Jacaranda Health: Highlights and Milestones from 2024



In 2024, we made some exciting shifts in the scale and impact of our programs to support mothers and babies, and invested in both our team and technology to sustainably continue this ambitious trajectory - both in Kenya, and across Sub Saharan Africa - over the coming months and years. Some of our major updates over the last year are included below.

I. Continuing a steep reach trajectory in Kenya:

- Reaching 3m+ mothers: We shared the challenges that new government privacy regulations created for PROMPTS in 2023, which resulted in a temporary drop in enrollment rates and monthly reach. Since then, we've turned this around, including introducing a digitized health care worker-led enrollment strategy and intensive product testing of the SMS opt-in messages to increase engagement. The results are exciting. By the year's end, we had reached our 3 millionth mother, and increased our annual reach to nearly 600k mothers. Besides reaching more women, the product testing process also resulted in higher rates of engagement: in the last year we've seen the volume of incoming questions from mothers quadruple to 12K questions daily.
- Expanding a training community of practice for frontline nurses. In 2024, we accelerated, while making some key strategic shifts (*see III*) to deepen our impact on the uptake and retention of core skills amongst frontline nurses.

II. Growing a global footprint: Ghana, Nigeria, Eswatini. Beyond Kenya, we've made solid progress in terms of implementation and government buy-in - both in our existing expansion countries, Ghana and Eswatini, and beyond. Our priority in these new countries, and geographies beyond this, is to prove the efficacy and demand for programs in new contexts, while testing different partnership modalities for deployment.



Greater Accra's Regional Public Health Nurse calls on her colleagues to fully embrace PROMPTS as a rapid, reliable and scalable means to distribute vital information to women in their district, and for their cooperation in helping the platform become a national digital health platform for Ghanaian mothers.

In 2024 :

- The Ghana Health Service approved us to scale regionally in Ghana's Greater Accra region, based on the strength of our pilot results, and we began to see early traction in terms of government cost share for PROMPTS. More on our latest Ghana work in <u>Future of Good</u>. Our team is planning to reach 100k mothers in 2025.
- We kick-started government-partnered pilots for PROMPTS in <u>Nigeria</u> (with eHealth Africa), which offering massive potential for future scale: Nigeria has ~10M births per year, 7x the size of Kenya.
- We laid foundations to expand into new contexts via implementing partnerships, most significantly our early, yet promising conversations with partners in Tanzania (exploring how PROMPTS could support Touch Foundation's watotoCare program focused on infants), as well as Uganda, Zambia, and Nepal.

III. Growing our programmatic potential to support moms and babies: In 2024, we continued to iterate on programs to deepen our potential for impact And thon mothers and nurses, and extend our reach to more vulnerable populations. Some programmatic highlights from last year include:



Caroline Okudo, has used PROMPTS as a companion since the start of her pregnancy through to the arrival of her baby girl. Since the introduction of Jacaranda's customized Large Language Model to PROMPTS, mothers like Caroline have received faster, more personalized responses to their questions.

- **Deepening the personalization of PROMPTS** as a pathway to better outcomes and impact for more vulnerable moms, including:
 - Capturing user-reported data (including <u>clinical history</u>, <u>socioeconomic status</u>, <u>climate</u>, and <u>conversational history</u>) to identify and proactively support higher risk PROMPTS mothers through personalized messaging support and tailored pathways of care.
 - Expanding the scale, accuracy and personalization of AI-driven interactions with mothers by improving <u>our LLM</u>, and <u>expanding its scope to new African languages</u>.
 - Testing new channels like Whatsapp and voice (as a mechanism to reach low-literacy / sight-impaired mothers) to offer users an alternative to SMS, with promising results.
- Expanding and refining our MENTORS program content.
 - We were tapped as a principal implementer of the Ministry of Health's national EmONC mentorship package in Kenya (which was largely influenced by our MENTORS program)
 - Launching <u>a newborn mentorship training package</u> to provide simulations/drills for a range of topics from newborn emergency care to stabilizing sick newborns for referral, and began building a cohort of newborn mentors in facilities.

- Shifting to <u>a 'cohort' training approach</u>, where government nurses train groups of mentees, who in turn report granular data on their individual progress, allowing for more targeted identification of skills and knowledge gaps.
- Rolling out a new co-designed set of data tools (PULSE) to our government partners:
 - Underwent a <u>co-design process</u> with gov't stakeholders to inform design.
 - Rolled out new PULSE dashboards to 23 counties and facilities in their constituencies.
 - Tracking quantitative metrics for utilization (eg. dwell time, open rate) with promising results, as well as new processes to capture qualitative data (ie. linking dashboard use with resource allocation). We can see, for example that over 1,700 users have engaged with the dashboards.
 - Beginning to track data utilization how do counties use data to improve quality and allocate resources more equitably. Some early anecdotes: based on quality gaps identified by the dashboards, 4 health centers procured clinical and lab equipment, and 3 referral hospitals received a county commitment to strengthen their NBU.



Bondo Sub County's Reproductive Health Coordinator, Dominic Omollo, discusses data points from Jacaranda's PULSE dashboard with his colleagues Dr. Felix Tindi, Medical Officer at Bondo Sub-County Hospital, and Caroline Owuor, Sub-County Health Records Officer.

IV. Building towards long-term sustainability: Last year, we made strides to grow the share of programs' cost share (ie. government contributions to running costs) in our operating countries, while investing in national advocacy tactics to position them as national resources in Kenya. In 2024, we:

- Grew our Kenyan county government partnerships to 23 counties.
- Maintained 60% county cost share for MENTORS.

- Increased cost share for PROMPTS to 19%, despite digital health budgeting still being relatively
 new for Kenyan counties. Outside Kenya, we've baked explicit cost share expectations into new
 agreements with partners, and so expect to see a higher level of program costs taken up at an
 earlier point in implementation. The Ghana Health Service has agreed to help cover SMS costs
 and staff the helpdesk with their midwives and negotiate with local telecoms for zero-rating.
 And in Nigeria, our partners will cover all costs related to SMS, enrollment of mothers, and staffing
 the helpdesk locally.
- Received endorsement from Kenya's MoH to embed PROMPTS within the national public health promotion services in 2025.

V. Growing a team and global presence in and beyond Kenya.

• Investing in talent: In 2024, we made a few exciting hires to strengthen our capacity to extend our reach to new countries through partnerships, as well as investing in the development of several key staff to drive our national scale ambitions in Kenya. These include a new Head of Global Business Development & Partnerships (Amelia Peterson in Zimbabwe), Head of Product (Kayla Huemer in Kenya), and several new Ghanaian staff to support PROMPTS implementation in Ghana. Last year also saw Cynthia Kahumbura step into a global role as Co-Executive Director, and Dr. Job Makoyo promoted to Country Director.



Cynthia Kahumbura Co-Executive Director



Emmanuel Olang, Senior Machine Learning Engineer



Job Makoyo Country Director



John Hammond Ghana Program Manager



Claude Diwouta Human Resources Consultant



Kayla Huemer, Head of Product



Amelia Peterson, Head of Global Business Development



Mesaye Bersoma Senior US Finance Officer



Jacaranda's growing team of 110+ gathered in Naivasha, Kenya, in June 2024 for a day of team building and dancing.

• **Growing our name on the global stage.** Last year, we shared insights and learnings from our work in conferences and summits across 13 countries, from Nagasaki, Japan to Lake Como in Italy.



'AI has the power to leapfrog outdated, resource-intensive systems and deliver personalized, life-saving care to everyone—regardless of their location, language, or technological access.' Jacaranda's Jay Patel speaking to a packed plenary room at this year's GDHF.

Finally, we share some some exposure and articles from recent months:

- The Ghanaian Times: 'GHS, Jacaranda Health set to launch PROMPTS next year' Read
- Nation: 'The power of text messages in saving mothers and babies' lives' $\rightarrow \underline{Read}$
- The Star, Kenya: Makueni County leverages AI to Boost Access to Healthcare. <u>Read</u>.
- Stanford Social Innovation Review: These AI-Powered Nonprofits Are Making Health Care More Equitable and Effective. <u>Read</u>
- Reuters: 'From Swahili to Zulu, African techies develop AI language tools'. Read
- Standard, Kenya: How free SMS alerts have reduced maternal, neonatal deaths. <u>Read</u>.
- BBC Podcast: Click Kenya Calling. Listen.
- McKinsey: AI for social good: Improving lives and protecting the planet (p9). <u>Read</u>.
- *CIO Africa*: Former UK Deputy Prime Minister Nick Clegg <u>spotlighted</u> Jacaranda's journey with AI, and its potential for transformative impact in low-resourced settings.
- AI4PEP-Africa: Digital health innovation to drive better care for mothers. Watch
- Lanfrica Talks: UlizaLlama: Swahili's Leap into LLMs by Jacaranda Health. Watch
- Google I/O: 'AI-Powered Maternal Health: Breaking Barriers in SSA'. <u>Read</u>