# COMMCARE FOR ANTENATAL CARE SERVICES IN NIGERIA



# **BRIEF OVERVIEW**

Maternal mortality is very high in Nigeria with maternal mortality rate (MMR) ranging from approximately 545 to 840 deaths per 100,000 live births in Nigeria. In Nigeria, 62% of births occur at home and only 39% are attended by skilled health personnel. Only 58% of women receive some form of antenatal care (ANC) from a skilled provider, and this varies greatly by geographic area. While 45% of women had the four or more recommended ANC visits, only 16% has had an ANC visit before their fourth month of pregnancy (Nigeria DHS, 2008).

As a result of high maternal mortality and the need to improve the quality of ANC services to increase demand for services, Pathfinder decided to integrate the use of mobile technology to support health workers. Community health extension workers (CHEWs) in addition to nurses and midwives provide antenatal care services in primary health centers in Nigeria. CHEWs are lower level of education and job aids to support effective clinical decision making are lacking at sites. In order to improve the quality of ANC services provided by CHEWs, Pathfinder International, in collaboration with Dimagi, Inc is implementing CommCare in 20 primary health facilities in Abuja and Nasarawa state.

Pathfinder launched the project in November 2013, coupled with a rigorous evaluation of the effect of CommCare on the quality of ANC services. CHEWs use CommCare to record client data and track ANC clients over time. CHEWs also use multimedia audio counseling clips during group health talks that prompt them to have continued conversations about health behaviors

# **ABOUT COMMCARE**

With over 5,000 registered mobile users across 30 countries in its cloud environment and over I million forms submitted to date, CommCare is one of the most widely adopted, technically advanced, and evidence-based mobile platforms for FLWs in developing countries.

CommCare is an easily customizable mHealth platform for health workers that tracks and supports their interactions with patients. CommCare replaces the conventional practice of a community health worker (CHW) manually tracking their work via paper registers and carrying large patient education flipcharts. Instead, each CHW is equipped with a midrange phone running open-source and low-literate-friendly software. The CHW registers clients using customized electronic forms. CommCare automatically submits visit data in 'real-time' to a central cloud server, CommCareHQ. Data on this server is privacy-protected, backed up, and accessible to supervisors and program managers around the world.

In Nigeria, CommCare applications are being used by Community health extension workers (CHEWs) to record client data and track ante natal care (ANC) clients over time.

# **EVALUATION AND RESULTS**

In Nigeria, there are currently over 150 CHEWs in 20 primary health centers are using the CommCare application to track ANC clients (10 primary health centers in Abuja and 10 primary health centers in Nasarawa state). Since December 2012, over 2,400 pregnant women are now registered and are tracked

# **BEHAVIOR CHANGE COMMUNICATION**

through CommCare. A rigorous research study is being conducted to assess the effect of implementing CommCare on the quality of ANC care. Baseline data was collected in January 2013, and the endline will be completed by September 2013. The analysis and write up will be ready by December 2013.

Globally, collective findings from 14 published papers about CommCare, six important grey literature studies, and four papers on closely related systems are encouraging. They demonstrate the potential for organizations to use CommCare to improve a wide range of aspects within their community health program (s). The findings also support the hypothesis that CommCare can be used to increase the timeliness. accuracy, and relevance of essential information delivered to clients. It is, however, important to note that CommCare by itself will not improve the behavior of CHWs, but can only amplify an organization's efforts to improve their community health program. Organizations must continually support their CHWs and utilize the information delivered by CommCare in order to realize the potential benefits of introducing an mHealth system for their CHWs.

# **LESSONS LEARNED**

- Active engagement of the NPHCDA in the Ministry of health from the start of the project is critical in order to foster ownership. This project complements the Nigerian government's commitment to using mHealth solutions for addressing maternal health, as seen through their partnership with the mHealth Alliance.
- Primary health centers with varying client loads use CommCare very differently (for decision support, client tracking and data reporting). The implementation approach thus has to be adjusted to fit the needs of smaller and bigger implementation sites.
- The need to create a single solution for both highperforming and low-performing frontline workforces is complex.
- Design processes to support and improve CHW

service delivery based on evidence.

# CONCLUSION

Mounting evidence indicates that properly using CommCare to support CHW programs can improve access, quality, experience, and accountability of the care provided by community health workers. After a successful pilot phase, Pathfinder is planning to scale up the use of CommCare in Nigeria to support the reduction of maternal mortality and improve the quality of ANC care. Dimagi, Inc. is also gathering evidence and refining its approach in order to provide sufficient evidence this tool can support maternal and child health services in Nigeria.

### GEOGRAPHIC COVERAGE

Nigeria (Abuja and Nasarawa state). CommCare is also implemented in 13 other African countries: Benin, Sudan, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Senegal, Sierra Leone, South Africa, Tanzania, Togo, and Zambia

### IMPLEMENTATION PARTNERS

The Nigerian National Primary Healthcare and Development Agency (NPHCDA); Pathfinder International; Dimagi, Inc.

### **FUNDER**

Pathfinder International

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