Project Summary: A Call for Life

Use of mobile phone applications to promote access to obstetric and neonatal emergency care

OVERVIEW
CARE International's vision is to build a world of hope, tolerance and social justice. Poverty will be defeated, and people will live in dignity and security. In all its interventions, CARE seeks alliances that can reach more people with a significant impact on the quality of life of the most vulnerable. CARE International has been working in Benin since September 1999.

A Call for Life - Un Appel pour la Vie

BACKGROUND
Although the government of Benin has prioritized maternal, newborn and child health, rates of maternal and neonatal mortality are still unacceptably high. With an estimated population of 9 million in 2011, there are about 1,500 preventable maternal deaths per year that are due to complications during pregnancy, childbirth, and the 6-week period following childbirth. A national study conducted in 2010 on the quality of Emergency Obstetric and Neonatal Care (EmONC) in Benin found an absence of basic as well as comprehensive obstetric and neonatal emergency services in the Cove-Zagnanado-Ouinhi health zone. Midwives and nurses had very little knowledge of how to manage emergency situations. Training and equipment was poor and there was limited dialogue and collaboration between communities and health providers. In addition, it was noted that clients had difficulty reaching health facilities during obstetric emergencies, especially during the rainy season.

The analysis of data from a qualitative and quantitative baseline study shows that access to qualified health care is and remains a major challenge in Cové-Zagnanado-Ouinhi health zone. Some of the key findings are:

- 7 out of 10 women surveyed have no education.
- For the majority of women, husbands have the final say in household decision-making.
- Women tend to wait until the second trimester of pregnancy before having their first antenatal care checkup.
- Some women consider antenatal consultations as a source of unnecessary spending and a potential threat to their pregnancy.
- About 4 out of 10 women who gave birth in the last 12 months did not know at least 3 danger signs for pregnant women, intrapartum women and newborns.
- More than 1 out of 10 newborns and more than 1 out of 10 women in the prenatal period experienced complications.
- 1 out of 10 women experiencing complications took more than an hour to reach the nearest health center.
- About 4 out of 10 births took place at home mainly due to one three factors: a lack of awareness concerning the importance of delivering in a health facility, a low opinion of service providers and the high cost of health care.
- About 1 out 4 newborns had a low birthweight.
- Less than 5 out of 10 women who had recently given birth received a post-natal consultation.
- Less than 1 out of 10 wet nurses practiced exclusive breastfeeding during the first 6 months of life.

STRATEGY
CARE Benin’s "A Call for Life" is an initiative that utilizes mobile phone technology to increase the utilization and quality of obstetric and neonatal emergency care in one commune (Ouinhi) in Cové-Zagnanado-Ouinhi health zone. This 3-year initiative
was launched in November 2011 with generous funding from Sanofi Espoir Foundation. A Call for Life is part of CARE’s Reproductive, Maternal and Child Health program, which aims to reduce maternal, neonatal and infant mortality in Benin, thereby contributing to the achievement of the MDGs 4, 5 and 6. This initiative has four main objectives:

1. **Improve knowledge of danger signs** related to pregnancy, childbirth and the postpartum and neonatal periods within the community and especially among women of reproductive age;
2. **Strengthen the capacity of health workers** to deliver quality maternal and infant health services and to effectively manage obstetric and neonatal emergencies;
3. **Ensure timely medical evacuations and referral** of obstetric and neonatal emergencies to appropriate health facilities;
4. **Strengthen partnerships** between communities and health facilities so that they are better able to address the needs of women and children.

In order to achieve these objectives, CARE partnered with Dimagi and D-TREE to develop a package of mobile phone software applications that would help health care workers and community relays to provide quality services and track their interactions with clients. This marks the first time that mobile phone technology was harnessed to improve health service delivery in Benin. Mobile phones will enable frontline health workers to:

- Inform and educate people about danger signs using pre-recorded images and audio messages in local languages;
- Register all pregnant women and track them during pregnancy to ensure they receive the recommended antenatal care;
- Provide counseling to pregnant & post-partum women on topics ranging from birth planning, to maternal nutrition to breastfeeding;
- Register all births and track women and newborns during the post-partum and neonatal period to ensure they receive the recommended care;
- Ensure the timely evacuation and referral of all obstetric and neonatal emergencies to the appropriate facility.

**SOME RESULTS**

The first 15 months of the initiative were devoted to the following seminal activities: the development, refinement and deployment of mobile phone applications for community relays and health care workers; the completion of a baseline study that will be used to inform program implementation and assess impact; the training of community relays and health care workers on mobile phone applications and relevant health topics; and the mobilization of key stakeholders to support A Call for Life, including community leaders, local officials, health personnel at all levels of the health system, and strategic and technical partners, such as UNICEF. Outputs achieved to date include:

- 13 integrated mobile phone modules developed to guide the work of community relays and health workers
- Deployment of mobile phone technology in all 28 villages and all 7 health facilities in Ouinhi commune.
- 35 community relays and 18 health workers trained on the mobile phone applications
- 1,303 pregnant women registered and being monitored
- 528 education sessions on danger signs conducted
- 559 newborns registered and being monitored
- 138 people (58 pregnant women, 42 new mothers and 38 newborns) experiencing obstetric or neonatal emergencies referred by community relays to health facilities
- 25 health workers trained in EmONC in accordance with their job function
- 17 journalists and radio presenters of educational programs trained on obstetric and neonatal emergency care

Additionally, CARE International Benin/Togo established a national level Learning Committee comprised of organizations and institutions concerned with maternal and neonatal health, including the Ministry of Health, which leads the group, the Benin country offices of UNICEF, UNFPA, WHO, MSH and URC-CHS, and the Network of Beninese Health NGOs. The intended purpose of this group was to define project approaches and discuss experiences in the use of mobile phone applications. However, it has succeeded in generating requests by members to adapt and utilize A Call for Life technology in their own programs and has provided group members with a platform to share, compare and learn effective practices relevant to their own projects.

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1CommCare is an open-source, mobile phone software application that can be modified by end-users according to their needs.

2Community relays are volunteers selected by their communities to link community members with health services.