SolDevelo
solutions development

Pathfinder
INTERNATIONAL

SolDevelo's Case Study and Project Information

About Pathfinder

Pathfinder International's mission is to advance sexual and reproductive
health and rights globally by catalyzing change locally.

In more than 25 countries, Pathfinder provides women, men, and adolescents with a range of quality health services-—from contraception and maternal and neonatal health to HIV prevention and AIDS care and treatment. Pathfinder strives to strengthen access to family planning, ensure availability of safe abortion services, advocate for sound reproductive health policies, and, through all of the work, improve the rights and lives of the people served.

Introduction

Pathfinder International currently runs a program called m4change in Abuja and Nasarawa, Nigeria using mobile phone (mHealth) system based on Dimagi CommCareHQ to support various clinical and education functions at primary health care centers. The data collected from the m4change application is stored in CommCareHQ database hosted by Dimagi.

Online portal features:

- Securely Import raw patient data from CommCareHQ
- Aggregate, Summarize, and sum data for the purpose of report accessibility to various stakeholders.
- Securely Interface with a Financial Institution for mobile money payments of enrolled clients in Nigeria from identified rules.
- Generate report of payment logs for audit purpose
- Document processes to inform scale-up

About project

20 facilities

Project was formally launched in 20 health facilities in Nasarawa and Abuja states.

150 workers

Community health extension workers and midwives currently using the application.

15,000 women

Women are registered and being followed in CommCare at project health facilities.

m4Change was launched in 2012 to improve the quality of services provided by community health workers through the deployment of a mobile phone antenatal care application designed to facilitate more accurate decision-making.

Pathfinder collaborates with Dimagi, Inc and the Nigerian Government to implement the m4Change project in Nigeria. The m4Change project aims to equip community health extension workers with a CommCare, a mobile phone decision support application, in order to improve the quality of antenatal care (ANC) services, contributing to the goal of reducing maternal mortality within the framework of Nigeria's "Saving One Million Lives Initiative". In February 2013, the project was formally launched in 20 health facilities in Nasarawa and Abuja states with more than 150 community health extension workers and midwives currently using the application. To date, more than 15,000 women are registered and being followed in CommCare at project health facilities.

In order to promote data use and effective planning, Pathfinder developed an online reporting portal to allow access to a user-friendly data dashboard where key stakeholders can access data for facility and aggregate level data analysis. Pathfinder also recognizes the power of using data for improved supervision. Pathfinder has partnered with the University of Washington to explore protocol and workflow data collected in CommCare and compared across sites. This data will be shared with supervisors to understand anomalies and effect change to improve the quality of care.

Online portal

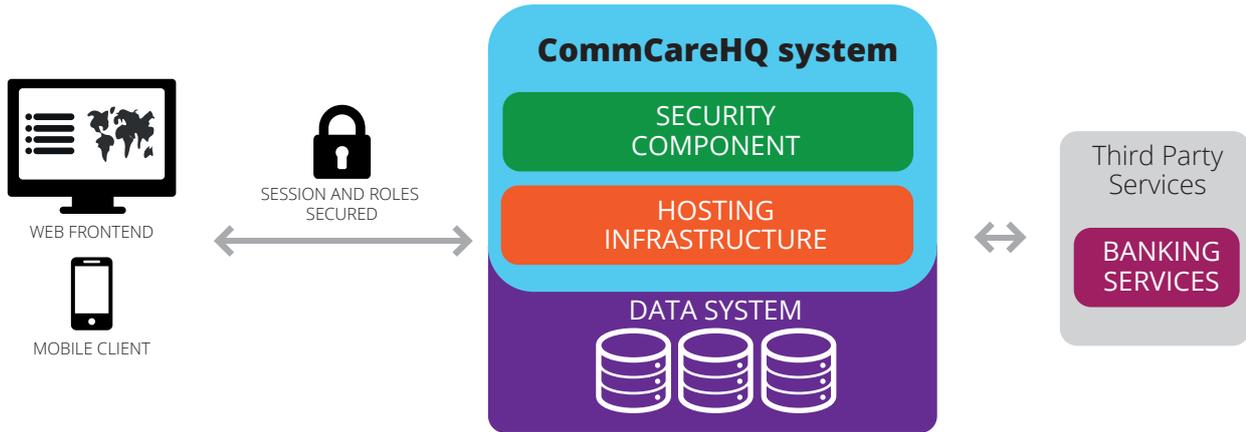to allow access to a user-friendly data dashboard where stakeholders can access data.

The use of SMS reminders have been shown to improve antenatal care attendance and skilled birth delivery rates in many African countries. The m4Change project leverages these findings to use SMS to notify women if they have missed an antenatal care appointment and encourage them to come back into care. SMS alerts are also sent to health workers to follow up on women for birth plans and to promote postnatal care services.
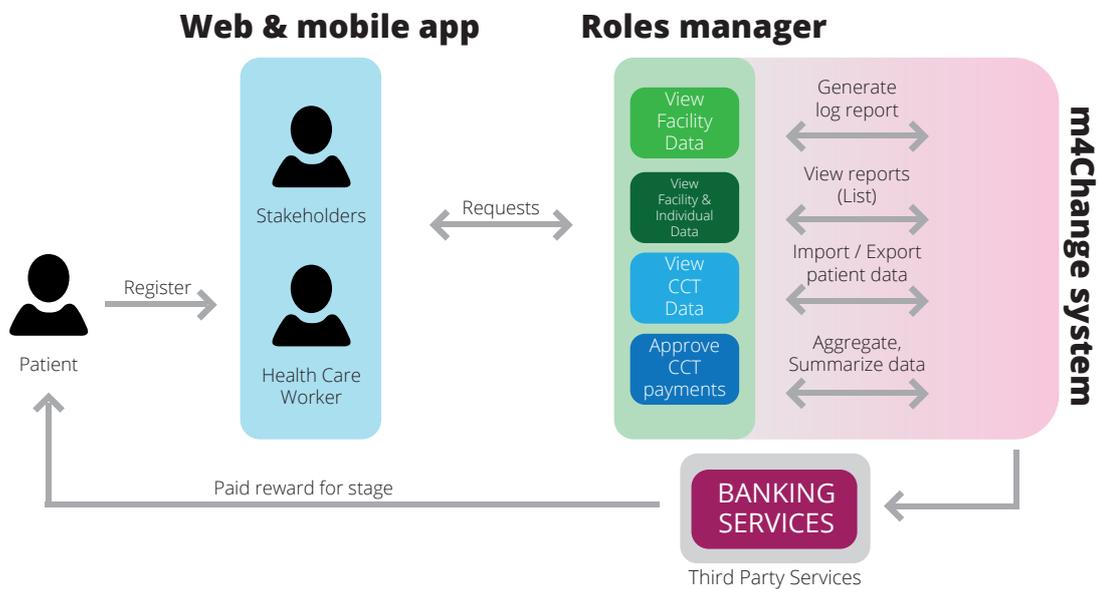
SMS reminder

m4Change send SMS messages to patients and health workers to improve care services.

System Architecture

System Diagram

Web & mobile app

Roles manager

m4Change system

View Facility Data

View Facility & Individual Data

View CCT Data

Approve CCT payments

Generate log report

View reports (List)

Import / Export patient data

Aggregate, Summarize data

Stakeholders

Health Care Worker

Patient

Register

Requests

Paid reward for stage

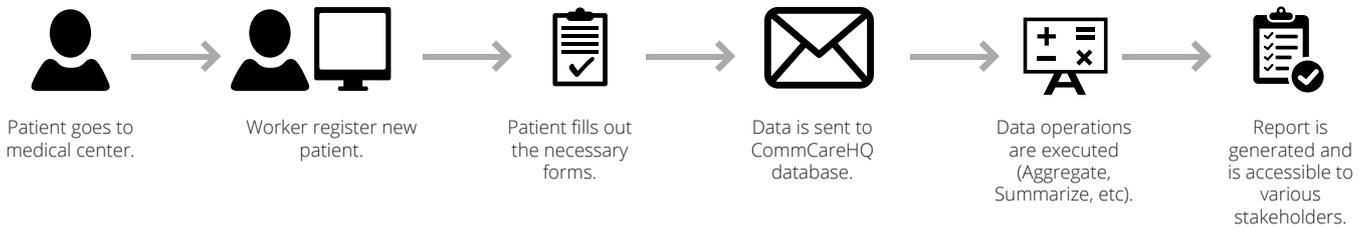BANKING SERVICES

Third Party Services

Our Involvement

Our SolDevelo team was responsible for developing Dashboard for Report Views, data extraction from CommCare Databases and also communication with Third-Party Bank System. Report Views we created:

- Facility ANC HMIS Report
- Facility L&D HMIS Report
- Facility Immunization HMIS Report
- Facility ALL HMIS Report
- Project Indicators Report
- Aggregate Facility Web HMIS Report

- mCCT Beneficiary Approval Page
- mCCT Beneficiary Payment Page
- mCCT Paid Beneficiary Page
- mCCT Rejected Beneficiary Page
- mCCT Beneficiary Log Page
- mCCT Monthly Aggregate Report

Sample Use Cases

#1 Collect data forms and generate reports

Patient goes to medical center.	Worker register new patient.	Patient fills out the necessary forms.	Data is sent to CommCareHQ database.	Data operations are executed (Aggregate, Summarize, etc).	Report is generated and is accessible to various stakeholders.

#2 Mobile money payments

Stakeholder goes to web application.	Stakeholder can view reports and aggregate level data analysys (e.g. financial)	Stakeholder can allow or deny payment for the patient's completed stage.	System communicate with banking system to execute transactions

Screens

Facility L&D HMIS report screen:

mCCT Beneficiary list view screen:

Report Filters

Location	All ▼
Date Range	2014-07-01 to 2014-10-28 This report's timezone is Africa/Lagos.
Case Search	
Service type	All ▼

Apply   Favorites ▾   Save...

Hide Filter Options   Export to Excel

mCCT Beneficiary list view

Review   Cancel   Reject   Reason: None ▼

▼ Date of service	Beneficiary Name	Service Type	Health Facility	Card No.	LGA	Phone No.	Amount	Visits	Status/Action all none
2014-07-03	agr1	delivery with immunization	AggregateTestFacility	12312	SanityTestDistrict	12312312312	3000	1	☑
2014-07-03	agr3	delivery with immunization	TestFacility1	12312	SanityTestDistrict		3000	0	☐
2014-07-07	Test1 july	registration	DOBI_PHC	11111	GWAGWALADA Area Council	08065523232	1000	1	☐
2014-07-07	Test2 okid	registration	DOBI_PHC	22222	GWAGWALADA Area Council	08911111111	1000	1	☐
2014-07-07	Dgu	delivery with immunization	DOBI_PHC	65555	GWAGWALADA Area Council	56696656559	3300	2	☐
2014-08-25	Test Immu	delivery with immunization	TestFacility1	12312	SanityTestDistrict	12312312312	3000	0	☐
2014-10-08	test2	immunization	TestFacility1	---	SanityTestDistrict	12312312312	5000	---	☐
2014-10-10	booked still1	registration	TestState1	12312	---	12312312312	1000	1	☐
2014-10-10	booked still2	registration	TestState1	12312	---	12312312312	1000	1	☐
2014-10-10	booked still3	registration	TestState1	12312	---	12312312312	1000	1	☐

m4Change calendar widget screen:

Report Filters

Location	All ▼
Date Range	2011-01-01 to 2013-12-31 This report's timezone is Africa/Lagos.
Case Search	
Service type	

Year to Date
Last Month
Last Quarter
Last Two Quarters
Last Three Quarters
Last Year
Last Two Years
Last Three Years
Last Four Years
Custom Range

← Sep ▼ 2013 ▼ →

Su	Mo	Tu	We	Th	Fr	Sa
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

← Oct ▼ 2014 ▼ →

Su	Mo	Tu	We	Th	Fr	Sa
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8

FROM   TO
2013-09-04   2014-10-29

Apply   Cancel

Hide Filter Options   Exp...

...y list view

▼ Date of service			No.	LGA	Phone No.	Amount	Visits	Status/Action all none
2014-07-03	agr1	delivery with immunization	AggregateTestFacility	12312	SanityTestDistrict	12312312312	3000	1 ☑
2014-07-03	agr3	delivery with immunization	TestFacility1	12312	SanityTestDistrict		3000	0 ☐
2014-07-07	Test1 july	registration	DOBI_PHC	11111	GWAGWALADA Area Council	08065523232	1000	1 ☐

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