

Providing voice-based educational messages to improve maternal and child health in Ghana

# **BEHAVIOR CHANGE COMMUNICATION**

Implementation date: 2013 to 2015

Maternal and infant health is an ongoing challenge in Ghana. The lifetime risk of a mother dying during pregnancy or childbirth is one in 35, while one in 24 children die in their first year of life. The outcomes are worse in rural areas with limited access to health services. Fortunately, many of these deaths can be prevented by educating mothers on topics such as when to seek medical help during a difficult birth, proper nutrition, and simple measures to protect against malaria.

To address this challenge, VOTO Mobile partnered with Savannah Signatures to roll out mobile messaging to women in Northern Ghana during and after their pregnancies. During a pilot study of SMS messages, Savannah Signatures found that 80 percent of women subscribing to the original service were non-literate; they were either unable to understand the messages or were dependent on relatives or friends to translate the messages. As a result of this finding, a voice-based solution was developed to engage women across all literacy levels. The original messages, designed by Mobile Alliance for Maternal Action (MAMA), were also adapted and translated into four local languages spoken by the majority of women in the area.

# **About Mobile Information for Maternal Health**

Women usually hear of the program through a local health clinic, or by their peers. They are able to register through the clinic, or text/"flash" a number and receive a call back with an automated prompt to obtain details such as age, location, language and stage of pregnancy. Each mother automatically receives two calls a week in her own language with information on the stage of her pregnancy and suggestions to keep her and her baby healthy. The information is also intended to counteract those traditional beliefs that often prevent women from accessing medical help, even in life-threatening situations.

Every voice subscriber can also opt-in to receive the

information via SMS. Through redialing the toll-free number from which they receive the messages, mothers can re-listen to previous messages, contact a live midwife with urgent questions, or unregister from the service. This also allows listeners who were too busy to hear the message the first time around, outside of mobile coverage, or out of battery the chance to catch up on their own time.

Interactive voice response (IVR) survey questions are embedded into the message to measure if mothers are making healthy decisions and if the content is being retained. Open-ended questions are also asked to receive feedback for improving the quality of the content.

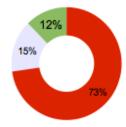
### **Evaluation and Results**

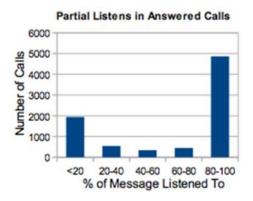
Savannah Signatures and VOTO have been monitoring usage and perceived usefulness of the system. Thus far, the program has placed over 65,000 phone calls and served 5,400 women in Northern Ghana. About 3,500 women have completed the program while the remaining 1,900 are currently enrolled. Approximately 73 percent of women find the calls useful while 15 percent state they are not helpful.

Through active system monitoring and tracking, drop-off rates over time were assessed. It was found that messages lasting 90 seconds or less retain over 70 percent of recipients, resulting in modification of all the program's message lengths into this timeframe. The majority of women also listen to at least 80 percent of the message, indicating mothers appreciate the messages and find them valuable. Those who choose not to listen will end the call at the start of the message, possibly because the time of the call was inconvenient or mothers did not want to hear the messages. Very few women hang up in the middle of the message.

Do They Appreciate It? How useful are the messages you've been receiving each week in helping you with your pregnancy?







## **Lessons Learned**

- Voice enables many opportunities to iterate content throughout the program through the advanced analytics captured, including the exact seconds of content listened to and responses to questions embedding questions within the voice call
- Utilizing an easy registration process and engaging women during the on-boarding process increases program involvement; This can include sending the voice messages while the woman is at the clinic and encouraging her to save the phone number in her phone for future reference
- Translating messages into the local language and incorporating voice messages are crucial to maintaining mother's engagement and comprehension of the material
- It is important to obtain feedback from users to determine and analyze message effectiveness;
- Place key information at the beginning of each mobile message, as not all recipients listen to the entire voice message

Geographic Coverage: Northern Ghana

Implementation Partners: Savannah Signatures, **VOTO** Mobile

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#### **Contact Information:**

VOTO Mobile | Kevin Schuster, Partnerships (+1-339-223-7293, kevin@votomobile.org)

STAR-Ghana | Wendy Otu, Thematic-Lead at STAR-Ghana (wendy.otu@star-ghana.org)

See References on page 89.

### Conclusion

Using VOTO's platform, Savannah Signatures is able to provide valuable maternal health information through both SMS and voice-based messaging, ensuring that women of all literacy levels may participate. When making improvements to the system, it will be important to investigate why some women do not find the messages helpful and what can be done to increase permeability, such as utilizing a different communications channel or providing tailored content for different users.