

Maternal Cash on Delivery Fieldwork:

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Laidlaw Scholars Programme

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August, 2026



GEORGETOWN UNIVERSITY
Center for Research & Fellowships

Overview:

In Bungoma, roughly one in five births occur outside a health facility at significant consequence to maternal and infant health outcomes. Antenatal (ANC) and postnatal care (PNC) are similarly underutilized. The Maternal Cash on Delivery (MCoD) project seeks to scale up proven conditional-cash-transfer (CCT) infrastructure contingent upon facility attendance to incentivize early ANC engagement, assisted deliveries, and infant immunizations.

Problem:

Underutilization of maternal and perinatal health services is a Kenyan public health priority. Nationally, Kenya's official 2022 baseline registers 355 maternal deaths per 100,000 live births and an infant mortality rate of 30 per 1,000 live births. ANC uptake remains a persistent gap: only 29% of women had their first ANC visit during the first trimester, two-thirds achieved at least four ANC visits, and just 4% reached the WHO-recommended eight.

Bungoma also has similar indicators: an earlier county-level assessment recorded a maternal mortality ratio of 488 deaths per 100,000 live births and an infant mortality rate of 39 deaths per 1,000 live births, with 13% of reported deliveries occurring outside of health facilities. Recently, county health officials have also flagged elevated teenage pregnancy and gender-based violence as persistent drivers of maternal and infant health risk.

In 2026, President William Ruto launched the Every Woman Every Newborn Everywhere (EWENE) Acceleration Plan 2026-2028, noting that Kenya loses 15 mothers and 92 newborns every day to preventable causes. To achieve the plan's targets of cutting maternal mortality from 355 to 140 per 100,000 and neonatal mortality from 21 to 12 per 1,000 by 2028, the government backed the initiative with ~\$7.5 billion KES in domestic funding.

Existing Evidence:

The foundation of the MCoD scale-up is evidence from Grepin, Habyarimana and Jack, 2019—an experimental study evaluating the effectiveness of a variety of different methods seeking to incentivize maternal health care utilization in nearby Vihiga County. The study found that women who received a conditional payment for their attendance were 30%, or 12 percentage points, more likely to deliver in a clinic when compared to a control group receiving no incentives (48% vs 36% respectively).

Since that study, county governments in Kakamega and Vihiga counties have implemented a cash transfer system conditioned on maternal-health-care use with support from UNICEF. In both cases, a series of payments is made to mothers for

attending ANC visits, delivering in a facility, and attending PNC visits. Both counties have seen drastic improvement in their relevant maternal health indicators since implementation; however, there still remains room to improve in the design of these systems, specifically in the areas of timeliness of payments and targeting/eligibility status of recipients. For this, the experiences of Vihiga and Kakamega County speak both to the potential impact of an evidence-informed scale-up of the CCT program and the potential for wider, generalizable adoption of this CCT infrastructure across other counties over time.

Other studies also provide evidence in favor of the potential impact of this scale-up. A randomized trial of a cash-transfer program in northern Nigeria found that conditional payments for vaccinations raised full childhood immunization by 27 percentage points when compared to a control group (IDInsight, 2020). GiveWell, an organization that vets global health charities specifically for cost-effectiveness, currently lists New Incentives, which delivers this CCT program, as one of their top four charities on the strength of this evidence, estimating the program averts a death for roughly \$1,500 to \$6,000. Zooming out, Fiszbein and Schady's 2009 World Bank synthesis of conditional cash transfer programs across many contexts also found positive effects of CCTs on health-seeking behaviors like vaccinations. Krishnamoorthy and Rehman's analysis of Indian national survey data with propensity score matching (2022) suggests that early antenatal care attendance itself has downstream benefits for a child's later immunization, which reinforces the logic that incentivizing mothers to get into the health system early is a worthwhile objective.

Intervention Description:

The MCoD project aims to rapidly deliver small cash incentives to pregnant women for their engagement with ANC, facility delivery, and PNC cost-efficiently at scale using digital infrastructure and innovations in targeting of recipients.

Task:

While in Kenya, I met with local county officials in Bungoma and Vihiga, interviewed local researchers working closely with health financial diaries, and visited Level 2 and 3 health facilities to investigate on-ground conditions that could be relevant to the execution of this project, particularly focusing on conditions that have developed or have been in flux since January, 2025.

Relevant Findings:

SHA Structure: The Social Health Authority (SHA) is the current Kenyan government's national public health insurance corporation, rolled out in October, 2024. Public health care coverage is effectively split into two funds: (1) the Primary Healthcare Fund (PHF) and (2) the Social Health Insurance Fund (SHIF). The PHF nominally covers basic

primary care, though unofficial fees come up often in the maternal healthcare journey. Access to this fund simply requires registering with SHA and no additional payment. Within the maternal healthcare journey, SHIF covers higher-cost procedures, complications, and Level 4+ referrals; however, SHIF coverage is only active if a woman pays a coverage fee. For the formally employed (a minority in Kenya), this fee is an automatic 2.75% payroll deduction. For informal-sector workers, the fee is based on a means test at registration that has a floor of ~300 KES/month, with a majority quoted at ~600 KES/month (a rate that is reported to be excessively burdensome for most). As a result, very few informal-sector members pay into SHIF, outside of cases of adverse selection, and thus lack coverage from the fund.

SHA Registration: Bungoma County has ~900,000 SHA registrations out of a population of ~2,100,000 (~43%), which is on the high end in a national context. Registration requires a woman to present an ID and phone number; ID access is cited as the largest practical barrier to registration, with phone numbers cited as a lower concern (~20 KES for a number). Women can register for SHA for free at health facilities, via Community Health Promoters (CHPs), through USSD (*147#), or online at Afyangu. Registration costs ~150-500 KES if done through a cyber café or 3rd party. Mass mistrust and misunderstanding of SHA is a dominant theme contributing to low rates of registration. Many of those unregistered believe having a SHA account will require them to make payments. There is also ongoing confusion over what is/isn't covered, compounded by the fact that coverage rules have genuinely been changing. SHA is also a politically charged entity, with many people's opinion of the program closely tied to their thoughts on the Ruto regime.

SHA Challenges: There has been a significant ANC attendance decline since SHA rolled out in Bungoma. Overall patient volume is down—in some clinics and dispensaries across the country by as much as 75%. The declines in ANC attendance are not thought to be entirely independent of larger patient volume trends. Some factors contributing to this decline in ANC utilization include as mentioned: the expectation of having to pay for SHA, especially among unregistered women; maternity care related costs, including unofficial/informal fees being charged at clinics; and misunderstanding and confusion around coverage. Some of these routine, informal fees include blood tests, HIV screening, etc. (~500 KES); iron supplements and ANC clinic booklets when supply is low; and supplies commonly required at delivery like cotton and gloves. Many women have reported that they maintain informal "emergency-fund" savings specifically for delivery costs, which suggests the free-delivery premise is not trusted or not holding in practice.

PHF, the unpaid level of SHA coverage, just covers routine ANC/PNC and basic emergency obstetric care while high-risk ANC/PNC care and comprehensive emergency

obstetric care (C-sections, ultrasounds, specialized consultation, etc.) require a woman's SHIF cover be paid for those services to be covered by the insurance. This dynamic creates harmful delays and complications in cases when vulnerable women, the vast majority of whom cannot afford to consistently pay their SHIF cover, need emergency care. These women often do not want to be referred to a Level 4+ facility, those facilities best suited to handle complications, out of fear of affordability. And Level 2 and 3 facilities are hesitant to serve these women because they either lack the capability or will not get reimbursed for the service. A patient may elect to pay their SHIF cover on the spot at the facility to activate the coverage if they require care that exceeds PHF coverage, and often they'll be required to pay 3+ months of SHIF payments if they find themselves paying on site in response to a medical episode rather than routinely. Overall, placing emergency obstetric care under SHIF has caused a decrease in at-risk mothers giving birth in level 4 facilities and higher—those fit to best handle complicated cases and emergencies—as the pay-up-front burden forces many women with complications to Level 2 and 3 facilities less fit to handle the complicated pregnancies safely.

Digitization Overview: Bungoma has made and is currently making significant strides in the rollout and uptake of robust digital healthcare infrastructure across all levels of operations. Facilities of all levels have been endowed with “whitelisted” tablets (data-bundle-exempt) through a partnership with Safaricom, so reporting nominally is not limited by internet access or personal data costs. All CHPs have been given whitelisted smart phones as well. These devices serve as the access point for a new digital health stack that is shifting all clinics to operate paperless. Compliance is mandatory and forced upon clinics as they are required to onboard these new workstreams to be eligible for SHA reimbursements. This digital infrastructure potentially opens the door for individual digital patient records to serve as an integrated, automated trigger for CCT payments. Yet questions of reliability and functionality (on-ground realities) provide cause for more investigation.

Digital Health Stack: Facility-level data capture at the point of care includes accredited health management information systems (HMISs) used across Level 2-6 health facilities with the goal of electronically handling the patient journey, from registration to triage, to admission, to services, to records. Level 2-4 public facilities currently use one of three systems: tibERbu, Kenya EMR, or AfyaKE, with tibERbu making up 95+% of use in Bungoma. There is currently a push to transition all 2-4 facilities onto tibERbu, which is estimated to be complete in the next month. Private and faith-based facilities are being pushed to adopt HMISs that are compatible with the tibERbu system and larger national data superhighway. This adoption is predicted to be complete in the next 3 months. Level 5+ facilities are moving onto the AfyaApex platform which is compatible with tibERbu and the national digital health superhighway ecosystem. The vision is to

have all facilities operating on HMISs that funnel into a single data stream for unified individual patient records across all levels of care.

Community-level data capture runs through the electronic Community Health Information System (eCHIS), used ubiquitously by Kenya's ~100,000 CHPs under a national mandate. eCHIS facilitates and records household-level maternal and newborn care—pregnancy identification, antenatal/postnatal follow-up—occurring before or alongside facility visits, feeding into the same national data architecture as facility-level data. CHPs use government/partner-provided smartphones and tablets, which are reportedly whitelisted, so reporting is not limited by personal data costs—though the ground reality of CHP operations needs to be further investigated.

The national Health Information Exchange (HIE) and Shared Health Record (SHR) are positioned as the center of an aspirational digital health superhighway for real-time, bi-directional health data exchange. This exchange layer seeks to unify records from the facility and community level into a single longitudinal patient record, accessible via API across facilities and different HMIS products via FHIR-based interoperability standards. All facilities are expected to adopt one of these accredited HMISs in the next 3 months or risk being decontracted from SHA reimbursements.

Conclusion:

These findings represent the first stones being turned in a long line of investigation. They do not provide conclusive answers as to the exact manner in which the project should move forward, but they do effectively highlight key on-ground shifts and realities that will have to be thoroughly investigated and understood in order to implement an effective maternal health program in Bungoma.

Two of the most important questions emerging from this fieldwork include how to navigate the SHIF payroll's effect on maternal care access, and how to design and implement MCoD in a way that leverages the new wave of digital health infrastructure while staying attuned to how that infrastructure actually functions on the ground—not just how it's designed to function.

Acknowledgements:

I am deeply grateful to the Laidlaw Foundation for supporting my research and enabling a transformative summer working with the gui²de team in Nairobi. I want to thank Professor Billy Jack for his mentorship and his modeling of dedication to impactful work in the service of others. And I want to thank Colleen Dougherty and Lauren Tuckley at Georgetown's Center for Research and Fellowships for their mentorship and belief in me.

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