IPSP Nigeria Maternal Health Pilot Program

M390.2 – HCD research on new use cases

March 31, 2016
Connectivity Use Case

Health Worker Training – via partnership with the ORB pilot in Ondo State
Clinics Visited

8 Clinics

26 Total Participants

Ondo State (ORB)
• Shagari
• Igoba
• Ayede Ogbese

1 large focus group
3 small groups
10 one-on-one interviews

6 OIC/Deputy OIC
7 Midwives
4 CHEW
7 Record keeping staff
2 State Health Officials
Research Materials – ORB Pilot

Mandatory Tablet - based film training program for Ondo State Frontline Health Workers
This section contains a list of mandatory courses to be taken by frontline health workers.

Optional Tablet - based film training program for Ondo State Frontline Health Workers
This section contains the optional courses that would be taken in addition to courses in the mandatory section.

Introduction

Focused Antenatal Care (Mandatory Course)

The four standard visits of FANC
The first visit

Warning Signs in Pregnancy (Mandatory Course)

Warning Signs in Pregnancy
Introduction and anaemia
The First Hours After Delivery (Mandatory)

Question 6 of 17
Which of the following statements is/are true for obstructed labour?
(Multiple answers allowed)

- Can sometimes occur in false labour
- Teenage pregnancy is a common cause
- Pelvic assessment always reliable to prevent it
- Head moulding is not an important sign in labour
- Vitamin D deficiency is a risk factor

You scored: 15%

You answered: Weight gain

In pre-eclampsia, which of the following is the first sign of the condition? (Multiple answers allowed)

You answered: Pedal oedema

Common Causes of anemia in pregnancy include the following? (Multiple answers allowed)

You answered: Poor nutrition

The following parameters appear on the obstetric partograph?

You answered: Bladder contraction

Which of the following statements is/are true for obstructed labour?
(Multiple answers allowed)

You answered: Weight gain

Retake this quiz
About ORB

• Launched in May 2016
• Three local government areas (LGA), six clinics in each
• 200 participants, each with a unique login ID
• In each clinic, only some individuals have an account that allows access to the application
• Clinics receive one tablet pre-loaded with the app containing 10 weeks of mandatory lesson content and additional, optional content
• App can be installed on any Android device (in addition to the clinic tablet)
• System is designed for offline use – connectivity is necessary for updates, initial login and sending analytic data
**ORB Use Cases**

**User Experience**
Although health workers using the ORB application prefer to receive in-person training, the videos offered by ORB are a great alternative. The visual demonstration of procedures and techniques is easy to understand and recollect.

**Use Case 1**
Health workers take turns using the tablet, watching videos and taking quizzes during their down time. Even though they watch the videos separately, they discuss learnings and questions as a group.

**Use Case 2**
Health workers find a time where they are all available, watch lesson videos together and discuss any questions. Subsequently, each health worker takes the quiz to evaluate their learning. Group viewing also allows those not selected to participate in the pilot unofficially.

**Use Case 3**
ORB is positioned “for health workers” so it had not occurred to most to share it with women in the clinic or the community; however, most healthcare staff agree that some of the content would be really useful for new/expecting mothers.
ORB Use Cases (continued)

**Community Sharing**
It would be easy to share content with women in the community because videos are interesting and easy to understand. Not only would women gain knowledge easily, but the videos reinforce the authority of the health workers.

**Group Viewing**
In terms of showing the videos at an ANC health talk, in or outside of the clinic, the volume on the device is the main obstacle, followed by the small screen size of a single tablet. One CHEW suggested a larger screen, such as a flat screen or a projector, would be more effective for group viewing.
“What you see, you never forget.”
– Officer in Charge (Lugbe)

“Learning improves their life.”
– Ndanusa, OIC (Lugbe)

“They say seeing is believing.”
– Ndanusa, OIC (Lugbe)

“At least if they don’t believe in us, they will believe in [the videos].”
– Nurse/Deputy OIC (Odode)
As a result of watching the ORB training videos, midwives and CHEWs were able to better understand the optimal antenatal care timeline and were, in turn, better able to schedule a patient’s visit across her pregnancy and track EDD (expected delivery date).

Beyond the technical lessons learned, health workers also emulate the nurse-patient interactions they observe in the videos. For example, a midwife built rapport with a patient who wanted a home birth, and successfully received an invitation to assist at home.
The Value of ORB

**Range of Learning**
ORB serves both experienced and novice healthcare workers. It provides access to new techniques and procedures in the field, as well as ‘refresher’ training, and also serves as a transition from a school environment, where mentors guide every step, to being responsible for patient outcome.

**Enhanced Communication**
The ORB app has led to enhanced social interaction and communication amongst staff, strengthened mentorship from senior to more junior staff members and introduced better alignment of processes.

**Ease of Learning**
ORB’s structure of organized lessons and quizzes is an upgrade to the common method of ad hoc information “look up” on a health worker’s personal device. To this end, ORB also provides equal access to learning, even for those who cannot afford such a device.

**ORB vs. IPSP**
Two clinics were also hosting the IPSP pilot and comparisons to “MAMA Connect” came up naturally. ORB was considered similar, but ultimately better, because of its structure and the ability to test knowledge, which delivers learning more effectively. Additionally, ORB can be used offline, outside of the clinic.
“It’s equivalent of going to school. I don’t see any difference.”  
– Ndunusa, OIC (Lugbe)

“It’s like taking JAMB.”  
(JAMB stands for Joint Admissions and Matriculation Board – this is an exam that school graduates in Nigeria take in order to gain admission to university.)  
– Ndunusa, OIC (Lugbe)

“Everyone would have an update. You could manage a patient very effectively.”  
– Rabiu, Midwife (Ludgbe)
A video can reinforce the methods learned in school and replace traditional (or erroneous) practices learned through experience. Omolola and Daodu, both midwives, explained that during their medical training they were taught various methods for the delivery of the placenta. During their practical training and subsequent work experience, the more experienced midwives had a preference for manual delivery, a practice which they both adopted. An ORB video presented natural delivery as the safer, preferred method which caused them to establish a new norm in their clinic.

Additionally, Omolola shared this learning with her former schoolmates via a WhatsApp group they use to maintain contact.
Monitoring Health Worker Training

Proof of Performance
Health workers believe that OIC and/or State monitoring of their progress is actually a good thing as it encourages them to take the training seriously and it provides traceable, unbiased evidence of their performance. In fact, many participants requested a ‘certification’ for each unit successfully completed.

The Training Gap
From the State perspective, it is not feasible to train every health worker due to factors such as budget and logistics. ORB is able to fill this training gap, which is otherwise impossible to consistently provide.

HR Management
ORB is also able to successfully track who has fulfilled training requirements. As a result, State officials are interested in introducing ORB analytics into an HR application that ties training achievement to a personnel record and promotion system.
Non-ANC Content
Healthcare worker training content requests were consistent with past HCD research. There was a strong desire for family planning content as well as disease management training. Participants emphasized the need for training content that is specific and broken down into actionable steps.

Content Requests
- Family Planning
- Immunization
- Nutrition
- Lassa fever
- Diarrhea
- Measles
- Pneumonia
- UTI's
- Endometriosis
- Pre-eclampsia
- Emergency Obstetric Management
- STI's
“We are dealing with life here, not pepper and tomato.”

TRANSLATION: We are dealing with life, which isn’t a frivolous matter.

– Daodu, Midwife (Avede Ogbese)
**Technology Context**

**Technology Literacy**
Hurdles to tablet use do still exist in the form of touch-screen usability and general skepticism, although in many cases these hurdles were easily overcome. It is safe to assume that extremely rural areas, where the addition of satellite would be most impactful, will face greater adoption obstacles.

**Last Mile Clinics**
From the State perspective, there will always be a proportion of clinics that, due to physical and cellular network barriers, will be difficult to reach. They believe satellite’s ability to bridge this gap is not only a benefit, but a necessity, to ensure communities receive the healthcare they need and deserve.

**Leadership Influence**
Clinic leadership is a major influencer in the successful adoption of new technology, and therefore the success rate of technology-based pilot programs. The OIC’s willingness and ability to personally adopt the technology and to share new knowledge within the clinic can drive, or detract from, successful adoption.
An OIC encouraged a CHEW in her clinic to purchase a smartphone in preparation for the ORB pilot. This CHEW went from not knowing how to answer a call to using Opera Mini to look things up herself in a few short months. She now confidently uses the ORB tablet to watch videos.
Thank you