# Enterprise for Development Proposal: Jacaranda Health

## Background and Summary

Jacaranda Health and Enterprise for Development have had a two-year partnership to design better tools and business models to improve maternal health in East Africa. EfD played a critical role in helping Jacaranda refine its nonprofit business and revenue model: this support helped us codify a set of innovations - scalable tools and approaches developed at our proprietary hospital - which have since been adapted into 'products' that can scale improvements in maternal health through partnerships, licensing, and public-sector advisory services.

In 2018, we propose another partnership that will pressure-test these innovations prior to their introduction on the national or global stage. With support from several other funders, we are embarking on an ambitious "Kenya County Expansion Initiative". This expansion will increase our partnerships with the public health sector to two additional strategic counties in Kenya, and will ultimately enables us to reach a larger number of facilities and mothers. **By the end of 2019, we aim to be in 3 counties delivering improved services to ~130,000 mothers and babies. By the end of 2020, we want to reach 240,000 mothers and babies in 5 counties that account for ~40% of maternal and neonatal deaths.**

The expansion initiative gives us an opportunity to validate and refine our model at scale, and provides a platform to test public-private partnerships at a national level. There are two critical questions around sustainability that we will need to answer during this expansion, both of which are well aligned with EfD's expertise and mission, and form the basis of this proposal:

1. **Are our innovations "cost-effective"?** Donors and governments are increasingly focused on scaling the low-cost, high-impact tools and approaches that result in dramatically improved health outcomes. We have demonstrated that our innovations are effective in public facilities, and we have some basic cost data, but we need to make a stronger economic case for scaling these tools.
2. **How do we make our innovations sustainable?** For true sustainability and scale, our innovations must have a 'business model' to succeed: how do we leverage government contracting and/or third-party financing to make sure these partnerships can be scaled and sustained beyond traditional philanthropic funding.

Our proposal is for EFD to provide $85,000 of the $504,000 USD first phase of our County Expansion initiative, which will run between May 2018 and June 2019. EfD funds would support Jacaranda resources (principally core staff, consultants, and some of the key county engagement costs), to answer these strategic questions in the context of our County Expansion Initiative. In the EOI below, we outline our approach to County Expansion and the specific pieces we would like EfD to support.

## Jacaranda's County Expansion Initiative

County governments run all of Kenya's public health facilities and health services. Some are managing care for several hundred thousand mothers and babies, with limited resources and support. County executives are keen to find solutions and partnerships that improve quality of care at low costs. By working closely with county leadership and health systems, Jacaranda will reach more women at scale. We have successfully partnered with the Kiambu County government and have interest from two other counties to expand our efforts.

Jacaranda's county expansion has two objectives:

- **Reach more women at scale.** With a focused effort over the next 3 years that targets 5 key counties, we can address a catchment area of ~40% of maternal and neonatal deaths in Kenya. The first phase of this expansion will reach **500+ healthcare workers and ~130,000 mothers and babies by end 2019.**
- **Multiply impact through policy change and strategic partnerships**. Once we achieve critical mass and count several key county governors among our champions, we have the opportunity influence policy and practice at the national level. To do this we would leverage our existing participation on government task forces on maternal and child health. By working in partnership with larger, strategic implementers, Jacaranda would also have the ability to influence delivery of services on the ground.

**Approach, 2018-2020:** Jacaranda has demonstrated proof-of-concept that its tools can be adapted for success in public hospitals. We are now ready to expand the facility-level engagements to county-level engagement, which will unlock access to government health services that service to a much broader catchment population. We have targeted five counties for expansion over the next 3 years: Kiambu, Nairobi, Bungoma, Nairobi, Nakuru and Kakamega. Collectively these counties represent 40% of the neonatal deaths in Kenya and are priority counties for development partners and funders (World Bank, USAID, DfiD). Given Jacaranda's demonstrated success, Kiambu, Nairobi and Bungoma Counties have already requested help rolling out Jacaranda's interventions across their respective counties, and will be the focal counties for our first phase of expansion (2018-2019).

In these partner counties and facilities, we will focus on two of Jacaranda's successful innovations:

**Client-focused, lightweight mobile phone tools that encourage pregnant women and new mothers to seek care at facilities:** More than half of Kenyan women do not receive a postnatal check-up after delivery, and 53% of women have an unmet need for family planning in the first two years after delivery[1]. We have tested delivering our mHealth services to 5500+ women across Jacaranda and four public facilities. Our antenatal support groups through popular mobile chat apps have resulted in a 30% increase in antenatal care visits, while our low-cost SMS-based 'checklists' influence post-partum care seeking. These are a sequence of 19 simple messages sent to women during the first 72 hours post-discharge from a public hospital. By Q2 2018, we will complete two randomized control trials that are testing these innovations with ~1000 women. Preliminary results are significant and high impact (see Figure 1).

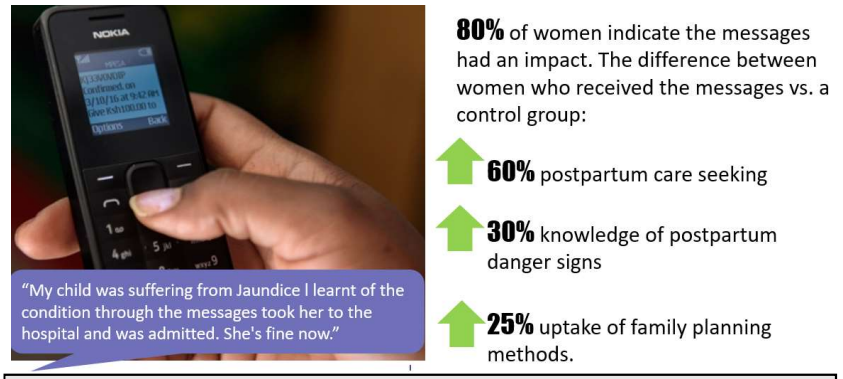


Figure 1. Preliminary results from a randomized control trial our SMS postpartum checklists

**A Midwife Mentorship Program that sustains provider capacity to handle basic and emergency obstetric care:** Maternal health nurses in Kenya score below 50% on skills related to emergency obstetric care and newborn care[2]. We developed a mentorship model supported by a low-cost EmONC training module, resulting in significant improvements in knowledge gaps - scores for life-saving skills amongst 96 public hospital nurses increased from 29% to To sustain these gains, we designed a clinical mentorship model and deployed nurse mentors with a 'mentorship toolkit' across 9 public facilities. In 9 months, the nurse mentors trained over 200 nurses. Performance on basic obstetric skills improved from a baseline of ~65% to a median 88%, while teamwork and communication scores improved by 54%, with all scores sustained at ~90% levels for 6+ months (Figure 2).

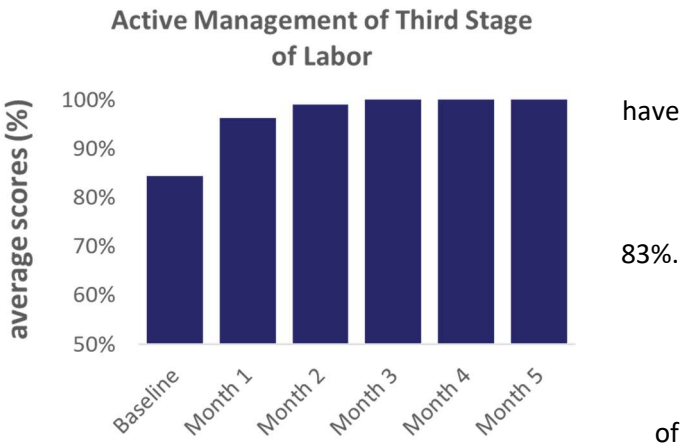


Figure 2. Mentors reviewed ~150 deliveries across 6 hospitals and noted a sustained increase in scores, based on correct performance of critical steps in managing deliveries.

[1] Kenya Demographic Health Survey (2014)

[2] Kagema F, et al. USAID, Maternal and Child Health Integrated Program (MCHIP). 2010.

## Key Objectives & Activities

**I. Establish strategic partnerships to support Jacaranda's expansion into priority counties.** This will include the formal MOUs with county governments and partners NGOs for project implementation, establishment of Jacaranda operations in Western Kenya to ensure a constant presence in that region. This will involve hiring a Western County Coordinator, who will build strong relationships with clinical and administrative stakeholders.

**II. Deploy Jacaranda's innovations in public facilities in Bungoma and Nairobi counties.** We will deliver our postpartum mobile behavior change package through facilities to women across Kiambu, Nairobi and Bungoma counties. We will also expand the Midwife Mentorship Program to Nairobi and Bungoma County.

**III. Demonstrate that these innovations improve maternal and newborn care for providers and patients, and can be *cost effective and sustainable* across counties:** EfD's support will play a key role in helping Jacaranda to achieve this critical final objective.

- **A. Demonstrate that our innovations are 'cost-effective':** In collaboration with our county stakeholders, we will define key health performance indicators (e.g. reduction in newborn sepsis, reduction in postpartum hemorrhage), and conduct cost-benefit or cost-consequence analyses. Costs will be determined by the investments Jacaranda and the counties make in delivering interventions, but will inform the delivery of these services at scale. Importantly, Jacaranda will focus on conducting the 'leanest', most appropriate analyses that will enable donors and policymakers to make decisions.
- **B. Establish proof-of-concept for models of sustainability:** We will explore two options for scaling innovations
  Integration into the national and local county health systems and government finance: For our SMS tools, we will explore the appetite and mechanisms for an approach where counties pay for the direct cost of service delivery (<$0.50 per mother) and central costs are managed by the National Ministry of Health (a precedent is the M4RH program in Tanzania). For our mentorship and training programs, we would look to incorporation of the mentorship programs within existing supportive supervision structures. Counties also have access to development financing (e.g. World Bank's facility for maternal health) that provides results based financing for achieving maternal health targets.
  Private sector partnerships: Although the likeliest path to sustainability is public-private partnerships above, we will also explore private sector cross-subsidization models that provide a revenue source to maintain innovations at scale. For our SMS tools, for example, we will explore minor fees and premium paid services (e.g. phone consultations) for private sector clients. For our training and mentorship programs, we can provide accredited fee-for-service training to private institutions.
  These activities would build on the initial support from EfD that helped us identify the various development pathways that are available for our tools & products.

## Expected Results

Our goal for our county expansion initiative in 2018 is as follows:

**directly serve ~60,000 mothers & babies per year, and support a catchment population of ~130,000.** We will reach 20,000 women directly with our postpartum package, resulting in ~10,000 more women returning to the facility for care, and ~5000 of women taking up postpartum family planning. Our mentorship program will serve 500+ healthcare workers across 20 facilities, serving as many as 100,000 women. These frontline providers >85% scores in key obstetric skills, sustained over a period of 6-12 months.

**Longer term goals**

By 2020, we aim to have a presence in 50-60 public facilities across 5 counties. **Target facilities directly serve 240,000 mothers & babies.**

By 2022, we aim to influence government and partners through policies and partnerships, to ensure that our innovations implemented across Kenya as part of national maternal and newborn healthcare package.