

MamaCare

Improving Maternal Health through SMS and USSD in Rural Nigeria.

Team: Tech Impact

Team Members

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The Problem

Problem Statement

Many rural Nigerian women miss maternal health care appointments due to poor communication, lack of reminders, and language barriers.

GCGO: HealthCare (Strengthening maternal and infant health systems)

Why It Matters

Missed antenatal care contributes to Nigeria's high maternal mortality rate—estimated at 512 deaths per 100,000 live births (WHO, 2020).



Our User

Name: Zainab (25, rural mother-to-be, Bauchi)

Phone: Basic Nokia

Literacy: Can read Hausa, not English

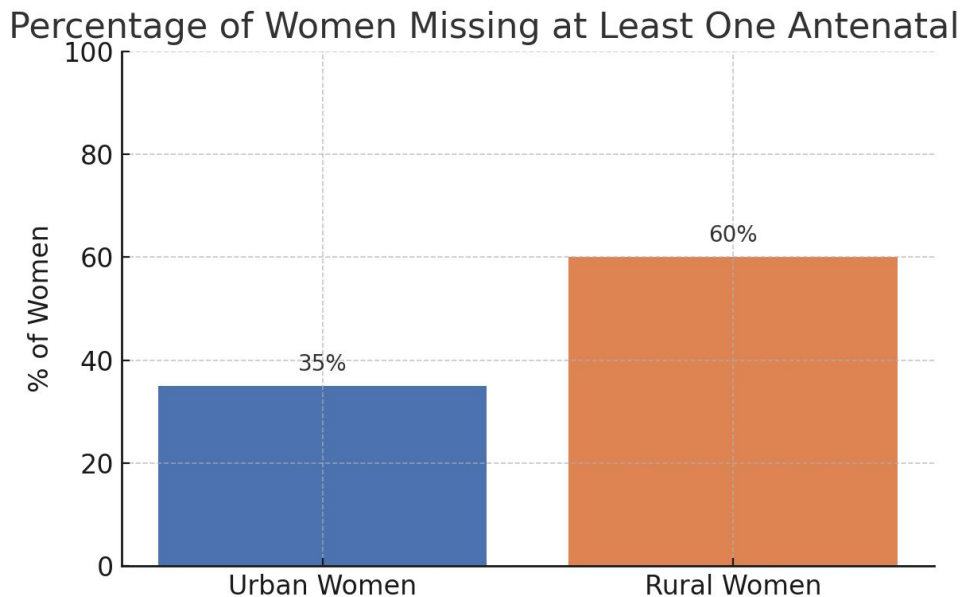
Pain Points: Forgets appointments, no follow-up, prefers health info in her local language

The Data That Validates the Problem



Bar Chart: Urban vs Rural Missed Antenatal visits

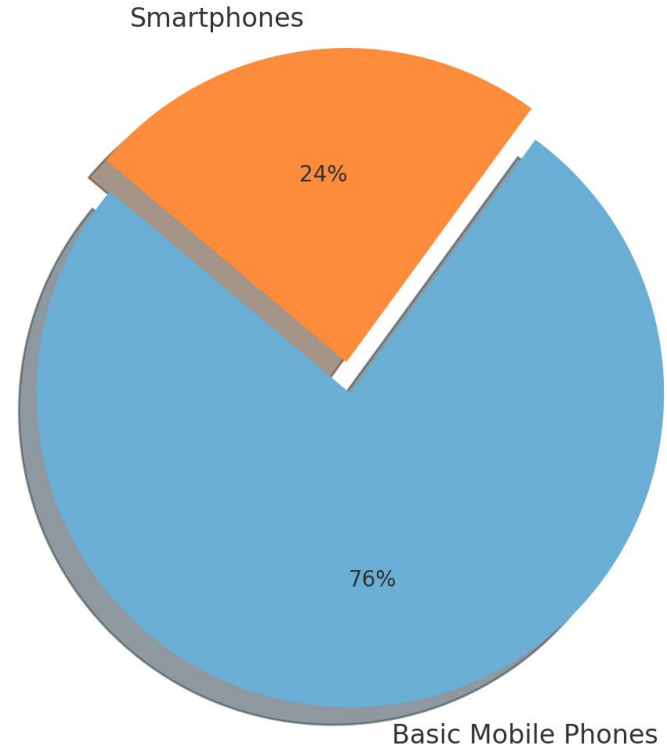
60% of rural women miss at least one antenatal visit (NDHS 2018)





Pie Chart: Phone Type Usage

Only 28% of rural women use smartphones; 89% use basic mobile phones

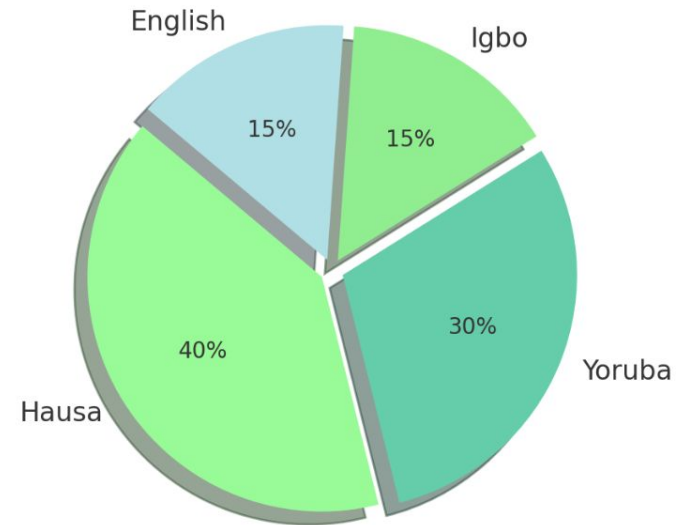


User Insight

I want reminders in Hausa. I forget my appointment dates easily.

Aisha, 7 months pregnant

Preferred Language for Health Messages





Our Solution

Introducing MamaCare

A USSD/SMS-based maternal health companion system that:

- Sends SMS appointment reminders
- Offers weekly health tips in local languages
- Tracks postnatal care and immunization
- Provides emergency contact info
- Works offline and on any mobile phone

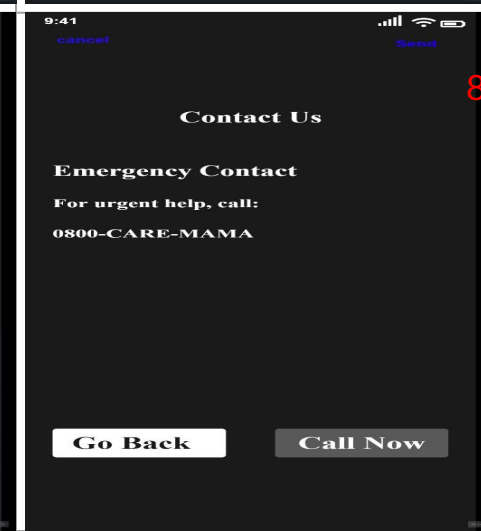
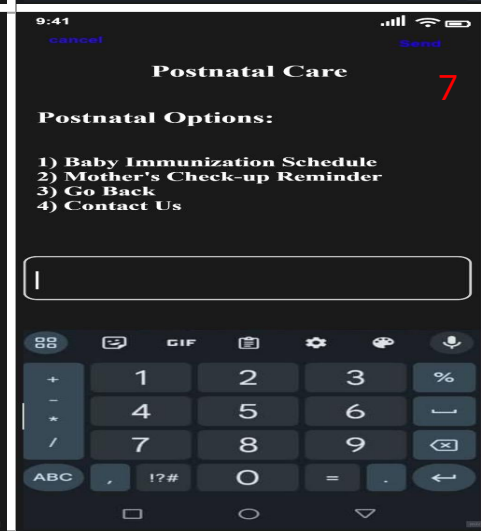
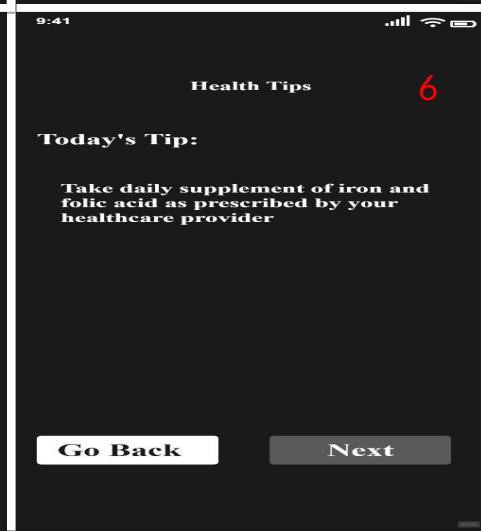
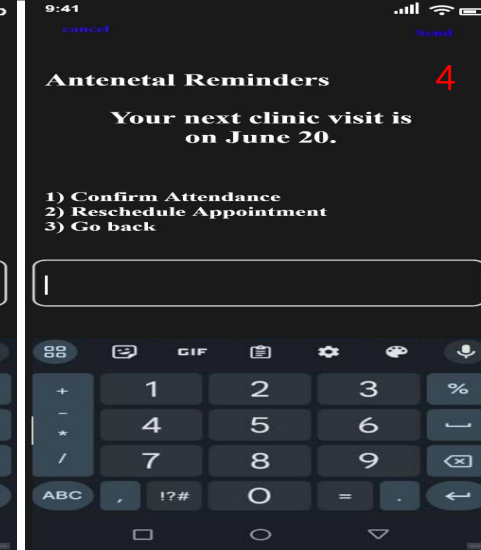
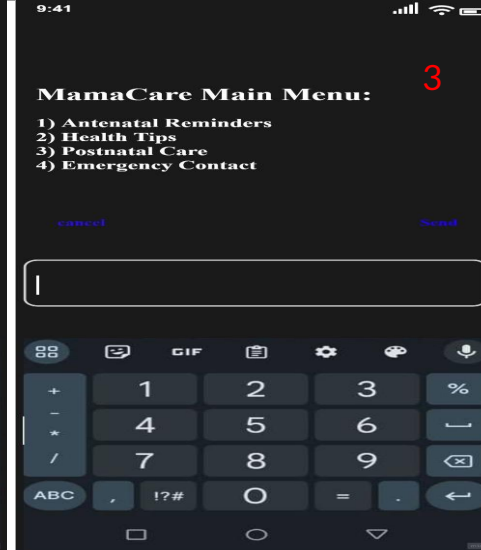
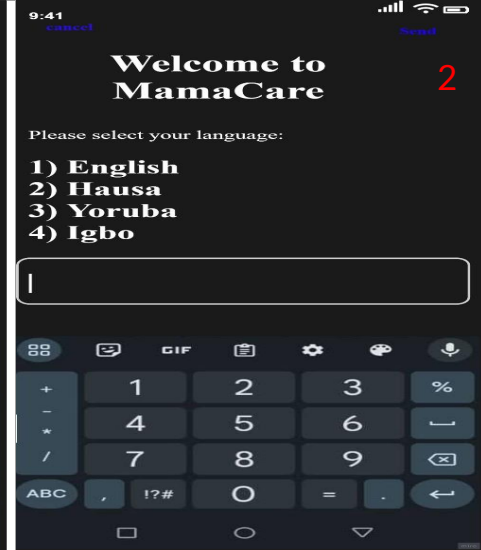
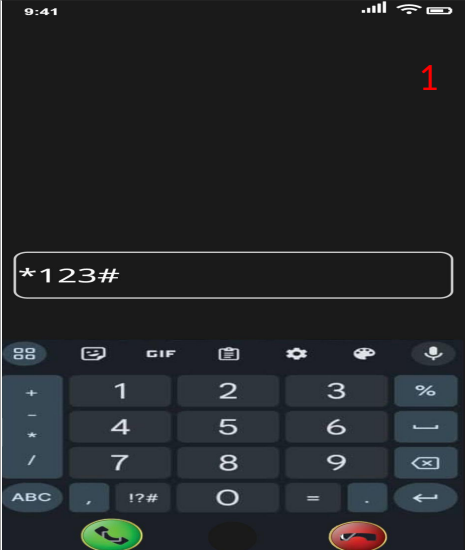


SMS

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Wireframe Solution





User Needs & Pain Points (from Testing)

1. **Menus felt too long**, and users struggled to navigate back easily.
2. **English-only messages** confused users who preferred local languages like Hausa.
3. **Lack of confirmation** left users unsure if their responses were received.
4. **Emergency contact options** were unclear, causing hesitation during selection.



Recommendations from Testing

- Add a “Back to Main Menu” option on every screen.
- Make Hausa the default language in northern states.
- Use symbols/numbers in SMS for low-literacy users.
- Shorten USSD flows from 4 steps to 2 wherever possible.



What's Next

(Future Vision)

- ❑ Partner with Primary Health Centres and NGOs for onboarding
- ❑ Launch pilot in 2 rural LGAs
- ❑ Monitor KPIs & iterate
- ❑ Add more languages (Pidgin)
- ❑ Integrate nutrition tips and referral alerts



Why Does It Matters

MamaCare is more than technology, it restores dignity and ensures access to life-saving care for rural mothers who are often overlooked. By bridging communication gaps with simple mobile tools, we promote health equity and protect the lives of mothers and babies.



Appendix

1. Nigeria has over 84 million feature phone users, a perfect match for MamaCare.
2. World Health Organisation(WHO)
3. [Tips for Presenting Your Wireframes](#)
4. [3 Steps to Better UI Wireframes](#)
5. [Wireframing for Beginners](#)



Thank you