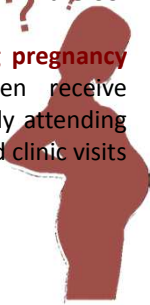# Encouragement System

Kaitlyn Schirmer, Yi-Chen Sung, David Swanson

PROBLEM

- **Maternal mortality is high**
  Maternal mortality in Kenya is 530/100K versus 24/100k in the US.

- **Low clinic visits during pregnancy**
  Currently, women often receive little antenatal care, only attending 1 of the 4 recommended clinic visits during pregnancy.

RESEARCH

RELATED WORK
- MOTECH sent messages to women in Ghana and found that they needed to use voice messages due to low literacy rates.
- WelTel Kenya1 is a study in Kenya with HIV positive patients showed that including SMS communication improved treatment.

FIELD WORK KEY FINDING *
- Pregnant women lack health knowledge
- Women often do not plan for the financial burden of pregnancy and birthing
- SMS is a popular form of communication in Kenya
- Cell phone coverage is reasonable
- Female literacy rate is high

SOLUTION

Send interactive SMS messages containing practical and actionable information that will encourage and empower the women to take their health care into their own hands.

KEY FEATURES
- For Pregnant Women
  - Tailored messages
  - Allow women to reply messages
  - Allow women to pull information when needed
  - Encourage participation through incentives
- For Clinics
  - Automatically and periodically send messages to women based on their pregnancy status and their preference.
  - Prioritizing replying messages depends on the woman's pregnancy risk level, frequency of replying messages, time, keywords, etc.
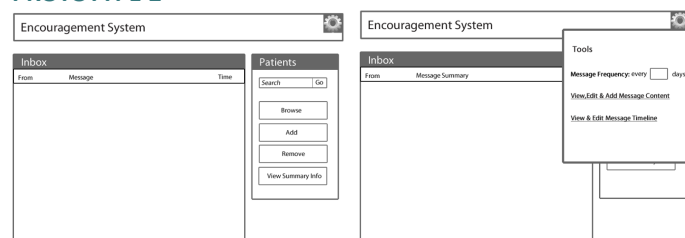
NEXT STEPS

- Build user interface
- Integrate with SMS and user/client databases
- Create algorithm of prioritizing messages

PROTOTYPE 1
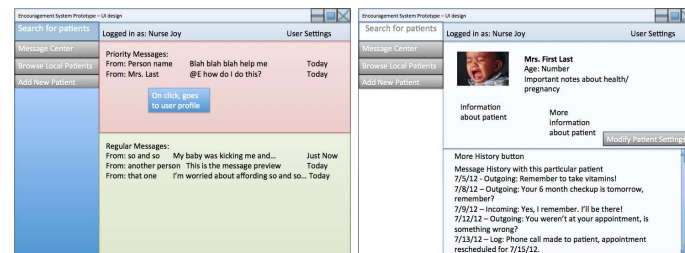
Loved the history, and sending messages from the user page. Liked the medical summary idea.

PROTOTYPE 2

Having two very different functional blocks (inbox, patient management) on the same page causes problems.

PROTOTYPE 3

Liked the pulling information feature (to-do list), messages history, and always shown profile information.