Executive Summary

About Lwala Community Alliance

Founded by a group of committed Kenyans, Lwala is building the capacity of rural communities to advance their own comprehensive well-being. Lwala believes that local communities have untapped potential to solve the world’s most pressing health challenges. We leverage our communities to lead in the design, implementation, and evaluation of all of our interventions. Then, we partner with communities, government, and universities to build evidence of impact and infuse these insights into the formal health system. This bottom-up change promises holistic solutions that are custom-built for the systems they are meant to reform.

Key Impact Indicators Q2 2020

COVID-19 Response

- 6 suspected cases, 0 confirmed cases in our catchment areas
- Contributed to 2 national guidelines for continuing community health services and home-based care for patients with COVID-19.
- Procuring personal protective equipment (PPE) for community health workers
- We have trained more than 2500 community health workers across Migori County on an adapted protocol to continue essential services in the midst of COVID-19.
- Of these 2,500, we have trained and deployed more than 400 COVID-19 response community health workers on home-based care, and contact tracing and monitoring

Expanding Our Model

- Advancing Community Health Services legislation at national and county levels
- Expanding WASH programming across 12 additional villages in Rongo Sub-County
- Published in the Journal of Interpersonal Violence. The study, co-authored with Vanderbilt Institute for Global Health, helps Lwala better understand prevalence of interpersonal violence and opportunities for community engagement and support.

Households Enrolled (cumulative)

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
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<td>21,956</td>
</tr>
<tr>
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<td>20,017</td>
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<td>End of 2018</td>
<td>12,118</td>
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Skilled Delivery Rate

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<td>Q1 Results Annual Target</td>
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<tr>
<td>South Kamagambo</td>
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<tr>
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Immunization Rate

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<tr>
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<tr>
<td>2020 YTD Annual Target</td>
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<tr>
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<td>42%</td>
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Couple Years of Protection

<table>
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<td>2020 YTD Annual Target</td>
<td>10,385</td>
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<tr>
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Antenatal Care Rate

<table>
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<tr>
<td>2020 YTD Annual Target</td>
<td>85%</td>
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<tr>
<td>South Kamagambo</td>
<td></td>
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<tr>
<td>2020 YTD Annual Target</td>
<td>33%</td>
</tr>
<tr>
<td>2020 YTD Annual Target</td>
<td>40%</td>
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</table>
**Letter from the Directors**

Dear Insiders,

We hope you are healthy and remain hopeful during this uncertain time.

This is a strategic moment for Lwala. Our major pivot has been to accelerate national and county-level advocacy and technical assistance in the context of COVID-19. So far, Julius has presented twice to the Kenyan Senate, advocating for effective community health response to COVID-19. Plus, we are actively contributing to national guidelines and policy documents that are used across the country to respond to the pandemic. In addition, Lwala has had an opportunity to more directly participate in the development of the national Community Health Services Bill. This legislation has implications beyond the pandemic, and opportunities to advance community-led health across Kenya.

Lwala has been side-by-side with our Ministry of Health colleagues since the beginning of this outbreak. Migori County called on us as a key partner in COVID-19 response, and asked Lwala to help coordinate the work of other development actors. This has given us the opportunity to highlight the importance of strong community-led health systems and successfully advocate for essential inputs like CHW payment, equipment, and policy.

At Lwala, we believe that – more than ever – investing in community participation in health systems is the foundation of equitable health services.

As we have seen globally, effective COVID-19 response relies on two key elements: community-wide behavior change and widespread tracking and monitoring. Community health workers have deep relationships and social capital that the health system can leverage to dispel misinformation. Plus, locals can mobilize resources most quickly, and community health workers can meet patients where they are -- reducing movement and infection exposure.

We have been moving quickly to maintain essential health services, and protect our communities from the spread of COVID-19. Still, the phrase *kidogo, kidogo* – little by little – comes to mind. Each handwashing station built, every conversation between a pregnant mama and her community health worker, and all of the supportive messages from a teacher to an out-of-school child have contributed to the resilience and overall health of our communities.

Onward in solidarity,

Ash Rogers                Julius Mbeya
Executive Director         Managing Director
Table of Contents

COVID-19 Response ......................................................................................................... 4

Our Impact........................................................................................................................................... 7
  Systems Change................................................................................................................................. 7
  Quality Improvement .......................................................................................................................... 8
  Community Health Workers............................................................................................................... 12
  Maternal Health ........................................................................................................................................ 14
  Child Health ........................................................................................................................................ 17
  Early Childhood Development......................................................................................................... 18
  Nutrition ............................................................................................................................................... 18
  Sexual and Reproductive Health ...................................................................................................... 19
  HIV and WASH Integrated Care (HAWI) .............................................................................................. 21
  Education ........................................................................................................................................ 22
  Economic Empowerment .................................................................................................................. 22
  Measurement and Research .............................................................................................................. 23
  Leadership .......................................................................................................................................... 23
  Ongoing Challenges ........................................................................................................................... 24

Community Health Worker Story ................................................................................... 24

Our Model ........................................................................................................................................ 26
  Quality Improvement .......................................................................................................................... 28
  Community health workers .............................................................................................................. 30
  Maternal Health ................................................................................................................................... 30
  Child Health ....................................................................................................................................... 31
  Tramuto Foundation/Health eVillages Nutrition Initiative ................................................................. 33
  Early Childhood Development ....................................................................................................... 34
  Sexual and Reproductive Health ...................................................................................................... 34
  HAWI – HIV and Water, Sanitation, & Hygiene Integrated Care ....................................................... 36
  Lwala Community Hospital ............................................................................................................... 37
  Education .......................................................................................................................................... 39
  Economic Empowerment .................................................................................................................. 41
  Measurement ....................................................................................................................................... 41
COVID-19 RESPONSE

At Lwala, we remain focused on continuing essential health services, and protecting communities from the spread of COVID-19.

Supporting Kenya’s National Response to COVID-19

When news of the pandemic first began to spread, the initial national response in Kenya was to restrict community health workers (CHWs) from making household visits. At the national level, we supported three major initiatives related to COVID-19:


2. Development of national home-based care guidelines. In the early months of the pandemic, many positive and suspected cases of COVID-19 were held in isolation and quarantine centers across the country. This increased the burden on the health system and put patients at further risk. We specifically contributed CHW workflow protocols for the national ‘Home Based Isolation and Care Guidelines for Patients with COVID-19’

3. Including CHWs in national personal protective equipment (PPE) estimates. Lwala advocated nationally for CHWs to be provided with PPE and included in national estimates of PPE needs. Further, Lwala supported the inclusion of a request for PPE for CHWs in Kenya’s application for COVID-19 relief to the Global Fund.

Migori County

Implementing national guidelines at the county-level

Lwala is supporting Migori County to implement the national guidelines described above. We are leveraging the social capital and distribution infrastructure of existing cadres of CHWs and community committees to rapidly deliver reliable information, continue essential health services, support community-wide behavior change, and scale-up of COVID-19 home-based care, contact tracing and contact monitoring.

We are working with Ministry of Health to train 2,500 existing CHWs across Migori County on an adapted protocol to continue essential services in the midst of COVID-19. Of these 2,500, we have trained and deployed more than 400 COVID-19 response community health workers (CR-CHWs). This quarter, we trained more than 80 CHW supervisors to provide supportive supervision to these CR-CHWs. 2 CR-CHWs have been deployed to each community health unit across Migori County to support home-based care, contact tracing, and contact monitoring for a population of over 1 million people.

To drive effective management of this cadre by Ministry of Health, Lwala has trained and coached 16 community focal persons from the Ministry of Health (2 in each sub county). The sub-county community health focal persons are supporting the CHW supervisors and COVID-19 response roll-out across the entire county. The Ministry of Health will be providing equipment, commodities, supervision, and cost-sharing CHW stipends.
Rongo Sub-County

We have further contextualized our response in our direct service area, serving 90,000 people. As with our national and county-level technical assistance, at the sub-county level we are focused on continuing essential health services, and stemming the spread of COVID-19.

Community education and health services

We are providing open-air well-patient outreach events that follow social distancing guidelines. Essential services available at the outreaches include: antenatal care visits, contraceptives, and childhood immunizations.

**Increased public outreach, including bi-weekly radio events.** We have increased the duration and frequency of radio shows compared to last quarter. The first hour is dedicated to COVID-19 information and the second hour alternates between topics related to healthy timing and spacing of births, teen pregnancy, and sexual and gender-based violence prevention.

CHW tools and support

Before conducting any household visits, CHWs are using a custom-built digital tool on a mobile device to conduct symptom self-checks and household phone screens. This tool enables CHWs to roll out WHO and UNICEF Integrated Community Case Management (iCCM) guidelines, and maintain essential services.

The chart below shows tracks the daily percentage of CHWs who report having all required PPE (face mask, gloves, hand sanitizer, and spirit swabs) to perform their household visits. Supervisors are alerted via automated text if any CHWs on their team are experiencing symptoms, or have run out of PPE or cleaning supplies. Supervisors are also notified automatically if a household screening call results in a suspected case.

**% of CHWs Reporting Adequate PPE for Household Visits**

We are also supporting CHWs and other frontline health staff with mental health counseling. Team members have accessed both group therapy and individual sessions in the past quarter.
Lwala Community Hospital and 8 Partner Health Facilities

Across our partner facilities, we have trained 48 health service providers on how to identify and handle suspected COVID-19 cases that may present in their facilities. We have developed essential primary care guidelines for all primary care personnel, and equipped all front-line primary care workers with PPE. We have also intensified infection prevention control – including protocols for donning and doffing PPE, setting up holding bays, waste management and occupational health and safety.

In addition to the digital tools for CHWs, Lwala developed a health facility gate screening tool. The facility gate screening tool assesses all visitors to Lwala Community Hospital and our 8 partner facilities.

We have used our gate screening tool to conduct nearly 30,000 COVID-19 screenings at facility entry points. These screenings resulted in 6 suspected cases. All suspected cases were deemed negative after further clinical follow-up.

The graph below cumulatively displays the number of screenings completed per day since the launch of the gate facility screening tool on April 9th.

Cumulative Facility Gate Screening by Day

Age category
- Over 5
- Under 5
OUR IMPACT

Systems Change

Growth Strategy
We are successfully providing direct service delivery in 3 out of the 4 sublocations in our subcounty – North, East, and South Kamagambo – reaching a population of 90,000. We will bring our full community-led health model to the rest of Rongo subcounty (population 150,000) in 2021.

Community Health Services Bills
This quarter, we worked at national and county levels to advance Community Health Services (CHS) Bills.

At the national level, Lwala convened a group of community health service organizations and presented a memorandum on the CHS Bill to the Kenyan Senate Committee on Health. The memorandum called for counties to professionalize and pay CHWs.

At the county-level, we collaborated with the Ministry of Health to set up a technical working group on community health services. This group will develop another draft of the county-level CHS bill, and coordinate community health services across the county.

One of the issues we actively advocated for removing from this bill is the literacy requirement for Community Health Committees (community unit members). We believe it is important for these committees to represent the communities they serve. Literacy requirements tend to discriminate against women – especially older women – and locals who are willing to give their time to support the health of their communities but may not have the literacy requirements.

With this work, we are offering key lessons from our community-led health model that can be replicated and adopted by the government.

Global engagement
Lwala is an active member of the Community Health Impact Coalition (CHIC), a coalition of 16 leading expert organizations implementing CHW models around the world, we have co-authored several tools on optimizing community health systems that have been published and made available to a global audience. In Q2, we contributed to:

- a video campaign demanding PPE for CHWs
- groundwork for a joint fund raising $100 million to ensure CHWs across Africa are protected with PPE
- a Devex piece on strengthening health systems
• a resource wiki including COVID-19 protocols. These protocol resources have been accessed by UNICEF & ministries in multiple countries

Quality Improvement

Continuing essential health services across partner facilities

In Q2, across all 8 partner health facilities, we saw a 4% decrease in overall patient visits compared to Q2 2019. This decrease was driven by a 10% decrease in outpatient visits, driven my COVID-19. From April forward, we increased outreach events by health facilities to cater to well-patients who were wary of visiting health facilities for fear of exposure to COVID-19. Despite the low patient visits caused by uncertainty over COVID-19 transmission, we saw an increase in overall service uptake in June.

Despite the decrease in outpatient visits, other key patient services held constant or increased in Q2 compared to the same period last year. Our partner facilities saw an 8% increase in skilled delivery rate over Q2 2019, and a 26% increase in family planning visits over Q2 2019. Antenatal care (ANC) visits remained stable in Q2 2020 compared to the same period in 2019.

The increase in utilization rates for these key services across partner facilities are attributed to:

• intensifying monthly well-patient outreaches carried out by each partner facility
• amplification of our CHW program in many of these same catchment areas, which led to increases in household visits and patient referrals
• increased measures to track and improve patient satisfaction, and
• improved facility performance on the Health Facility Assessment Scores, reflecting improvements in clinical quality

<table>
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<th>Total Number of Outpatient Visits</th>
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<tbody>
<tr>
<td>2018 Q1</td>
</tr>
<tr>
<td>Ngodhe Dispensary (2263)</td>
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<tr>
<td>Ngere Dispensary (1972)</td>
</tr>
<tr>
<td>Ndege Oriendo Dispensary (2539)</td>
</tr>
<tr>
<td>Minyenya Health Centre (2256)</td>
</tr>
<tr>
<td>Kochola Dispensary (2238)</td>
</tr>
<tr>
<td>Kangeso Dispensary (3262)</td>
</tr>
<tr>
<td>Ongo Dispensary (2495)</td>
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Continuing essential health services through Lwala Community Hospital

Similar trends in patient visits were observed at Lwala Community Hospital. In Q2, we saw a 25% decrease in patient visits compared to Q1. This drop is attributed to COVID-19 where patients expressed hesitation in visiting health facilities across the country for fear of contracting COVID-19. However, some of this decline in patient visits was driven by intentional shifts in routine visits. Clients with HIV and non-communicable diseases were put on more spread-out visit schedules, with many receiving visits and drug delivery directly to their homes.

There was also a wariness amongst patients to seek essential health services in a facility setting because of the pandemic. Well-child patient visits, in particular, dipped in Q2. In response to this dip in facility visits, we intensified the number of well-patient outreaches in the community in June. Through increased outreaches, we saw a 25% increase in patient visits in June compared to May. This rebound was especially strong for well-child visits. Services rendered at these outreach events include short term and long-acting contraceptives, antenatal care visits, immunizations, and malnutrition screening.
Total Lwala Community Hospital patient visits, excluding clinical outreaches

Total Lwala Hospital Community Hospital visits, including clinical outreaches
Despite the decrease in patient visits to the hospital from February through May, we have maintained maternal care at the facility. This continued care is exemplified by our stable year-over-year trend in skilled deliveries at Lwala Community Hospital.

Clinical assessments at Lwala Community Hospital

Lwala Community Hospital received a score of 92% on an assessment called ‘Infection Prevention in the context of COVID-19’. The assessment evaluated the hospital’s response to COVID-19, and its ability to continue providing services without increasing risk of infection. The assessment was conducted in partnership with Migori County Ministry of Health and the University of Maryland.

Lwala Community Hospital received perfect post-training scores for 3 Lifenet Training courses in Q2: Nursing Basics, Safe Babies, and Safe Mothers.
Learning from Health Facility Assessment Scores at Partner Facilities

In the first quarter of 2020, bi-annual Health Facility Assessment Scores showed that Health Facility Management Committees (HFMCs) across our partner facilities were not meeting as regularly as recommended. To address this opportunity in Q2—especially during COVID-19—Lwala proposed virtual meetings for HFMCs, and facilitated the first events to ensure their technical success. By re-engaging each HFMC in Q2 and encouraging them to conduct virtual meetings during COVID-19, all HFMCs are now meeting again more frequently.

After starting virtual meetings, one of the HFMCs found a solution to an issue common across Kenya. At Kangeso Health Center, a woman in labor could not access care due to curfews at night. Her village chief is a member of the HFMC. Using his status in the community, and on the HFMC, he worked with the head of police to procure documents that allow patients to travel at night during curfew. This solution was promoted during a virtual HFMC meeting, and then shared across all 9 partner facilities to be replicated in their communities.

Key adjustments and challenges in response to COVID-19

In Q2 2020, the Quality Improvement team limited travel to reduce the risk of COVID-19 transmission. The number of facility visits decreased to 8 per month (down from an average of 24 per month), but each visit lasted longer. These in-depth sessions enabled the QI team to safely and comprehensively understand issues and successes at each facility. Plus, all facilities have received increased remote support through WhatsApp, phone calls, education videos and posters, and remote Health Facility Management Committee support.

Community Health Workers

"Through our work, the people are being educated, and the community knows the importance of visiting the health facilities”
- Millicent, community health worker since 2012.

Improving CHW supervision and continuing essential services

21,119 households are enrolled in our community-led health model and regularly visited by a CHW. Our CHWs identify and track pregnancies, encourage facility deliveries, ensure on-time immunizations, test and treat common childhood illnesses, provide contraceptives, connect clients to health centers, and provide health information.

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<th>Lifenet Course</th>
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<th>Post-Training Score</th>
<th>% Change</th>
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<td>Nursing Basics</td>
<td>57%</td>
<td>100%</td>
<td>+ 43%</td>
</tr>
<tr>
<td>Safe Babies</td>
<td>70%</td>
<td>100%</td>
<td>+30%</td>
</tr>
<tr>
<td>Safe Mothers</td>
<td>78%</td>
<td>100%</td>
<td>+22%</td>
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This quarter, our CHWs in North Kamagambo and East Kamagambo reached an average of 75% of active households with a monthly visit. This is an 18% increase compared to this time last year. In South Kamagambo – our most recent expansion site – 43% of active households were visited in Q2. This is a 21% increase over Q1 2020, when household visits first began.

Across all three catchment areas, CHW supervision and training has improved over the last 18 months. We’ve implemented new tools for supervisors and placed more emphasis on key performance metrics. Household visits in South Kamagambo are still low and erratic. This is expected as this rollout there is still new and we are hopeful these numbers will increase overtime, as we saw in East Kamagambo.
In June we also participated in Malezi Bora – an annual child-mother nutrition campaign across Kenya. Malezi Bora was introduced by the Kenyan government in 2007 as a “proactive strategy to reverse a worsening trend in the maternal and child health indicators”. Household visits during Malezi Bora include supervision from community health officers. Plus, CHWs are required to visit more households than usual to support the campaign during the month. This year, Malezi Bora focused on Vitamin A supplementation and de-worming for children under 5.

Maternal Health

Skilled delivery rate
So far this year, we have achieved a 100% skilled delivery rate in North Kamagambo, a 98% skilled delivery rate in East Kamagambo, and a 97% skilled delivery rate in South Kamagambo.

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So far this year, 82% of women in North Kamagambo, 56% of women in East Kamagambo, and 33% of women in South Kamagambo have attended 4+ antenatal care (ANC) visits before delivery. ANC progression has plateaued in North Kamagambo, and it has been difficult to increase service uptake – even before COVID-19. We are encouraged, though, that ANC visit rates have held steady in North and East Kamagambo compared with 2019.

In South Kamagambo, we are just beginning our work, and increasing service update is especially challenging in the context of COVID-19. We have emphasized the importance of ANC visits through mass text, radio, and public address system announcements. Plus, CHWs continue to encourage pregnant women to attend their visits. We are confident that increased well-patient outreaches this quarter will increase these rates in the future.
To date, we have trained 48 facilities and 543 clinical workers across Migori County on the Obstetric Hemorrhage Bundle. The Non-Pneumatic Anti-Shock Garment (NASG) is a key component of the Obstetric Hemorrhage bundle. To date, we have distributed 105 garments to 48 facilities.

This past quarter, we have emphasized mentorship and online training for staff members who clean the NASGs. During follow-up training with health care providers, we found that subordinate staff tend to be the ones cleaning and sanitizing the garment. In smaller facilities where personnel are limited, these staff members even support NASG application on patients. We are conducting online training to ensure that the garments are in excellent condition, and all relevant staff know how to use, clean, and store it. This training is especially important during COVID-19, as it helps limit disease transmission, and costly replacements in a stressed supply chain.
Child Health

Key Performance Indicators

So far this year, 96% of children in North Kamagambo are fully-immunized. This is a decrease from last year, driven by a measles vaccine shortage earlier in the quarter. Lwala is tracking the children who did not receive the vaccine, and we expect them to be fully-immunized in Q3.

Lwala Community Hospital conducted 2,120 well-child visits in Q2 2020, which is a 32% decrease from the same period last year. We saw this decline in relation to COVID-19 and confused messaging on access to essential services. In response, we shared community messages via mass SMS, radio, and public address to quell initial anxiety, equipped CHWs with PPE. Plus, we increased well-patient outreaches in June and have seen an increase in these visits as a result.
Early Childhood Development

Building upon the mapping and preliminary focus group work done in Q1 2020, the Early Childhood Development (ECD) program continues to prepare for a successful launch amidst COVID-19.

In Q2, stakeholders from the Rongo Sub-County ECD coordination group reviewed training manuals and job aids that will be used by CHWs. The program also produced educational posters about parenting and child protection during COVID-19, which were displayed by the Ministry of Health in every health facility in Rongo Sub-County.

Nutrition

Malnutrition screening continues

We have screened 10,673 children in North Kamagambo for malnutrition this year, including 5,662 children in Q2. 23 malnutrition cases were referred to Lwala Community Hospital for treatment this quarter, which is up from 10 in Q1 2020. Malnutrition screenings are being conducted during well-patient clinic outreach events, and through low-touch protocols during CHW household visits.

As part of the nationwide mother-child nutrition week (Malezi Bora), 1,658 children were given a vitamin A supplement and deworming tablets to reduce cases of malnutrition in children under 5. This is 87.7% of children under 5 in our direct service area. A plan is underway to reach the remaining children under 5.

Food supplies for most vulnerable households

With the emergence of COVID-19, we expected a surge in malnutrition cases because of changes in the economy. Lwala has ensured active case finding in communities via CHWs and provided a food package for 445 vulnerable households in North Kamagambo. The food distribution includes a 1-month supply of: beans, rice, cooking oil, sugar, salt, and bar soap. Those 445 households are composed of 2,032 people, including 1,425 children. Of those children, more than half are orphans. Moving forward, we plan for all CHWs in other catchment areas to receive nutrition counseling training. We also plan to provide a social support package through the end of the year for the most vulnerable households.

Kitchen garden support

To maintain social distancing, a number of group activities were suspended this quarter – including gardening training and initial nutrition follow-up. These are group events that meet weekly over 5 weeks, so they were not feasible. Instead, we implemented garden follow-up phone calls. Community facilitators call the clients one-by-one to ask them the status of their kitchen garden. Community facilitators can identify if there’s a gap and, depending upon the situation, they can counsel the garden caretaker on how to improve their plot. 38 parenting groups have been established, targeting 1503 mothers, 1371 fathers and 1658 children. In order to sustain adequate nutrition for the children, the parenting group members were supported with seeds to establish kitchen gardens. These gardens help families grow fast-maturing, nutrition-rich vegetables in order to cushion themselves against undernutrition challenges that may arise as a result of COVID-19.

Early indicators from 152 conversations suggest that the gardens are growing well, and sustaining 3-4 types of fast-growing, nutrient-rich vegetables.
Sexual and Reproductive Health

Reproductive health services continue after initial slowdown

We have provided 10,386 Couple Years of Protection (CYP) so far in 2020, compared to 7,773 CYP in the same period last year. A key driver of that increase is our expansion in South Kamagambo, which started in October 2019.

The number of clients accessing contraceptive services dipped in the month of April. As COVID-19 travel restrictions and stay-at-home orders began, there was confusion about which interventions were permitted, and fear that if a patient went to a health care facility and exhibited any symptoms, they would be placed in a holding center. To dispel these fears and encourage health-seeking behavior to continue, we focused on public education activities including posters in prominent places, doubling radio broadcasts, and using a public address system community-by-community. Early indicators of CYP recovery include the vast number of condoms distributed by Youth Peer Providers, an overall CYP increase in May, and strong attendance at sexual and reproductive health outreach events at the end of the quarter.

In 2020 so far, Youth Peer Providers have distributed 36,860 condoms through the Dial-A-Condom program, including 22,949 condoms in Q2 2020. This is a 39% increase over Q2 2019. With large outreach events halted due to COVID-19, the Dial-A-Condom program has been a safe and popular way to continue condom distribution. We are encouraged by the strong uptake of Youth Peer Provider services, especially while schools are closed. We are focusing on these services to prevent any increase in teen pregnancy rate, sexually transmitted disease transmission, and intimate partner and sexual and gender-based violence.
Teen pregnancy prevention

<table>
<thead>
<tr>
<th>Year</th>
<th>Teen Pregnancy Rate in North Kamagambo</th>
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<tbody>
<tr>
<td>2020 Year-To-Date</td>
<td>34%</td>
</tr>
<tr>
<td>2019</td>
<td>30%</td>
</tr>
<tr>
<td>2018</td>
<td>26%</td>
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Of 213 total births in North Kamagambo year-to-date, 73 babies have been delivered by teenage mothers. **This is a 34% teen pregnancy rate for 2020 YTD.** With schools closed across Kenya until January 2021, teen pregnancy is a nationwide concern. School-based sexual and reproductive health education has, historically, been a key component of program delivery. In lieu of school and group events we are continuing services and communicating with the public through:

- **Well-patient outreach.** Sexual and reproductive health (SRH) services have continued, following a modified protocol that requires social distancing and wearing a mask.
- **Posters with SRH and sexual and gender-based violence prevention messages** have been hung in strategic, visible places by Youth Peer Providers and CHWs.
- **Spoken messages delivered via public address** system, once per week per catchment area. Content announcements are made by a Lwala staff member and a Youth Peer Provider, and include information about: family planning, sexually transmitted diseases, sexual and gender-based violence prevention, COVID-19, and upcoming well-patient visit locations.
- **Radio events, twice per week for two hours at a time.** This is an increase in time and frequency of radio shows compared to last quarter. The first hour is dedicated to COVID-19 information and the second hour alternates between topics related to healthy timing and spacing of births, teen pregnancy, and sexual and gender-based violence prevention. These radio shows reach all of Migori County (total population 1 million), plus neighboring areas Homa Bay and Kisii. Before COVID-19, our call volume during radio shows averaged between 2-4 people, as many potential listeners were at work or school. In the past quarter, we receive an average of 40 calls and texts per show. With many more active listeners, the radio shows have become an important venue for sharing information about upcoming well-patient visits.
- **Text messages and WhatsApp groups.** In Q2 2020, we used WhatsApp groups and SMS reminders to educate over 11,600 unique recipients on sexual and reproductive health topics, contraceptive use, teen pregnancy prevention, and sexual and gender-based violence prevention. In addition, Youth Peer Providers, CHWs, and SRH advisory committee members are relaying information to their immediate beneficiaries and networks through their existing WhatsApp groups.
- Through **low-contact household visits,** Lwala’s CHWs continue to provide support to mothers by identifying symptoms of high-risk pregnancies, ensuring adequate maternal nutrition, promoting prenatal care visits, supporting safe delivery at a facility, and providing post-natal follow-up, breastfeeding support, and contraceptive information and access.
- In each catchment area, a **sexual and reproductive health engagement committee** is working closely with CHWs, health care providers, and local leaders to report community issues – including sexual and gender-based violence and teen pregnancy.
HIV and WASH Integrated Care (HAWI)

Continuously improving hygiene practices and infrastructure to limit infection

Lwala has enrolled **3,821 people into the HAWI program** since inception, including 33 in Q2 2020. Everyone enrolled in the program receives both HIV and WASH support and becomes a WASH leader in their community.

In Q2, in response to COVID-19, **antiretroviral medication was distributed to 1,450 households during community outreach events**. This was a new initiative devised in the context of COVID-19 to limit vulnerable patient flow to health facilities and reduce burden for patients. All patients booked were reached with medication, zero defaulted on treatment, and none were lost to follow up. This is a new perspective in provision of HIV care which may reduce a burden to patients by lowering the need to visit hospitals.

![WASH Infrastructure Built, Cumulative](chart)

To date, we have built **2,215 handwashing stations**, including **2,109 this year**, and **1,831 handwashing stations in Q2 alone**. This compares to **77 handwashing stations in Q2 2019**. Proper hand-washing and water quality is particularly important in preventing the spread of infections like COVID-19, so building these stations was a top priority for the WASH team this quarter.

To date, **557 latrines** have been built, including **53 new latrines in Q2**. **77 existing latrines were improved this quarter**. We have nearly reached saturation in the number of new latrines to be built, so we are now maintaining and improving existing latrines. This work was urgent this quarter after communities received an unusually high amount of rain. The influx of rain caused latrines to enlarge and

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*Figures are approximate and subject to change.*
collapse. In response, WASH committees within each community organized with their neighbors to rebuild or fix the latrines.

4,160 water treatment tablets and 14 water filters were distributed for water treatment in the past quarter. Plus, 1,555 water guards were added to protect water sources from debris and other contamination. Clean water is always a priority, and is especially important in preventing the spread of infections and viruses like COVID-19.

In June, our WASH program expanded to 12 new villages across East Kamagambo, South Kamagambo, and Central Kamagambo. The expansion sites were chosen by the county Ministry of Health team. 14 public health officers have been trained on public health marketing. They will cascade that training down to CHWs, who will share with community members.

**Education**

Since Kenyan schools were closed in response to COVID-19 (March 17), our education program has focused on: continuing learning and COVID-19 sensitization in communities, checking-in on the most vulnerable out-of-school girls, and strategic work with Regional Education Learning Initiative (RELI). RELI is composed of more than 70 member organizations, all working together to ensure inclusive learning for all children in East Africa. Our current work with RELI centers on preparing the community for the new nationwide, competency-based curriculum. Our goal is to improve student outcomes by proactively raising awareness of the new curriculum amongst caregivers, teachers, and students. This is important work to continue even while schools are closed; we expect education disparities while schools are closed and do not want the new curriculum to compound learning gaps.

Two days per week, loud speaker announcements remind students and their caregivers when and how to tune into their radio lessons.

Mass text has been an effective way to reach households with phones. In Q2, 11,647 CHWs, household members, education committee members, Youth Peer Providers, and teachers received 25 different Dholuo text messages from Lwala programs. The messages included key information about upcoming clinic outreach events, sexual and reproductive health, sexual and gender-based violence prevention.

**Economic Empowerment**

**Savings and loan cooperative**

In Q2 2020, Lwala village’s savings and loan cooperative recruited 11 new members, bringing total membership to 209. This cooperative operates independently and provides pro-poor financing to staff and community members.

**Village Enterprise**

Through Village Enterprise’s business loan program, business owner groups pool their savings, loan it out, and receive their savings back plus interest. To reduce gatherings and physical currency exchange in the context of COVID-19, loans and savings are now distributed to enterprise groups through M-Pesa – Kenya’s popular mobile phone money transfer service.

We suspected it would be difficult for business loan groups to “share out” in this way, but by the end of Q2, 11 out of 16 groups did so successfully.
New grant disbursement was also completed via M-Pesa. In response to COVID-19, new enterprise groups include 3 members, rather than the 25-30-member groups created previously. Smaller units limit large gatherings amongst the enterprise group members. In Q2, 169 business groups (507 individuals) received their 5,000 Kenyan Shilling grants via M-Pesa. This business loan program and virtual mentorship is crucial as business adapt to economic changes caused by COVID-19.

Measurement and Research

COVID-19 screening tool development
Lwala developed COVID-19 screening tools for health facilities and CHWs. The tools were developed using CommCare. Data collected by facilities and CHWs is visualized using PowerBI, which allows our team to quickly spot trends, and see daily updates from across partner facilities and catchment areas.

Interpersonal violence study
Lwala co-authored a new publication in the Journal of Interpersonal Violence with Vanderbilt University researchers. Reporting on data from our latest representative cross-sectional data collection, we find that in our Lwala communities:

- Interpersonal violence is an urgent problem in Lwala and the surrounding area. In East and North Kamagambo alone, an estimated 6,785 women have experienced interpersonal violence in their lives.
- Education for women, a focus of Lwala’s programming, protects against interpersonal violence. Women with more than six years of education are about half as likely to experience violence as those with less education.
- There is a cycle of violence. Girls who had exposure to violence as children are 60% more likely to experience violence later in life.
- More than 90% of women who experienced violence were married. There is an urgent need for programs to empower women to avoid violence and leave unsafe relationships when needed.

This research helps Lwala better understand prevalence of interpersonal violence and opportunities for community engagement and support in our wrap-around community health model, to promote holistic health.

Leadership

Public speaking
Lwala’s Executive Director spoke at Innovations in Healthcare’s virtual panel on Maintaining Maternal and Child Care during the Pandemic. The panel discussed challenges around patient education, adjustments to clinical workflows, staff training, and the future of maternal and child health after COVID-19.

Advocacy
Lwala’s Managing Director presented a memorandum on the CHS Bill to the Kenyan Senate Committee on Health. The memorandum called for counties to professionalize and pay CHWs.

Media
Lwala’s Early Childhood Development coordinator spoke on Citizen TV Kenya about several topics, including online safety for children.
A team of Youth Peer Providers created a new music video with the local Legend Gospel Studio. The video demonstrates how to wash your hands and wrists, and how to wear a mask correctly.

**Ongoing Challenges**

We continue to work through supply chain challenges. In this last quarter there was a stockout of the measles vaccine, leading to many children falling behind immunization schedules. The vaccine is now back in stock and we are working with government to follow-up with those children. We’ve also seen stockouts of bed nets and essential medicines at the county-level and are working to procure supplies to fill these gaps while supporting longer-term supply chain solutions with Ministry of Health. We are specifically committed to providing ample PPE for frontline health workers – including CHWs – and avoiding essential medicine stock-outs at partner health facilities.

We are closely tracking indicators related to intimate partner violence, sexual and gender-based violence, and teen pregnancy—especially as Kenyan schools are closed until January 2021. Interpersonal violence is an urgent problem in Lwala and the surrounding area. In East and North Kamagambo alone, an estimated 6,785 women have experienced interpersonal violence in their lives. ²

Tanzania borders Migori County to the south. Being a border region, several suspected COVID-19 cases have been identified from persons crossing the porous borders. We are also monitoring a recent COVID-19 outbreak at a prison in Migori County. We have advocated for testing everyone at the prison and remain concerned about that situation. These two factors combined increase the risk of cases of COVID-19 flooding the county and overwhelming the health system. Our work with the county, including the new cadre of pandemic response CR-CHWs, is intended to avert such a scenario.

**COMMUNITY HEALTH WORKER STORY**

**A CHW fights for her community members’ health even during her own health challenges**

Mama Rehema° is a 65-year-old community health worker. She was one of the first traditional birth attendants to volunteer and train for the CHW role. She is now known within the community as “Mama Rehema, ogue chalre”, translated as “Mother Rehema, all lizards are the same”. The parable reminds her to treat all community members as equals, without considering social classes.

In 2007, Mama Rehema fell ill and went for treatment at the recently opened Lwala Community Hospital. She received a positive HIV test result, and immediately thought to have her whole family tested for HIV. Four family members also tested positive. For 13 years, Mama Rehema has been on HIV care. Early on, adherence to antiretrovirals (ARV) among her family members was not easy, as they had heard rumors about drug reactions and stigma from other community members.

Lwala’s comprehensive HIV programming empowers people with HIV to lead healthy, productive lives, while eliminating new infections. All HIV-positive individuals and their allies are encouraged to join a program called HAWI (“Good Luck” in Dholuo). HAWI groups are trained in critical health topics and community organizing. Participants provide psychosocial support to each other and launch health initiatives in their communities. Each participant in HAWI is also regularly visited by a CHW. As soon as

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the HAWI program began in 2015, Mama Rehema mobilized other community members to start an HIV support group. Through the support group, the community’s tone changed from shame to solidarity. Clients on care identified themselves and joined the care group, creating a safe space to share matters affecting them. Topics discussed during their meetings include: management of ARV adherence and side effects, psychosocial support, water, sanitation, and hygiene (WASH) issues, and stigma management and disclosure. This group quickly became a model for other villages.

Mama Rehema is also receiving care for stage two cervical cancer. She speaks to community members freely about her cancer diagnosis and has encouraged more than 10 community members to receive a cervical cancer screening. In context of COVID-19, Mama Rehema is a high-risk community member. Yet, she is a passionate and effective CHW who is trusted by her community unit. Mama Rehema follows the modified COVID-19 protocol (face masks, social distancing, and effective hand washing) to keep herself and others safe. She continues to educate community members through her own experience, while being encouraged herself by support group members. These interactions keep her strong and motivated.

Mama Rehema has worked at her community’s water access point since March 15th, educating fellow community members on health issues ranging from effective hand-washing, latrine use, and mask usage, to HIV-testing, adherence on ARVs, well-patient visits, and illness screenings. She especially enjoys speaking to youth about health issues, using the skills she gained while raising her own grandchildren. “I will continue working hard to promote my community members’ health and the sky is the limit. I am optimistic that I will be healed and I will continue serving my community on health matters”, said Mama Rehema.

*Names have been changed, and photos omitted, to protect the privacy of the individuals depicted.*
OUR MODEL

Health Systems Strengthening

Lwala’s model has generated ample evidence of success including a child mortality rate of 29.4 per 1,000 live births compared to the regional average of 82 per 1,000 live births, a 300% increase in contraceptive uptake, and virtual elimination of mother-to-child transmission of HIV. As a result, the Ministry of Health invited us to scale our model throughout Migori County to reach a population of 1 million people. We will meet this challenge through a three-pronged approach: direct service delivery, government technical assistance, and peer replication.

Within Migori County, Lwala’s strategy is to provide direct service delivery in all of Rongo sub-county and to expand our community-led health model through government engagement and peer replication throughout the rest of Migori County – reaching 1 million people.

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3 Household Survey Data (2019).


5 Sourced from Lwala Community Alliance’s routine monitoring data, collected at the household level through a customized data collection platform using CommCare, Open Fn, and Salesforce.
COMMUNITY COMMITTEES
We organize community committees to launch their own initiatives in areas including: water, sanitation, & hygiene, HIV/AIDS, reproductive health, and nutrition. We also train community members to participate on health facility management committees and equip them to drive improvements in the health system.

COMMUNITY HEALTH WORKERS
In collaboration with Ministry of Health, we recruit, train, pay, supervise, and digitally empower transformed traditional midwives and government community health workers to extend high-quality care to every home. Our Community Health Workers identify and track pregnancies, encourage facility deliveries, ensure on-time immunizations, test and treat common childhood illnesses, provide contraceptives, connect clients to health centers, and provide health information.

COMMUNITY-LED HEALTH MODEL

DATA
Real-time data, collected by our mobile application, enables our team and government policymakers to make patient-centered, evidence-based decisions. Additionally, in partnership with the Vanderbilt Institute of Global Health, we are in the midst of a rigorous program evaluation which will track outcomes over time, alongside comparison sites.

HEALTH FACILITIES
We provide onsite quality improvement support and training to government health facilities. This support is built around the World Health Organization’s six building blocks of health systems: service delivery, health workforce, information systems, supply chain, finance, and governance. We also provide onsite clinical trainings, targeting lifesaving care for mothers and infants during delivery. Our approach emanates from our center of excellence – Lwala Community Hospital.
To provide direct services, Lwala implements our community-led health model. The model rests on 4 key pillars:

**Government Technical Assistance**
We engage stakeholders at every level, from global audiences to local opinion leaders to mainstream our evidence-based innovations and advocate for a strengthened health system. At the global level we work with forums like the international [Community Health Impact Coalition](#), which is a consortium innovative leaders in global health including Partners In Health, Project Muso, Last Mile Health, and more. With this coalition we contribute to the production of new guidelines and develop best practices to influence community health work on a global scale. The [CHW AIM](#) tool is an example of this effort.

Lwala is committed to supporting Kenya’s ambitions to achieve universal health coverage. As such, all of our work is done in partnership with the Ministry of Health at national, county, and local levels. In partnership with government, we are testing innovations designed for nationwide scale. We engage with national health working groups where we share our successes and advocate for national replication of proven interventions. To engage at the regional level, we are a member of the Inter-County Coordination for Human Resources for Health working group, which represents 6 counties in the Lake Victoria region. We use this platform to share our successful Community Health Worker model and advocate for the adoption of best practices. In Migori County, we work closely with the government to codify Lwala’s principles into law and leverage government cohorts to oversee our implementation. By working with Migori County, we influence the health outcomes of 1 million people.

**Peer Replication**
The third prong of our community-led health model expansion is peer replication. There are a number of community-led organizations in our region that are looking to implement a cohesive model to create impact. Lwala believes in leveraging partnerships with like-minded organizations, so we sign Memorandums of Understanding with peer organizations to share expertise and best practices. We supply peer organizations with our Community Health Worker training curriculum and community health program guide as a “starter kit” to operating a community-led health model in return for cost-sharing and knowledge exchange. We are excited about the various ways in which our partners bring our model to life in their own communities.

**Quality Improvement**
Lwala believes that in order to provide quality healthcare access, Community Health Worker initiatives must be tied to quality facility-based care. Government health centers provide the majority of the health services in Kenya despite experiencing frequent shortages in staff, training, medicines, electricity, running water, and other essential resources. These systemic challenges reduce quality of care provided to patients, feed distrust in the health system and ultimately influence the overall health of families and communities. Lwala unites community members and health workers to lead health facility management committees. Together, they implement a cycle of continuous improvement. Along the way, Lwala provides comprehensive assessments, coaching, training, and occasional resources to help facilities reach their goals of providing high-quality, patient-centered care.

**Health Facility Management Committees** – We start by organizing Health Facility Management Committees at each government facility. These are Ministry of Health entities meant to build accountability in the health system, but they are typically dormant in rural areas. In the past, these committees have existed in name only, leaving the facilities without vital oversight structures. We revitalize them, ensure they are led by a
representative group of community members, and put them at the center of an iterative quality improvement process.

**Health Facility Assessments** – We utilize a unique *Health Facility Assessment Tool* that we developed with the guidance of a Quality Improvement Consultant. The tool measures facility performance against the 6 World Health Organization building blocks for health systems strengthening. Within the building blocks, we score the facility on 30 specific performance objectives that we pulled from Kenya Ministry of Health and World Health Organization guidelines. The *Health Facility Assessment Tool* also incorporates scores from three tools implemented on an ongoing basis: a patient satisfaction survey, staff satisfaction survey, and case observation guidelines. We digitized the tools on our customized CommCare application. The evaluation is conducted on mobile tablets which enables rapid analysis and programmatic responses. Some of the components of our Quality Improvement Initiative include:

**Clinical Mentorship** – As a part of our Health Facility Assessments, we conduct case observations at our partner facilities. Mentorship sessions include real-time skills development while observing direct patient care. Case observations help our quality improvement team identify service areas that need strengthening. To conduct Case Observations, our trained Nurse Mentor and Quality Improvement Officer observe patient care on 6 service delivery areas: integrated management of childhood illnesses, child immunization, postnatal care, newborn care, labor and delivery, and antenatal care. They score the providers on criteria that we developed using World Health Organization and Ministry of Health guidelines. Then, they aggregate the scores to give healthcare providers structured and transparent feedback on their service delivery. Insights from case observations are also incorporated into facility improvement planning efforts, focusing efforts where the need is greatest.

**Patient Satisfaction Survey** – Our patient satisfaction survey evaluates patient experience based on 3 key clinical quality measures: patient wait time, patient engagement, and clinical process. Each of these measures has numerous indicators ranging from average time attended to by a clinician to whether confidentiality is respected by clinicians. We analyze these surveys using a sophisticated scoring matrix which generates overall patient satisfaction scores. Suggestions and comments taken from patients during the patient satisfaction surveys help to inform priority areas for facility work improvement plans.

**Clinical Staff Rotation Program** – This rotation provides a 2-week immersive, peer-based training experience across our partner facilities, after which staff transfer the skills they’ve gained to other peers at their own facilities. We believe that this cross-learning is a significant factor driving high rates of adherence to standards across all of our partner facilities.

**Facility Improvement Planning** – Using the information gathered during the Health Facility Assessments, we create tailored work improvement plans for each facility. We generate these
plans through a collaborative process with the facility management teams. In order to achieve the goals set out in the facility improvement plans, we work with Health Facility Management Committees to implement a ‘Plan Do Study Act’ (PDSA) cycle as illustrated by the graphic.

**Community health workers**

Core to our model is the recruitment, training, supervision and payment of traditional birth attendants as Community health workers (CHWs). Traditional birth attendants are the women in the community who have delivered healthcare to their communities for generations. But, because they have been cut off from formal health systems, the home births they provide are often dangerous for mother and baby. We transform these women from the largest competitors to skilled deliveries to the greatest champions of maternal and child health. These transformed CHWs find and provide care to every pregnant mother, child under-5, and person living with HIV.

**Integrated Supervision Structure** — Incorporating government supervision is integral in pursuit of our mutual goal of universal access to health care. We train government community health assistants as supervisors for our community health worker cohort. The community health assistants use our mobile data collection system and a supportive supervision structure for community health worker management. This integrated structure is an important element of our collaboration with the Ministry of Health.

**Community Health Workers** — CHWs link mothers to the formal health system by identifying early symptoms of high-risk pregnancies, ensuring adequate maternal nutrition, and accompanying mothers for a safe, facility-based delivery. Next, each child is enrolled in our CHW program at birth, allowing us to manage immunization timelines and track growth. CHWs provide home-based screening for the deadliest childhood conditions, including malaria, pneumonia, respiratory infection, malnutrition, and diarrhea. When a child does get sick, CHWs provide care and treatment in the home and refer complicated cases to the local clinic—making certain that no child slips through the cracks. We employ community health worker-driven data by equipping our network of community health worker with tablets and our customized mobile application. The community health worker leverage this technology to monitor their caseload, collect data, and receive real-time decision support. Our approach ensures that illnesses are identified early, and no vulnerable community member slips through the cracks.

**Community Transportation & Referral System** - Community health workers work with a handful of motorcycle taxi drivers in each community unit who are trained as expert referrers. These drivers are given shifts to be on-call for emergency cases. Since community members already use motorcycle taxis for transportation, this system leverages an existing community structure to support healthcare access.

**Maternal Health**

We are engaging mothers at every step of their healthcare journey. Lwala community health workers identify pregnant women as they proactively visit homes in their village. Then, they link mothers to the formal health system, identifying symptoms of high-risk pregnancies, ensuring adequate maternal nutrition, promoting prenatal care visits, and supporting safe delivery at a facility. They also follow up on postpartum care, provide breastfeeding support, and educate new mothers on a range of contraceptive
options. Additionally, Lwala is improving maternal care at the health systems level. We are supporting government health facilities to improve the quality of prenatal and postnatal care. And, we are working with community committees to improve access to emergency transportation for pregnant women.

**Antenatal Care** – Antenatal care visits ensure healthy deliveries and protect both babies and mothers. Our community health workers make sure that every mother gets antenatal care. They map and enroll every pregnant woman into our community health worker program, ensuring that they attend 4 or more antenatal care visits before they deliver and educating them on pregnancy danger signs, diet, and behaviors. At the facilities, clinicians also provide education to mothers on a healthy prenatal diet, danger signs in pregnancy, and the importance of a birth plan.

**Skilled Delivery** – Our high skilled delivery rate speaks to the positive feedback loop we have created between our community health workers, the community, and our partner facilities. We harness the power of traditional midwives in the community and incorporate them into our community health worker cadre. These community stakeholders in turn drive clients towards the clinics, building goodwill and strong ties with the people we serve.

**Tackling Maternal Death** – Almost 99% of mortalities from obstetric hemorrhage occur in developing nations. We have partnered with Massachusetts General Hospital, Harvard Medical School, Kisumu Medical Education Trust, and the Ministry of Health to implement the WHO’s Obstetric Hemorrhage Bundle. The bundle approach uses misoprostol, the uterine balloon tamponade, the non-pneumatic anti-shock garment (NASG), and more to save mothers experiencing obstetric hemorrhages. A key component of the Obstetric Hemorrhage Bundle is the non-pneumatic anti-shock garment (NASG), which has been shown to reduce mortalities related to obstetric hemorrhages by 67%. This low-technology, reusable tool constricts blood flow to the lower extremities while redirecting blood flow to the vital organs, giving women an additional 72 hours to get treatment. The bundle will prepare every facility in Migori County to safely treat obstetric hemorrhage, effectively reducing maternal deaths.

**Child Health**

Lwala is changing this injustice through our community-led health model. Digitally empowered community health worker enroll all children at birth, track child growth, and ensure on-time immunizations. They provide home-based screening and treatment for the deadliest childhood conditions, including malaria, pneumonia, malnutrition, and diarrhea. Community health workers also connect children to local health clinics. Lwala works with community members, health workers, and government to ensure these local clinics have the resources, training, and systems to provide quality care from conception to adulthood – making certain that no child slips through the cracks.

**Elimination of Mother-to-Child Transmission of HIV** – We test every pregnant woman for HIV at her first antenatal care visit and again during labor. This allows us to enroll every baby born to an HIV-positive mother into the elimination of mother-to-child transmission component of our HIV program. This

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program provides the mother with specialized support throughout her pregnancy and immediately following birth. During monthly meetings, hospital staff lead educational sessions on drug adherence, infant feeding, and nutrition. In addition, an HIV-positive mentor mother provides counseling and support to encourage women to accept their status and be proactive about HIV care.

**Immunization** – Community health workers are dedicated to ensuring that every child in our community is vaccinated. At each household visit, community health workers check the child’s immunization records against the vaccines that they should have received. If the child is behind on any vaccines, they refer them to a health facility and sometimes even bring the vaccine directly to their household. This process is supported by our robust data system, which allows community health workers to track every child and ensure that no child slips through the cracks.

**Malaria Community Case Management** – We combat malaria in 2 ways: facility-based testing at our 9 partner facilities and through community case management. Equipped with rapid diagnostic tests and medication, our community health workers can diagnose and treat malaria cases in their clients’ homes. Our data shows that the malaria burden decreases significantly after the Ministry of Health conducts wide-spread indoor residual spraying. Therefore, we advocate for the Ministry of Health to repeat the spraying program every year.

**Helping Babies Breathe** – Birth asphyxia - when babies are born not breathing - is one of the major causes of newborn death in regions with limited resources. Helping Babies Breathe, a curriculum developed by the American Academy of Pediatrics, was designed specifically for this context and teaches lifesaving neonatal resuscitation techniques in the first minutes after birth. Helping Babies Breathe techniques have been shown to reduce neonatal mortality by up to 47% and fresh stillbirths by 24%.

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Adequate nutrition during the first 1,000 days between conception and a child’s 2nd birthday is one of the best investments in a child’s health, education, and wellness. Lwala provides preventative support to all pregnant and breastfeeding women, young children, and people living with HIV and other chronic illnesses. We screen individuals for vulnerability and provide a holistic package of support to get families on a long-term path to nutrition security.

**Prevention** – Community health workers provide nutrition counseling to all households and screen pregnant women, children, and people living with HIV for nutrition vulnerability. For expectant and new mothers, community health workers emphasize the importance of exclusive breastfeeding for the first 6 months of a child’s life and provide lactation support. Individuals are also provided routine vitamin supplementation and deworming treatment.

**Food Security** – If a household qualifies as high-risk of malnutrition our community health workers enroll the family into our gardening for nutrition program. Through this, qualified households receive counseling, fortified flour, nutrition training, gardening training, and seed inputs. This program supports families to identify, grow and prepare nutrient-dense foods. Gardening facilitators visit individual homes to provide gardening coaching and collaborate with community health workers to ensure the household gets on a path of food security.

**Clinical Care** - If a child is diagnosed with severe acute malnutrition, they are referred to the hospital for clinical care. These patients receive high-quality inpatient care, therapeutic food, and counseling for the family. Once the child is discharged, the family is enrolled into the gardening for nutrition program and a long-term care plan is developed with the community health worker.
Mother Care Groups – In mother-to-mother support groups, we provide expectant and new mothers with an integrated health package including family planning and maternal nutrition. We emphasize the importance of establishing a proper nutritional foundation for babies during the critical “golden window” of the first 1,000 days of life. To encourage teen mothers to join our mother care groups, we create groups specifically designed for teen mothers where they do not have to fear facing stigma from older mothers.

Early Childhood Development

In 2020, Lwala expanded our model with a new Early Childhood Development (ECD) program. This program uses play and cognitive stimulation to incorporate a child-centered approach to early learning. By integrating this program into our community-led model, we are addressing holistic outcomes for children in our communities through social, environmental, and developmental approaches.

The ECD program structure leverages the World Health Organization’s Nurturing Care for Early Child Development Framework. Community health worker in our innovation hub are establishing parenting groups for caregivers with children between 0 – 4 years old, and play groups for children to participate in play-based learning. Caregivers are supported to use locally available materials to develop toys and picture books. During parenting group sessions, community health workers provide training and support to the parents on maternal & child health, nutrition, sanitation, responsive and skillful parenting.

In addition to community-based programming, community health workers will provide ECD-focused education to caregivers with children under 4 during every household visit. They will be closely monitoring growth milestones and other key indicators through Lwala Mobile, a customized CommCare application that provides our community health worker and programs coordinators with real-time data.

Sexual and Reproductive Health

When women and couples have the tools to choose when they get pregnant, the result is better health outcomes for mother and child. Lwala understands that while women and girls may have a desire to access reproductive health services, relatives and community leaders are often the gatekeepers to these services. Thus, we increase confidential access to services, while challenging social norms and increasing buy-in for reproductive rights. We start by training and empowering community committees, male forums, community health workers, and youth advocates. Each of these groups plans and launches their own reproductive health initiatives to educate their neighbors, distribute and promote contraceptives, and confront cases of abuse.

Community Engagement – Our community engagement strategy is to create overlapping forums for conversations around reproductive health and rights. This approach allows us to reach a diverse set of the population in settings that feel most comfortable to them. Several of the engagement forums include:

Sexual and Reproductive Health Committees – Community reproductive health committees are at the heart of our model. These committees are made up of religious leaders, local political leaders (village chiefs), teachers, and a diverse group of men, women, and youth. Our committees promote contraceptive access, male involvement in

A Youth Peer Provider educates other teenagers on reproductive health.
contraception use, and family health in general. The committees hold regular advocacy events to discuss long-acting contraceptives, child protection and rights, and domestic violence. 50–70 people attend each event.

**Male Forums** – We conduct male forums on the topics of teenage pregnancy, adolescent and youth reproductive health, HIV/AIDS, maternal care, and more. Men are an essential target group because they are often the gatekeepers to women and children’s health. In male-only forums we directly explore norms of masculinity and create a safe environment for men to challenge each other on harmful assumptions. Men are also given a chance to look at contraceptive commodities and understand their uses and side effects. These forums take place in venues where men already congregate – motorcycle taxi stages, gold mines, local pubs, and football games.

**Youth Peer Providers** – This program is designed to make adolescents feel more comfortable talking about and accessing sexual and reproductive health services by delegating the services to people their own age. To remove barriers that may discourage youths from accessing contraceptive services, Youth Peer Providers are stationed in the community to ensure privacy and sensitivity. Our Youth Peer Providers distribute over 5,000 male condoms per month. At outreaches, community members can access informational material, STI and HIV testing services, and contraception.

**Twak Mar Rowere Radio Program** – Every Thursday afternoon we host a radio show focused on issues related to sexual and reproductive health, HIV, STDs, family planning, and gender-based violence. The show, whose name means “A sharing platform for young people,” features a different staff member or stakeholder each week. We have a rotating schedule of Youth Peer Providers, community health workers, community committee members, and healthcare providers that join the show. Each week, the hosts select a topic to discuss for the first half of the show, then they spend the second half taking listener calls and questions.

**Service Provision** – The goal of the service provision element of the model is to open as many access points to contraceptives as possible. We provide short-term and long-term methods consistently, and host designated clinic days for permanent methods.

Our various contraception distribution networks include:

**Health Facilities** – We support facility-based services with a focus on long-term methods, implants and IUCDs, at our partner primary care facilities. At our partner facilities, we provide reproductive health training, conduct on-site clinical mentorship, drive continuous quality improvement, and ensure a reliable supply of contraceptive commodities. Finally, we also partner with Marie Stopes to provide permanent methods during clinic days within government facilities.
Community Health Workers – We provide our community health worker with male and female condoms, two types of birth control pills, and emergency contraception to distribute to community members during their household visits and outreaches. As condoms and pills are short-term contraceptive methods, home-based distribution facilitates consistent contraceptive use by providing refills to clients directly in their homes. Community health workers also generate demand for long-acting reversible contraceptives such as implants and IUCDs. The community health workers refer their clients to a health center where they can access long-term contraceptive methods, creating a cycle of positive health-seeking behavior.

Youth Friendly Corners – We operate 7 Youth Friendly Corners to provide services to adolescents and youth. We’ve learned that while integrating family planning services throughout all clinical departments increases uptake for women who have already had a pregnancy, it discourages uptake from a critical age group – youth aged 14 - 24 without children. Young people are more likely to access services if they can do so away from the general patient population. Thus, we equip, staff, and supply youth friendly corners as separate spaces near government facilities. These corners provide games, youth leadership training, and access to reproductive health services in a friendlier environment than a typical health center.

Dial-a-Condom – Our Youth Peer Providers developed what they describe as “Uber for Condoms.” Youth in our communities are given mobile phone numbers for peers who have a consistent supply of condoms. They are able to order condoms on demand without having to travel to a health facility or risk being seen taking a condom from a public dispenser.

Sayana Press – Lwala’s Sexual and Reproductive Health Coordinator is a county-level Trainer-of-Trainers on Sayana Press in Migori County. Lwala spearheads the distribution of this injectable contraceptive to trained facilities. Sayana Press is an injectable contraceptive, much like Depo-Provera, which is approved for self-administration. Prior to Lwala’s training and distribution of Sayana Press, this innovative contraceptive method was unknown to the Ministry of Health.

HAWI – HIV and Water, Sanitation, & Hygiene Integrated Care

Lwala’s comprehensive HIV programming empowers people with HIV to lead healthy, productive lives, while eliminating new infections. All HIV-positive individuals and their allies are encouraged to join a program called HAWI (“Good Luck” in Dholuo). HAWI groups are trained in critical health topics and community organizing. Participants provide psychosocial support to each other and launch health initiatives in their communities. Each participant in HAWI is also regularly visited by a community health worker. Research shows that HIV-positive individuals are more susceptible to malaria, diarrhea, and other enteric diseases. Therefore, we implement WASH interventions in conjunction with HIV care to reduce the relative risk for malaria and diarrheal diseases among people living with HIV/AIDS.

Our HAWI model empowers community members to proactively address HIV and elevate WASH standards in their own communities. The model is composed of 5 key components: 1) Community Health Worker monitoring, 2) support groups, 3) WASH committees, 4) community-led total sanitation (CLTS), and 5) water infrastructure.

Community-Led Total Sanitation (CLTS) – Community-led total sanitation is a process to promote WASH practices in our villages with community members at the helm.

- First, community health workers train community groups on WASH topics. These new WASH champions then teach their own communities about WASH and support their peers to construct latrines, handwashing stations, and drying racks. We typically select the highest performing HAWI
clients to spearhead this community-led process because they are proven WASH champions.

- Next, community WASH groups promote proper WASH practices with their peers in their own communities. The leaders follow up with their neighbors and organize Action Days to construct latrines and safe water sources for those who are unable to construct them on their own, such as widows and the elderly.

- Finally, once the WASH groups have catalyzed their own communities to build WASH infrastructure, villages can declare themselves Open Defecation Free. This designation denotes that every household is covered by a high-quality latrine and handwashing station, which are used appropriately and without fail. The Ministry of Health then verifies that this designation is accurate and officially certifies the village as Open Defecation Free.

The highest performing community-led total sanitation villages who have achieved Open Defecation Free status then qualify for water infrastructure rehabilitation, which further improves WASH standards in their own community.

**WASH Committees** – Lwala activates community WASH committees who lead their villages in constructing latrines, building handwashing stations, and securing safe water. If a household is unable to build their own latrine, their neighbors step in to get the job done. As this happens, villages declare open defecation-free status, signifying community-wide sanitation. WASH committees work to move up the sanitation ladder, upgrading latrine infrastructure and securing safe water sources.

**Water Infrastructure Rehabilitation** – Once a village is certified as Open Defecation Free, it qualifies for water infrastructure rehabilitation. It is crucial to perform rehabilitation only in Open Defecation Free villages to ensure that improved water sources will not become contaminated. In addition, this criterion serves as an incentive for villages to accelerate Open Defecation Free processes.

**HAWI Outreach** – We hold WASH trainings in partnership with our trainer-of-trainers. At the trainings, community members learn about food-borne illness, handwashing, mosquito net use, latrine coverage, safe water practices, and more. During the outreaches, the Community Health Workers liaise with WASH-trained community members to provide education and share testimonies about the benefits of WASH and avoiding the repercussions of stigma related to HIV.

**HAWI Tournament** – Lwala hosts a HAWI soccer tournament in August every year. Over six days, teams from all over the sub-county enter the tournament, drawing crowds of over a thousand people per day. The crowd size and audience energy create a perfect environment for awareness campaigns and outreach activities. During the tournament, we station clinical officers at tents to provide HIV testing services, contraception, and maternal child health counseling.

**Support Groups** – We facilitate support groups for thousands of people living with HIV. Our support groups provide psychosocial support to clients who have historically been marginalized by the community. Through sensitization and ongoing community awareness raising, disclosure and discussion of HIV management has been accepted and supported by our community. The highest performing HAWI clients become WASH champions, a role that empowers them to lead their own communities through community-led total sanitation.

**Lwala Community Hospital**

Lwala Community Hospital is our center of excellence for providing quality clinical care and support services to the community we serve. Our services are at the cutting-edge of rural healthcare provision.
including mobile HIV-care enrollment, low-technology garments to address obstetric hemorrhage, and a high-capacity laboratory that can perform blood transfusions. In turn, our clinical staff provide training and mentorship to government health workers to increase the capacity of all health workers in the area.

**Quality Assurance**

**Clinical Standards Strengthening** – Lwala partners with Lifenet, PharmAcess, the Ministry of Health, USAID, and our own Quality Improvement Initiative to have routine assessments completed at the facility. These assessments critically examine the quality of care at our hospital and often are accompanied by additional technical trainings for our clinical staff. Between assessments, our clinical staff write concrete work improvement plans to address the identified weaknesses.

**Patient Satisfaction** – We survey patients from Lwala Community Hospital bi-annually on their satisfaction with the care they receive at our facility. The results from this survey inform our understanding of hospital procedure, perceived quality of care, and general client happiness.

**Clinical Mentorship** – Our Nurse Mentor conducts routine case observations in our hospital to spot-check whether our clinical staff’s services are meeting best practices. These observations are based on criteria dictated by the World Health Organization and the Ministry of Health, and staff are measured across several service delivery areas including labor and delivery, postnatal care, integrated management of childhood illnesses, and immunization, among others. Through these assessments, our Nurse Mentor determines areas for improvement and tailors her trainings to address them.

**National Health Insurance Fund**

As a level 4 hospital, we are eligible for reimbursements from the National Health Insurance Fund. We provide services for maternal child health and HIV free of charge and the reimbursements from NHIF help to offset that cost. Enrollment in NHIF and the maternity-focused Linda Mama government reimbursement program is crucial to both the financial sustainability of facilities, as well as the achievement of Universal Health Coverage. As such, we are dedicated to enrolling as many clients in these programs as possible through outreaches and our specialized records clerk.

**Baby-Friendly Hospital Initiative**

The Baby-Friendly Hospital Initiative is a global effort developed by the World Health Organization and UNICEF in 1991 to improve antenatal and postnatal care for women and their newborns by promoting and supporting breastfeeding practices. At Lwala, one of the ways we are implementing this initiative is by holding outreaches in the community to sensitize community members on the importance of exclusive breastfeeding and immediate initiation of breastfeeding during delivery. Our nutrition program works closely with our clinical team to demonstrate proper breastfeeding positioning and techniques to relay to mothers who deliver at our partner facilities.

**Non-Communicable Disease Care**

In order to combat the rise of non-communicable diseases (NCD) in our communities, Lwala Community Hospital is implementing a three-pronged approach: community outreaches, clinical outreaches, and NCD clinic days. During the outreaches in the community and at the hospital, we offer health education on NCD management and the risks associated with untreated NCDs. In addition, we hold NCD clinic days every Thursday during which we have a medical officer on standby ready to attend to all our NCD patients. By designating a specific day in the week for our NCD clinic days, we ensure that all of our clients are scheduled with adequate time and resources to support their questions and concerns. We initiated
these NCD clinic days after noticing that clients who came to the clinic for NCDs required additional time and attention to properly care for their needs.

**Open Maternity Days**

Held quarterly, Open Maternity Days invite expectant mothers and their families to engage with Lwala’s nurses and staff to understand what to expect on the day of delivery. Open Maternity Day offers women a space to share their fears about their upcoming deliveries and provide suggestions for how Lwala can best support the deliveries. During Open Maternity Day, we also take the opportunity to educate mothers on Respectful Maternity Care, patients’ rights, and the benefits of deliveries attended by skilled professionals. At Lwala Community Hospital, we support expectant mothers during their entire maternity journey, from conception and beyond.

**Education**

Lwala supports School Community Committees, composed of school officials and community members, to develop school improvement plans and launch their own solutions. We currently work across 13 government primary schools. While we provide technical support, training, and evaluation, School Community Committees carry out the design and implementation of initiatives. The education program spans various areas of youth achievement, from health to leadership to academics, while consistently incorporating a gender equity lens.

**Breaking Barriers**

**Broadened Horizons** – Increasing girls’ access to education and developmental pathways is critical to the progress of the communities we serve. The goal of the Broadened Horizons program is to mentor girls who have dropped out of school and to support them to re-enroll. To incentivize parents to keep girls in school, we provide small grants to help them pay for school fees. The parents attend weekly training sessions for three months, and we disburse a $30 grant per term. In addition, the girls themselves are given uniforms, books, and pens once they have re-enrolled in school.

**School Supplies for Girls** – Through our New Visions women’s sewing cooperative, we provide reusable pads and school uniforms to build the self-agency of girls to remain in school. By providing girls with these resources, we reduce two of the largest barriers to girls’ school completion – lack of money for uniforms and insufficient access to feminine hygiene materials.

**In-School Girls Mentoring** – As opposed to the Broadened Horizons program, which caters to girls who have dropped out, the in-school girls mentoring program employs thirteen mentors to reach at-risk girls in school with the goal of preventing dropouts.

**Innovation Challenge** – We developed the innovation challenge to engage teachers to design solutions to their own challenges. Participating teachers submit innovations to combat challenges in the areas of parental engagement, student performance, and teacher attendance, among others. Each year, we select the highest-potential ideas and support teachers to implement them in their own schools.

**Quality Education through Participation**

**School Community Committees** – School Community Committees are crucial to identifying challenges within the schools and implementing successful solutions to address them. In schools, headmasters, teachers, students, parents, and local leaders constitute major stakeholders with various interests and priorities that may converge or conflict. School Community Committees are composed of representatives from each of those groups and ensure that each of their constituent interests are met and every relevant viewpoint is
represented. In addition, schools often have difficulty lobbying the government for increased funds to improve school infrastructure. Without these funds, schools are unable to build bathrooms, athletic fields, new classrooms, or water tanks for their students to enjoy school and feel safe. Lwala increases the number of participating teachers, parents, and community members at School Community Committees meetings, while simultaneously improving their capacity to advocate and hold the Ministry of Education accountable. We also train these committees on effective advocacy techniques, and specifically engage them on key issues.

**School Development Fund** – Once School Community Committees are well organized, we support each school to establish a school development plan. Through our school development fund, we cost-share the implementation of the school development plans by providing in-kind support for materials and labor while the schools fund or fundraise for at least 40% of the cost. These projects typically include constructing new classrooms, water tanks, latrines, handwashing stations, and goal posts. With School Community Committees at the helm, schools have a greater ability to lobby for funds, hold the government accountable, and represent the diverse interests of the various stakeholders in primary education.

**Teacher Effectiveness** – Additionally, we believe in arming teachers with the resources necessary to better serve their pupils. We organize teacher exchanges so that lower-performing teachers can: learn through example from high-performing teachers, visit successful learning environments, and share ideas, successes, and challenges with other educators. Lwala also organizes learning sessions to encourage collaboration and creativity in the classroom. Additionally, we engage our teachers in selecting evidence-based training modules to bring directly to schools. This exposes teachers to cutting-edge pedagogy while keeping them at the forefront of teaching improvement.

**Teaching at the Right Level (TaRL) program** – TaRL is an evidence-based approach developed by J-PAL and Pratham to address the learning crisis in primary schools across Africa by equipping teachers with a teaching methodology that focuses on strengthening the basic foundational skills in reading and math in primary schools. Teachers at 5 of our schools are trained on the TaRL teaching curriculum, which focuses on supporting children who are left behind and ensuring that they can best address the individual needs for each child. By doing this, the focus of learning shifts from schooling for all to learning for all.

**Health**

**Youth Friendly Corners** – We operate a total of 7 Youth Friendly Corners in the communities we serve. These innovative health centers have a dual purpose: providing healthcare services, such as contraception, to youths in a private environment, and creating a safe space to spend time with peers when youths are not in school. Stigma and lack of anonymity are major barriers to adolescents and youth accessing contraceptive services. These Youth Friendly Corners are key in our efforts to reduce HIV infection and pregnancy among youth.

**School Health Clubs** – Every week, students and teachers at the government-run primary schools hold health club meetings. Over 2,000 girls and boys in grades 6 to 8 attend the clubs during after-school hours. The health club patrons are Lwala-trained teachers who implement a curriculum entitled Life Skills that discusses comprehensive sexual and reproductive health, contraception, gender-based violence, children’s rights, and more. We incorporate a curriculum entitled Young Love to address the high prevalence of intergenerational relationships that often lead to teenage pregnancy and HIV-infection. Since teachers often resist teaching sex education during class, the school health club program enables students to learn about sexual and reproductive health and other health matters after school.
**Better Breaks** – We hold 3 Better Breaks sessions every year to give kids a fun, safe, and educational activity to enjoy during school vacations. During Better Breaks sessions we administer pregnancy tests, provide contraception, and test kids for HIV. We survey the attendants of our Better Breaks sessions on topics such as contraception access, gender-based violence, and perceptions of safety in the community.

**Economic Empowerment**

**Village Enterprise**
To provide economic opportunities to our community, we partner with Village Enterprise, an expert in poverty graduation for the “ultra-poor.” Village Enterprise identifies the poorest members of the community through a poverty assessment. The assessment uses the Progress Out of Poverty Index (PPI), which measures household wealth and ranks households into four wealth categories. Those in the lowest category, ultra-poor, qualify to be enrolled into Village Enterprise, making them eligible for micro-grants and business skills training.

**Business Groups** – Village Enterprise groups all of the enrollees into 3-person business groups to receive training and start a business as a team. Village Enterprise provides each 3-person business group with a start-up grant of $100 USD and the entrepreneurs are required to contribute $10 USD of their own money to ensure their commitment. Village Enterprise supports farming, retail, livestock, and skilled service jobs.

**Business Savings Groups** – Village Enterprise makes groups of ten businesses, or thirty people, to create larger business savings groups. After covering their costs and paying themselves, the participants invest their profits into the business savings group. The participating businesses can then borrow from this common pool of money to grow their businesses and they pay interest on the loan to grow the money pool for the entire group. We track business savings groups from inception to graduation.

**Community Bank**
Lwala Community Bank is a savings and loans cooperative, which operates independently and provides pro-poor financing to staff and community members. The bank is designed to increase access to fair and reliable microfinance and financial products for rural communities. Each member pays into the bank when they join, and after six months they are eligible to begin taking loans from the common pool of money. The assets held by the bank grow as the borrowers pay back interest on their loans. The loan products are specifically designed for the community’s needs – focusing on agriculture and other small businesses. Lwala also supports mentorship by encouraging successful business owners to mentor newer members and to motivate other entrepreneurs to join the bank.

**Measurement**
Our Monitoring & Evaluation (M&E) system enables our team at Lwala, service providers, and government policy makers to make client-centered, evidence-based decisions. This means that we are building data collection systems while pushing analysis and conclusions at all levels of staffing, from frontline workers to government officials. We are using emerging technologies and platforms such as mUzima and CommCare to inform evidence-based decision-making and create information systems that drive systemic change.

Lwala’s performance M&E starts with an overarching impact framework designed to assess our collaboration with the community to improve overall health, agency, and wellbeing. The impact
framework consists of a suite of key performance indicators (KPIs) and associated targets aligned with our ambitious goals. We evaluate our progress on our KPIs and compare our results with external results on comparable indicators to understand our impact. Our KPIs are chosen because they are indicators tracked at an international level, in Kenya, and specifically in Migori County (e.g., rate of skilled deliveries).

**Program Evaluation**

Over five years, we are measuring Lwala’s multi-sectoral impact through a quasi-experimental stepped-wedge design, collecting repetitive cross-sectional survey data. Overtime, we’ll be able to look at relative changes in Lwala sites compared to control sites to better understand the impact of our interventions. The study focuses on maternal and child health, but also collects a wide range of socio-economic data to help us understand more about the drivers of health outcomes. The sampling frame factors in approximately 4,500 households and sample size was calculated using a binomial test to compare one proportion to a reference value. We use Cox regression models with clustering at the household level to estimate hazards ratios for survival analysis. We have completed 2 rounds of data collection to date. Over time, we’ll look at relative changes in Lwala sites compared to control sites to better understand the impact of our interventions. As the study progresses our evidence will increase in nuance and rigor.

Findings will be disseminated during routine meetings with all key stakeholders and will be utilized for policy and program planning as well as for quality improvement. This ongoing research and evaluation effort will provide both the hyper-local data needed to inform program implementation and generalizable conclusions about the effect of multifaceted, wraparound program strategies on health outcomes in low-income settings beyond this project.

**Research Partnership with Vanderbilt Institute for Global Health**

Faculty at Vanderbilt Institute for Global Health support Lwala’s Monitoring & Evaluation activities, and partner with us to publish academic studies. We also leverage the expertise of Vanderbilt biostatisticians to set up survey designs and analyze data.

**Technology-Enhanced Iterative Learning**

Lwala manages a data system designed for supervision on tailored client care and a sophisticated beneficiary-centered database. The system is built in a Salesforce platform, which houses health and demographic information for more than 50,000 individuals. Through a customized CommCare application, community health workers access and input information about their clients in real-time and the data is automatically updated in our database. All of our data is then uploaded to Power BI, a powerful analytics tool that allows for easy and instant data manipulation, transformation, and visualization.