JACARANDA HEALTH

Q3 IMPACT REPORT

Jacaranda Health July - September 2024



First time mother Judy Thomas cradles her week old baby at her home in Machakos County, Kenya. *Photo by Allan Gichigi*.

Snapshot of Scale and Impact

Q3 was a catalytic quarter in terms of reach and impact. In Kenya, we reached 2.7m mothers on PROMPTS, and saw engagement soar (in August alone, we received 324,500+ questions from mothers). We continue to train an expanding network of frontline nurse champions to deliver quality services, while empowering their county managers with the data tools (p4) and financing mechanisms (p2) to sustainably finance them at scale.

Outside Kenya, we announced new partnerships in Nigeria and Nepal (p3,5) to test and scale PROMPTS, while expanding our AI on the back-end to cater for new languages and contexts (p7). We hope you enjoy reading.

> Nurse Angeline Munya debriefs with her colleagues an interactive drill, conducted as part of Jacaranda's MENTORS program. Photo by Allan Gichigi.



2,743,691 reached

2,868 frontline health care providers trained

23 Kenyan partner counties

3 countries of current operation

59% government cost share for MENTORS

Jacaranda Health **Q3 Impact Report 2024**

new and expecting mothers

Kenya: Innovations in the field

As Jacaranda co-deploys its core programs with 23 Kenyan county governments, we are also helping them address some adjacent gaps that limit timely, high quality care for mothers and babies.

In August, we began a new initiative with Kakamega County to introduce rapid diagnostic test kits in 21 under-capacitated facilities, with the aim of improving detection of pregnancy-related complications like anemia, malaria, syphilis, HepB and HIV.

In September, Jacaranda trained 20 emergency medics in Kisii County under its MENTORS program as part of wider efforts to streamline service provision across cadres and improve referral rates in the county.

In August, Jacaranda and Thinkwell introduced a Results Based Financing mechanism within Makueni to incentivize improved maternal health services and health system performance.

2.74m+ million mothers reached in Kenya

> In July, we received endorsement from Nairobi County to expand PROMPTS beyond public hospitals to all private and faith-based facilities, helping us reach thousands of new mothers in the capital each month.

> In Q3, we launched a new data-driven **assessment** to help Mombasa County identify systematic gaps that limit the quality of facility-based care - like staffing, commodities, infrastructure and equipment.

Current counties of operation

Country Expansion: Q3 Highlights

Ghana:

In September, we completed our two-year operational study with the Dodowa Health Research Center to assess the feasibility and acceptability of PROMPTS for Ghanaian mothers and frontline providers. We are currently compiling the results, as the springboard to ready PROMPTS for broader scale in the coming year.

Eswatini:

In Q2, we continued to work with national government and the <u>Clinton</u> Health Access Initiative (CHAI) to enroll mothers to PROMPTS in Eswatini. As of June, over 3,000 mothers are receiving personalized immunization information through the platform.

Nepal:

In September, we secured a partnership with One Heart Worldwide (OHW) to pilot PROMPTS. In 2025, our ambition will be to test and adapt PROMPTS with 2025 Nepalese mothers, ensuring we're set up for future scale in the health system.

Nigeria:

In Q3, we kicked off our partnership with eHealth Africa to test and scale PROMPTS in Kano State. Our teams are busy adapting messaging and setting up the platform as we prepare to enroll 25,000 mothers in the coming year (p5).

PULSE: Real-time, granular dashboards for data-driven decision-making in maternal health systems

Jacaranda has been sharing data with its government partners for years. But this quarter we rolled out our most sophisticated dashboards to-date - PULSE.

PULSE is the product of an intensive six month <u>co-design process</u> with governments and facilities. It triangulates real-time, granular data from mothers, providers, and facilities in simple formats (eg. traffic light coding), allowing rapid identification of the 'red flags' hindering timely, quality care for mothers and babies.

PULSE has already been rolled out within seven Kenyan counties. We have anecdotal evidence that they are being used in decision-making, but will be closely tracking utilization over the coming months - both quantitatively (eg. open rates) and qualitatively to understand how data use translates to resource allocation.

"We're excited about these dashboards after all, we helped design them. Our teams are already using them weekly, and their potential is huge. We believe they will help us better pinpoint where the sometimes-invisible gaps are - like patient experience - and understand what kind of intervention we need to make." Dr. Makena, Director Curative and Rehabilitative Services, Makueni County.



Anonymized PULSE data showing 'red flags', or gaps, in essential steps performed during prenatal care check-ups, as reported by PROMPTS mothers. Stakeholders can track across multiple other tabs to identify the drivers of poor outcomes - from respectful maternity care, to infant immunization uptake.

Jacaranda Health Q3 Impact Report 2024 4

Jacaranda partners with eHealth Africa to expand lifesaving PROMPTS support for Nigerian mothers

In June, we secured a partnership with <u>eHealth Africa</u> to test and scale PROMPTS with 25,000 mothers in Kano State.

Over the last few months, our team has been working to prime PROMPTS for the Nigerian context, including <u>finetuning</u> <u>our GenAI models to converse in Hausa</u> <u>and Yoruba</u>, and introducing new content to address common pregnancy misconceptions and other government-identified priority areas such as malaria prevention, given the disease's high prevalence (32.4%) in Kano State.

 \rightarrow Read more about the partnership

Photo credit: Maternal and Child Survival Program.



Jacaranda Health Q3 Impact Report 2024 5

Our strength lies in leveraging this kind of mobile technology to tackle maternal health issues, and I fully support the adoption of AI to help us advance our healthcare support." H.E. Mutula Kilonzo Junior, Governor, Makueni County



Jacaranda and **Google.org double down** on personalized AI for **Kenyan mothers**

Last month, we culminated <u>a six</u> month Google.org Fellowship program aimed at improving both the scale and personalization of how PROMPTS supports mums.

Between April and September, seven Google.org technical experts joined our Nairobi-based team to collaboratively tackle some big strategic questions: How do we personalize messages based on a mother's question and unique profile? How can predictive analytics help identify linked risk factors (like a series of headaches) in her conversational history? And—most importantly—how do we do this safely at scale?

 \rightarrow Read more about the Fellowship

Teams from Jacaranda and Google.org met with the Makueni County Governor this September to discuss the potential of AI-powered platforms like PROMPTS to improve patient knowledge, uptake of essential services, and quality of service provision. Photo by Allan Gichigi.

Launching an open source Large Language Model in five African languages

In August, we announced the expansion of our customized open-source Large Language Model, UlizaLlama (AskLlama), to offer AI-driven support in multiple African languages, including Swahili, Hausa, Yoruba, Xhosa, and Zulu. The new multi-lingual model will help deepen how we support new and expectant mothers at scale, while carving new inroads for AI-driven services across Africa in other sectors. \rightarrow Read more

→ Download the model cards

- <u>Swahili / English Llama3 Model</u>
- Hausa / English Llama3 Model
- <u>Yoruba / English Llama3 Model</u>
- <u>Xhosa / Zulu / English Llama3 Model</u>
- Multilingual Model



P

TO: PROMPTS

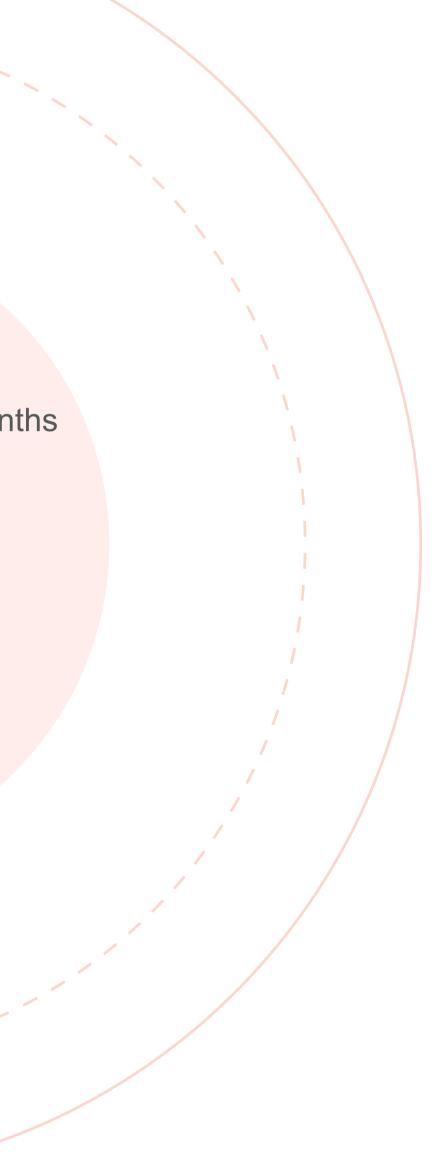
Bawo, Mo wa ni oşu meta męta mi ati pe Mo n ję ęję pupọ. O ti tęsiwaju fun opolopo awon ojo ni bayi... Kini o ye ki şe?

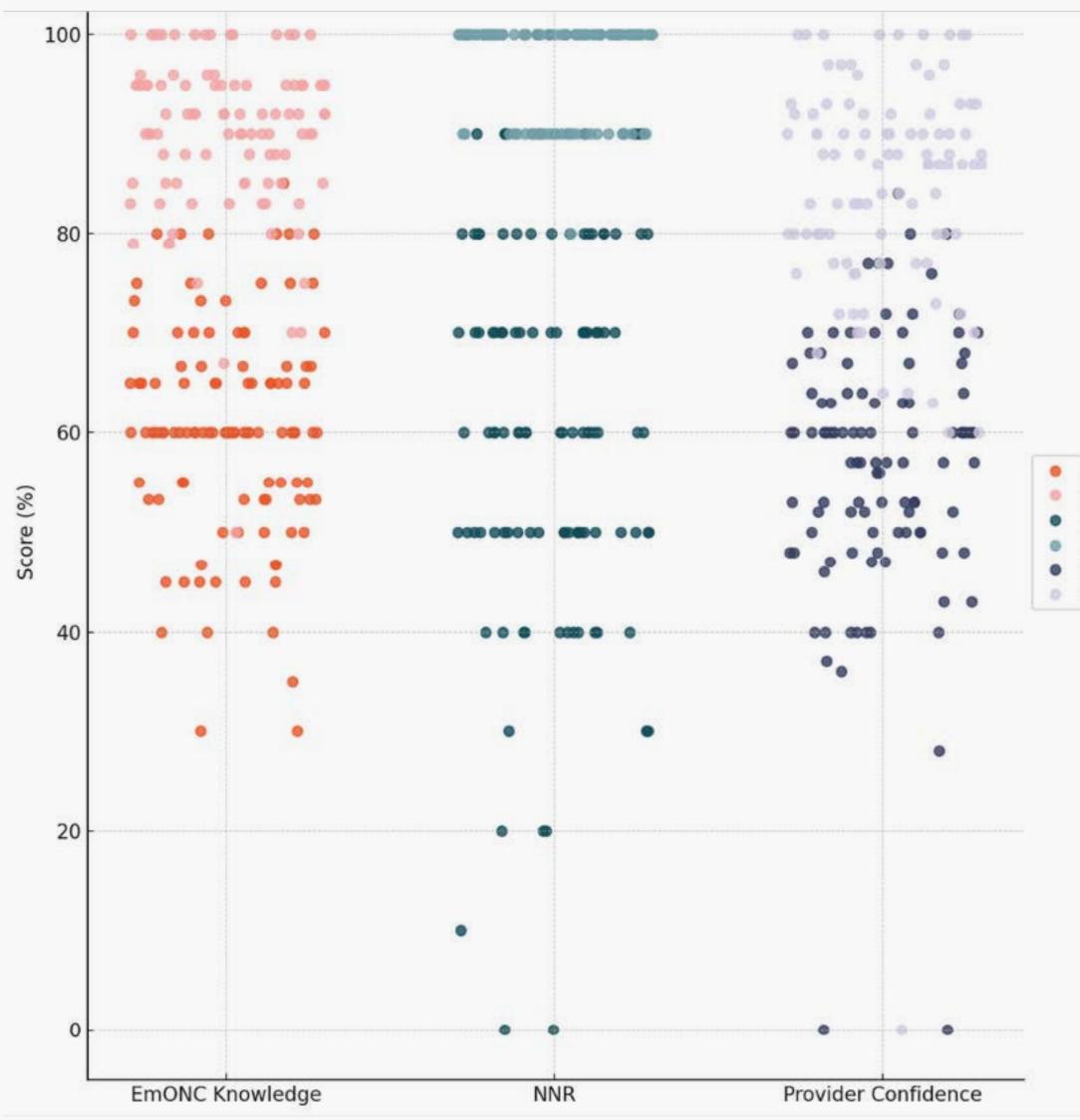
OPTIONS SEND CLEAR

9 wxyz

a/A ⇒

ANC/PNC: Pregnant 7 months Geography: Kano State Language: Yoruba **Intent:** Heavy bleeding **Urgency:** High **Intent Score:** 0.99416 Category Score: 1





EmONC Knowledge Scores (Baseline) EmONC Knowledge Scores (Endline) NNR Scores (Baseline) NNR Scores (Endline) Provider Confidence Scores (Baseline) Provider Confidence Scores (Endline)

> Scatter graph showing the distribution of pre and post test scores across three essential EmONC learning 'verticals' - provider knowledge, neonatal resuscitation (NNR) and provider confidence. Each dot represents the score of an individual health provider.

Data snapshot: What we are learning about the individual learning journeys of frontline nurses

When a woman seeks care, she needs to connect with a health provider who can competently manage her case first time especially during an emergency. But with thousands of nurses out there, how can we track who has been trained on what - and how recently?

Our digital learning assistant, DELTA, offers a solution. Run through WhatsApp, nurses progress through a series of self-paced, scenario-based modules, generating instant, individualized data on a nurse's unique skillset. The data offers huge potential to detect individual level changes in performance, bridge 'blind spots' amidst staff rotations, and plug gaps in national data systems (which track performance and quality at the facility level).

Impaci

digital development summit

Jacaranda's Director of Technology, Jay Patel, speaks to the need for person-centered AI that augments, not replaces, human capacity at scale at this year's Impact First Summit in Lisbon.

WATCH NOW



Seen and heard at...

Impact First Summit: 'Cloud Technology and Social Responsibility: An Accelerant for Humanity' <u>> Watch</u>

ALLIN: 'Inspiring the Canadian Ecosystem: What to Learn from Al Initiatives in Africa'

UNGA79: 'AI Solutions: Transforming Healthcare in the Global South'

Deep Learning Indaba 2024: 'Voices of Africa: Building the Infrastructure for African NLP'

Tech Trends Kenya: 'Google supports Jacaranda Health's use of GenAI for mothers and babies' -> Read

Caribou Digital: 'Case Studies in the Practice of Responsible AI for Development' <u>
→ Read</u>

Meta: 'Announcing the inaugural Llama Impact Grant and Llama Impact Innovation Award recipients' -> Read



Jacaranda Health Q3 Impact Report 2024 9

Join Us

Jacaranda is seeking passionate, driven teammates who care about supporting new and expecting mothers seek and access the best quality care. Check out our open roles.

Head Of Data & Analytics

Senior Product Coordinator

Program Officer

→ Open roles

Jacaranda team members gathered in Naivasha, Kenya for a team building.



JACARANDA HEALTH

Improving quality of care and outcomes for every mother and every newborn

jacarandahealth.org

in 🗶 f

Lucy Ruguru, simulates a postpartum hemorrhage drill in Thika Level 5 Hospital, Kiambu County. *Photo by Dodowa Health Research Center.*

