (58% of 71)	71 (95% of 75)	75
chipegwa	0	33 (47% of 70)	70 (71% of 98)	98
sakina	33 (62% of 53)	53 (79% of 67)	67 (96% of 70)	70
salma	0	31 (49% of 63)	63 (73% of 86)	86

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

