

## Brief Overview

CycleTel™ is a mHealth application that offers a family planning method directly on a user's mobile phone via SMS. Based on the Standard Days Method® (SDM), CycleTel is a fertility awareness-based method that helps a woman know which days during her menstrual cycle she is most likely to become pregnant. SDM has been proven to be more than 95 percent effective in preventing pregnancy when used correctly.

CycleTel helps a woman determine if she is eligible to use SDM by asking a series of screening questions via SMS. If eligible, she then receives personalized messages about her fertility status, in addition to messages that support correct use of SDM and the service. CycleTel depends on sustained interaction between the user and technology for as long as the woman chooses to use the service.

Georgetown University's Institute for Reproductive Health (IRH), in partnership with others, has followed a step-wise, systematic approach to CycleTel development. IRH conducted a rigorous proof of concept testing from 2009 to 2011 and pilot testing from July 2011 to January 2012, to develop and evaluate the service. IRH is currently exploring partnerships to launch CycleTel in India and other countries worldwide.



### ■ Geographic Coverage:

Lucknow and New Delhi, India

### ■ Implementation Partners:

Georgetown University's Institute for Reproductive Health led a team of partners that included: ThoughtWorks Inc. | Unicef | Indian Society of Healthcare Professionals | FrontlineSMS. Partnerships for service launch are in development.

### ■ Funder:

USAID

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## About CycleTel

A woman opts in and joins the CycleTel service by sending an SMS to a designated number. Then, via SMS, she is screened for method use. If she meets two conditions (her periods usually come once a month, and she and her partner can avoid unprotected sex several days each month) she sends the date of her last period to the service and begins using CycleTel. The service alerts her of her fertile days during each cycle. Additional messages support correct use of the method, help her monitor her cycle length, and offer information on other reproductive health issues, such as the importance of optimal birth spacing. Additionally, a helpline number is available for one-on-one consultation over the phone.

FrontlineSMS was used to mimic the service during proof of concept testing. Since an IRH staff member had to send and track all messages via FrontlineSMS, this technology platform was only appropriate to support a small number of CycleTel users. With successful proof-of-concept results, IRH worked with ThoughtWorks to develop a customized software to automate the service.

Once the CycleTel technology platform was built, IRH recruited 715 women in the Delhi region to test the automated version of CycleTel for two menstrual cycles. The purpose of the pilot test was to:

- Ensure that the automated technology functioned properly with a higher volume of users;
- Evaluate user experiences with the service and integrate user feedback before scaling the technology; and
- Test the feasibility of integrating the CycleTel helpline into a fully-functioning family planning call center.

## Evaluation and Results

Over 95 percent of users interviewed at exit reported that they received messages at an appropriate time and in an appropriate quantity, indicating that the technology worked as designed. When asked what they liked most about CycleTel, more than 80 percent of users reported appreciating its ease-of-use and the timely reminders. Nearly 90 percent of women and 80 percent of men interviewed said that they would recommend this service to others.

IRH is testing the feasibility of offering the service on an interactive voice recording (IVR) variant of the service. If test results are positive (i.e., if women are able to use the IVR version, which requires them to listen to messages and enter numeric responses), this could make CycleTel appropriate and accessible for millions of women and couples at the base of the pyramid who have an unmet need for family planning but for whom texting can be challenging.

## Lessons Learned

- Proof of concept testing, with low-cost technology solutions, is a critical first step to testing a mHealth concept.
- Proof of concept testing informed the development of a “technology functionality” scope that was integral for helping to identify an appropriate technology partner.
- Business plan analysis serves as a reality check as to what level of investment is needed to reach a defined level of scale.
- An ecosystem of partnerships is required to operate and sustain a mHealth service.
- IRH’s systematic and rigorous approach to CycleTel development is a model in the mHealth field that other organizations can apply to plan for the scale and sustainability of other mobile services.

## Conclusion

Strong interest in CycleTel has been expressed by mobile network operators, telecom aggregators, donors, technical assistance organizations, and others. Discussions are underway with potential go-to-market partners. IRH aims to launch CycleTel in India and expand the service to other countries. CycleTel is now well-positioned to expand access to family planning by offering an effective family planning method directly via mobile phones. As with any innovation, to be taken to sustainable scale, continuous investment is required for research and development, as is the development of sustained partnerships and a strong client base.