

PROMPTS

PROmoting Mothers in Pregnancy and Postpartum Through SMS

> Hi Mum, Watch for danger signs during pregnancy. Are you experiencing vaginal bleeding, sickness, fever, or abdominal pain? If so, respond with an explanation of what you feel and a trained nurse will call you.

6 M-2 0 14 # 0

A digital health solution to address delays in care seeking.

A key driver of maternal deaths is that mothers are not empowered or informed to seek care at the appropriate time. In Kenya, a recent government study identified that delays in care seeking contribute to a third of all maternal deaths in the country. Empowering women with knowledge is critical; 91% of women would seek care if they knew and recognized pregnancy and postpartum danger signs.

PROMPTS is Jacaranda Health's AI-enabled digital health service that, through twoway SMS exchange, empowers women to seek care at the right time and place, and gives them greater agency in the health system.

The platform improves care-seeking behavior by sending mothers rigorouslytested SMS messages tracked to their stage of pregnancy, alongside an AI-enabled helpdesk service that triages and responds to mothers' questions, and sparks a rapid referral chain if a risk is identified.

FM

20%

increase in mothers attending 4+ prenatal care visits



$2\mathbf{X}$

increase in uptake of postpartum family planning services

90%

of high-risk mothers flagged by PROMPTS get care at the hospital

89%

of PROMPTS mothers exclusively breastfeed for the first six months after delivery

2+ million

mothers receiving lifesaving information through PROMPTS

1,200+

public health facilities across Kenya actively enrolling mothers to PROMPTS





throughout pregnancy and postpartum.

Mothers sign-up to PROMPTS for free in public health facilities, where 85% of underserved women receive care. They begin receiving pregnancy-related information, reminders, and advice, and can ask questions at any time - in English or Swahili - and receive a targeted response or referral in urgent cases.



A sequence of messages

tracked to a mother's stage of pregnancy influencing key behaviors linked with better outcomes, like pre and postnatal care attendance, and uptake of postpartum family planning services.

An AI-enabled clinical

help desk that reads, triages, and responds to mothers' questions, and sparks a rapid referral chain if a risk is identified.

A comprehensive data infrastructure that collects

and aggregates data from mothers to inform quality of care in government health systems.

\$0.74

running cost per mother for the lifetime she is on the platform (always free for moms).

Inclusive Design to Reach all

Mothers. We know that socio-economic and geographic barriers prevent many women from accessing digital health tools. PROMPTS is deliberately designed and iterated on to ensure the broadest possible inclusivity for women.

- Free for Mothers: Mothers enroll and receive messages for free for the entire time they are on the platform.
- Inclusive Technology: PROMPTS runs on SMS to ensure its inclusivity to both basic and smartphone users, without costly data implications.
- Human-centered Message Testing: SMS content is rigorously tested with mothers and adapted to ensure its broad accessibility and relevance.
- Equitable Enrollment: Women enroll in public facilities, where most underserved women receive care. Those without a phone are encouraged to enroll through a partner or neighbor's phone, and Community Health Workers offer an alternative enrollment option.



An Al-driven approach to CONNECTING **MOTHERS TO** INFORMATION AND REFERRAL

PROMPTS is powered by an AI-enabled two-way helpdesk service that responds to thousands of messages from mothers daily in English or Swahili. **The platform** uses Natural Language Processing (NLP), a machine learning approach, to read, categorize, and prioritize messages according to clinical urgency, ensuring high priority cases receive support first. Urgent cases are flagged to a trained clinical helpdesk agent, ensuring mums in need are connected to the right care in minutes.

How does it work?

PROMPTS uses NLP to find the 'red flags' in a haystack of questions - at scale. Incoming messages are labeled according to 'intent', or category, helping offer nuanced responses to questions and connecting mothers to the appropriate level of care - especially during emergencies.

PROMPTS currently detects 100+ different message 'intents'. This means it understands the difference between, say, a message about eggs or avocados, or a mild versus a severe headache. Low priority questions (eg. 'Can I eat avocados during pregnancy') receive a personalized instant response in a few hours. High priority questions (eg. 'My headache is very bad, what do I do?') are rapidly flagged to the clinical helpdesk.







5.000 questions from mothers answered by the helpdesk daily



of questions are accurately detected and responded to by AI







1 minute

response time for high-risk cases

90%

86%

of high-risk mothers now report receipt of care in a referral facility





Nine weeks into pregnancy, Faith noticed dark red spots of blood. Her husband sent a message to PROMPTS; 'There's a lot of blood. What do we do?'. Bleeding is one of many 'intents', or message categories, that PROMPTS' AI system is trained to detect and flag as urgent. In the first trimester, bleeding can signal miscarriage and early clinical intervention is critical. Minutes later, Faith's husband was connected to a clinical helpdesk agent, who advised rapid referral to hospital.

Faith's miscarriage was far from the outcome that she'd hoped for but, critically, it took place within a safe, clean, and dignified environment with skilled nurses on hand. 'If it wasn't for **PROMPTS**, we might have waited to see the situation.' says Faith. 'It was a lifeline. We'll continue using it as we try for another baby.'

AMPLIFYING **MOTHERS' VOICES** to improve quality of care

450k have shared their experinces of care

FROM PROMPTS Hi Mum. Your feedback helps us help you get the best care. On your last check-up, were you treated with respect? This means; no physical abuse, treated with dignity, addressed directly, consenting to procedures and privacy.

୩-ଗୁ DEF W-2 MNO 0 :-



and access to care.

RESPECTFUL CARE: Mothers

Client experience of care is a vital, yet

under-utilized benchmark for quality

in health systems. Yet, in Kenya, few

formal channels exist for mothers to

client experiences. PROMPTS offers a

are routinely prompted to share feedback on their experiences of care in facilities, including disrespectful care, lack of privacy, refusal of services, or discrimination.

UPTAKE OF KEY SERVICES:

Mothers are asked if they attended their last antenatal or postnatal care check-up, received infant vaccines by schedule, or took up a method of family planning.

CLINICAL QUALITY: Mothers are prompted to share which clinical steps (eg. taking blood pressure) or information (eg. discussing a birth plan) were missed at their last prenatal care check-up.

share feedback on quality of care and our county partners are continuously wanting to quantify data from facilities with direct

unique window into client experiences of

Data from PROMPTS helps draw a dotted line between mother and those making the decisions about her care.

Data from mothers is combined into realtime, co-designed dashboards and shared with facilities and health system managers, building accountability towards targeted improvements and ensuring limited resources are allocated to where they are most needed.

Data in Action

- Long-standing cases of reported abuse in a Nakuru facility were resolved in a month due to targeted patient feedback shared with the facility in-charge.
- Long-standing cases of reported abuse in a Nakuru facility were resolved in a month due to targeted patient feedback shared with the facility in-charge.

One our challenges as nurses is that we don't have a broader view of how our clients experience care, beyond what they tell us in person. Direct client feed back is realy helping us improve.

> - Christine, Head Nurse, Lanet Health Center, Nakuru County















Growing our GLOBAL PARTNERSHIPS to reach more mothers through **PROMPTS**



In Ghana, we are working with the Ghana Health Service (GHS) to test the feasibility, acceptability, and

In Eswatini, we are

partnering with Eswatini's Ministry of Health and the Clinton Health Access Initiative to leverage PROMPTS for infant immunization tracking. The combination of mHealth and sourcing information directly from mothers offers a unique approach to identifying underimmunized children in high coverage areas.

effectiveness of PROMPTS to support government MNH strategic priorities, including the use of digital health platforms to enhance access to and

Jacaranda Health is a non-profit whose mission for the last 12 years has been to improve health outcomes for mothers and their babies across Africa. Jacaranda partners with governments to deploy a package of proven, affordable and scalable solutions within the public health system, where the majority of underserved mothers and babies receive care.

Read our 2025 Strategy

- www.jacarandahealth.org
- ≥ hello@jacarandahealth.org
- 🍯 @jacarandakenya
- f @jacarandahealth
- in @Jacaranda Health
- **Subscribe to our Newsletter**

Disclaimer: This report discusses pregnancy and motherhood. While we use the term "mother" throughout the piece to mirror the language of the community we are collaborating with; we also acknowledge that not all pregnant people identify as "mothers." We would like to recognize that pregnancy and motherhood can be experienced by people of all genders.