All names of beneficiaries and their home locations have been changed to protect individual privacy. Photo images do not represent specific narratives in this report.
In 2018, we took a bold step in expanding our impact, doubling the population we serve. This is part of a larger effort to build a model county of community-led health, transforming how the 1 million people in Migori, Kenya access healthcare, and ultimately influencing the health system at-large.

We are driven to reach more communities facing the challenges of a struggling health system by one of our core values, neighborliness.

When our founders, Milton and Fred, got the opportunity to study in the US, it was their neighbors that sold chickens and goats to send them to Dartmouth. And when they returned to fulfill their father’s dream of building a hospital, it was their neighbors who oversaw the blueprints, donated land, and dredged sand to make it possible. This founding community believed that we are each other’s keeper.

Over twelve years, we’ve built a holistic health model that is driven by the power of neighbors banding together to make change. We have seen community committees lobby local government to connect health centers with electricity, ensuring 24-hour maternity services in facilities that were previously closed at night. We have seen villages launch campaigns to build latrines and declare their homes open defecation free. We have seen Community Health Workers identify sick children and treat them in their homes. We have seen neighbors encouraging each other to try a contraceptive method or finally get an HIV test.

The relationship between communities and their health care system is changing – and with it, health outcomes are improving. This year, we published a peer-reviewed study in a scientific journal, PLOS One, that shows a significant decrease in child death in Lwala communities. Child mortality has decreased from 105 deaths per 1,000 live births prior to Lwala’s intervention to 29.5 deaths per 1,000 live births in the last five years.

This evidence drives us to engage more communities with our lifesaving model. This next year, we will continue to expand our direct reach to a population of 90,000. And we’ll remain at the forefront of policy change with the Ministry of Health, to secure health care for all.

All of this is possible through the support of our neighbors and partners, like you. Thank you for standing with us!

In solidarity,

Ash Rogers
Executive Director

Julius Mbeya
Managing Director
Agency, Health, and Wholeness of Life

Founded by a group of committed Kenyans, we are building the capacity of rural communities to advance their own comprehensive well-being.

Lwala believes that communities have untapped potential to solve the world’s most pressing health challenges. We connect community innovation with university-backed research and evaluation to create drastic improvements in health outcomes.

We leverage our community 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.
COMMUNITIES
We start by organizing community committees to launch their own health initiatives around water, sanitation, & hygiene, HIV, reproductive health, and nutrition. We also train community members to participate on the governance committees of public health centers and equip them to hold the health system accountable.

DATA
Real-time data, collected by our mobile application, enables our team and government policymakers to make patient-centered, evidence-based decisions. This means we’re building systems that collect data while also pushing analysis at all levels, from frontline workers to government officials.

COMMUNITY-LED HEALTH MODEL

COMMUNITY HEALTH WORKERS
We recruit, train, pay, supervise, and digitally empower transformed traditional midwives to extend high-quality care to every home. Our Community Health Workers track pregnancies, encourage facility deliveries, ensure on-time immunizations, test and treat common childhood illnesses, provide contraceptives, and connect clients to health centers.

HEALTH CENTERS
We provide onsite quality improvement support and training to government health facilities. This support is built around the World Health Organization’s six health system building blocks: service delivery, health workforce, information systems, supply chain, finance, and governance. Our approach emanates from our center of excellence – Lwala Community Hospital.
PARTNERSHIP WITH KENYAN GOVERNMENT

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.

In 2018, we are proud to have run the first county-wide pilot of our obstetric hemorrhage initiative, supported policy change within Migori County to begin paying Community Health Workers, and shared our joint learning in national, continental and global forums.
Innovation Hub

Health Facilities
143,000 Patient Visits

Community Health Workers
204

Community Health Workers
7

Health Facilities

Kenya

Migori County

17 Clinics Served by Obstetric Hemorrhage Initiative

East Kamagambo
2018 Expansion

Central Kamagambo
2020 Expansion

South Kamagambo
2019 Expansion

Rongo Subcounty

North Kamagambo
2007 - Present Innovation Hub

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CHILD HEALTH

ENSURING EVERY CHILD CELEBRATES A 5TH BIRTHDAY

Children in rural Kenya die at a rate 12 times higher than children in the United States\(^2\). Nearly all of these deaths are preventable, with most children dying simply because they receive healthcare too late.

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

\(^1\) Kenya Demographic Health Survey (2014)
PEER-REVIEWED STUDY SHOWS LWALA WITHIN REACH OF SUSTAINABLE DEVELOPMENT GOAL

A peer-reviewed study of under-five mortality was published in 2018 in the journal PLOS One. Results show that prior to Lwala’s intervention 105 children under 5 died for every 1,000 live births. From 2012 to 2017 that rate dropped to 29.5 deaths per 1,000 live births¹.

While not directly comparable, Lwala’s rates outperformed the most recently reported under-5 mortality rates for our region, Nyanza Province (82 per 1,000) and for Kenya as a whole (52 per 1,000). Lwala is within reach of the Sustainable Development Goal of 25 deaths per 1,000 live births.

IMMUNIZATION RATE

PERCENTAGE OF CHILDREN WHO RECEIVED ALL SPECIFIED VACCINATIONS

<table>
<thead>
<tr>
<th>MIGORI COUNTY</th>
<th>57%¹</th>
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</thead>
<tbody>
<tr>
<td>2016 LWALA COMMUNITIES</td>
<td>94%</td>
</tr>
<tr>
<td>2017 LWALA COMMUNITIES</td>
<td>96%</td>
</tr>
<tr>
<td>2018 LWALA COMMUNITIES</td>
<td>97%</td>
</tr>
</tbody>
</table>

¹ Kenya Demographic Health Survey (2014)

WELL-CHILD VISITS

REGULAR CHECK-UPS FOR HEALTHY CHILDREN

<table>
<thead>
<tr>
<th>LWALA COMMUNITY HOSPITAL</th>
<th>11,218</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTNER FACILITIES</td>
<td>9,972</td>
</tr>
</tbody>
</table>
Central to our model is the recruitment of traditional midwives. These women have delivered healthcare to their community for generations. But because traditional midwives have been cut off from the formal health system, these births are often dangerous for mothers and babies.

We leverage the deep connections of these midwives and train, pay, supervise and digitally empower them as professionalized Community Health Workers. We transform these midwives from the greatest competitors of skilled delivery to the formal health system’s greatest champions.

Lwala Community Health Workers identify pregnant women as they proactively visit homes in their village. Then, they link mothers to the formal health system by identifying symptoms of high-risk pregnancies, ensuring adequate maternal nutrition and encouraging safe delivery at a facility. They also follow-up on postpartum care, provide breastfeeding support and counsel new mothers on a range of contraceptive options.
ENSURING MOTHERS SURVIVE CHILDBIRTH

Obstetric hemorrhage (uncontrolled bleeding) is the leading cause of maternal death in Kenya. Even if a mother delivers at a health facility, this condition may require that she receive surgical or higher level care to save her life. In an environment with poor infrastructure and limited emergency transportation, many mothers don’t make it to lifesaving care in time.

In response, Lwala partnered with University of California San Francisco and the Ministry of Health to deploy the low-cost technology of the non-pneumatic anti-shock garment. When applied to a woman in shock, the device provides *72 additional hours to get the mother to advanced care*.

We are deploying this life-saving intervention across Migori County.

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1. Kenya Demographic Health Survey (2014)
WORKING WITH COMMUNITIES TO PROMOTE HEALTHY TIMING AND SPACING OF BIRTHS

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.

THE CHALLENGE

UNMET NEED FOR CONTRACEPTIVES

Percentage of women of reproductive age who want to stop or delay childbearing but are not using contraceptives.

Regional Average: 23%
Kenya: 17%
USA: 9%

1. Kenya Demographic Health Survey (2014)
2. Ibid.
I wanted to preserve my health and focus my love on raising my four sweet children

– FAITH, MOTHER OF 4

Faith had tried long-term contraceptive methods, but experienced side effects and wanted a permanent solution. Her Community Health Worker shared information on a full range of options and Faith chose to have a tubal ligation at Lwala Community Hospital. She was so pleased with the results that she began sharing her experience with friends and neighbors. Faith spoke at Lwala outreaches and in community meetings, answering questions and debunking misconceptions. Thanks to Faith’s courage and community advocacy, 12 women followed her lead and selected tubal ligations.

CONTRACEPTIVE PREVALENCE RATE
PERCENTAGE OF WOMEN USING CONTRACEPTIVES

KENYA
58%¹

MIGORI COUNTY
44%²

LWALA COMMUNITIES 2016
62%³

LWALA COMMUNITIES 2018
78%⁴

REPRODUCTIVE HEALTH SERVICE VISITS BY YOUTH

LWALA COMMUNITIES

2016 2017 2018
6,600 8,100 13,300

COUPLE YEARS OF PROTECTION
A MEASURE OF BIRTH CONTROL PROVIDED, BASED ON THE NUMBER OF YEARS OF PREGNANCY PREVENTION IT PROVIDES

LWALA COMMUNITIES

2015 2016 2017 2018
3,477 5,771 9,291 14,833

¹Kenya Demographic Health Survey (2014)
²MEASURE Evaluation Pima (2016)
³Lwala Community Alliance Household Survey (2017)
⁴Lwala Community Alliance Household Survey (2018)
unweighted data, subject to change.
I’m grateful for the team that helped me get surgery during my strenuous labor. Without that support, I’m afraid my life or the life of my baby could have been lost. – LYNN, MOTHER OF 4

When Lynn realized she was pregnant with her fourth child, she contacted her Community Health Worker, Susan. Just like with Lynn’s previous 3 pregnancies, Susan visited Lynn regularly, helped her keep track of prenatal care visits and screened her for common warning signs.

Susan is Lynn’s neighbor and before training with Lwala she delivered babies in her home as a traditional midwife. Now, Susan provides her clients higher quality care with the support of a mobile application, consistent supplies for testing and treatment, a dedicated supervisor, and a team of nurses at the health center.

At the early signs of labor, Susan accompanied Lynn to the health center. However, the labor was strained and the clinician determined it was unsafe for Lynn to deliver vaginally. Lynn was referred to a higher-level hospital and the Lwala ambulance transported her rapidly. Qualified surgeons performed a successful cesarean section and Lynn soon returned home with a healthy baby girl, Mary.

Following the birth, Susan visited Lynn and Mary every week. She tracked Mary’s growth and checked for complications, paying special attention to signs of infection at Lynn’s incision site. Mary is now two months old, has gained nearly 3 pounds and has received her first round of vaccinations.
HIV CARE AND PREVENTION

BUILDING AN HIV-FREE GENERATION

Migori County is among the five counties with the highest HIV incidence rates in Kenya¹.

Despite major advancements in HIV prevention and care in other regions of the country, Migori County has lagged behind².

Lwala’s comprehensive HIV programming empowers people living with HIV to lead healthy, productive lives, while eliminating new infections. All HIV–positive individuals in our communities 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 regularly visited by a Community Health Worker.
AIDS-FREE GENERATION

The global UNAIDS target is to reach 90-90-90 by 2020.

I was terrified by my HIV diagnosis. But, through the support of my community, I regained the bright dreams I had for my baby. – EDNA, MOTHER OF 5

When Edna visited Lwala Community Hospital early in her fifth pregnancy, she was shocked to learn that she was HIV-positive. She wondered if HIV was the cause of death of her recently deceased husband and worried about the health of her unborn child. Edna was put on HIV treatment and immediately connected to Nick, a psychosocial counselor, and Milly, a peer mentor who had also given birth while living with HIV. Edna joined her local HAWI support group, which helped her build a latrine, handwashing station, drying rack and rubbish pit - important elements of a healthy home. She also enrolled in Lwala’s nutrition program and planted a nutrient-rich garden. Edna delivered a healthy baby boy, who recently reached 18 months old and tested HIV negative.

Only 2% of HIV-exposed infants supported by Lwala tested positive for HIV 18-24 months after birth, compared to 8.3% in Migori County as a whole.¹

¹ UNAIDS. Fast-track to an HIV-free generation. (2016)
IGNITING COMMUNITY ACTION FOR SAFE WATER

Water-borne illness is the number one cause of premature death in Kenya.\(^1\)

Improved sanitation has been shown to reduce diarrhea morbidity by 38\%\(^2\).

To achieve this, Lwala activates community committees who lead their villages in constructing latrines, building handwashing stations, and securing water sources. If a household is unable to build their own latrine, their neighbors step in to get the job done. Once villages are declared open defecation free, we work together to secure safe water.

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1. Institute for Health Metrics and Education (2016)
4. Lwala Community Alliance Household Survey (2017)
INVESTING IN THE LONG-TERM IMPACT OF NUTRITION SECURITY

Maternal malnutrition has a direct correlation with increased risk of infant death.  

45% of child deaths are linked to malnutrition.  

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 women and young children, screens for vulnerability, and provides a holistic package of support to get families on a long-term path to nutrition security.

BUILDING A LADDER TO NUTRITION SECURITY

TREATING ACUTE MALNUTRITION

Clinical Care – Intensified clinical training, longer hospitalization periods, designated nutrition unit, therapeutic food

FIGHTING CHRONIC MALNUTRITION

Food Security – Nutrition training, gardening training, seed inputs, fortified flour

PREVENTION

Maternal/Child Nutrition – Screening for nutrition, breastfeeding training, nutrition education, vitamins (A & zinc), de-worming

Priority Households – Community Health Workers follow-up daily after hospitalization, provide therapeutic food, provide fortified flour and enroll in long-term food security program


CLINICAL QUALITY IMPROVEMENT

SUPPORTING PATIENT-CENTERED HEALTH CENTERS

The Challenge
Government health centers are tasked with providing the majority of health services in Kenya. And yet, these facilities experience frequent shortages in staff, medicines, electricity, running water, and other essential resources. These systemic challenges reduce the quality of care provided to patients and feed distrust in the health system.

7 HEALTH CENTERS SUPPORTED

11% AVERAGE IMPROVEMENT IN QUALITY ASSESSMENT SCORE

5 FACILITIES NEWLY ESTABLISHED 24-HOUR MATERNITY SERVICES

5 FACILITIES DEVELOPED TRANSPARENT PHARMACY MANAGEMENT SYSTEMS
**LWALA COMMUNITY HOSPITAL**

**STANDING AS A CENTER OF EXCELLENCE**

---

**ACCESSIBLE CARE**

- **90%**
  - Of our catchment population has been treated at LWALA community hospital

- **59,000**
  - Patient visits

- **13**
  - Deliveries a week

**FREE CARE**

- Free care to pregnant women, children under 5, and people living with HIV

---

**QUALITY CARE**

- **99%**
  - Of our patients say they would recommend LWALA to a friend

- **94%**
  - Score on PEPFAR’s site improvement through monitoring assessment

- **12%**
  - Improvement on SAFECARE assessment

**CASE REVIEWS**

- Quarterly case reviews with Vanderbilt University Medical Center clinicians

---

**INNOVATIVE CARE**

- **MUZIMA**
  - Mobile application allows data collection and sharing between health workers in the community and the facility, creating a seamless patient experience and higher quality care

- **CLIENT-OWNED PATIENT RECORD**
  - In partnership with IBM Research we piloted a mobile application allowing patients with non-communicable diseases to own and manage their own patient record

**SAFECARE CERTIFIED**

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TACKLING A KEY DRIVER OF POOR HEALTH - EXTREME POVERTY

Lwala partners with Village Enterprise to implement their cost-effective poverty graduation model. The approach combines business training and mentorship with a start-up grant. We are empowering the rural poor to lift themselves out of poverty through income and savings generated from small businesses.

458
BUSINESSES STARTED

1,381
ENTREPRENEURS TRAINED

9,160
LIVES IMPACTED

INCREASE IN WEEKLY ANIMAL PROTEIN CONSUMPTION

INCREASE IN HOUSEHOLD SAVINGS

LWALA COMMUNITY BANK

We sparked the creation of a savings and loans cooperative, which operates independently and provides pro-poor financing to staff and community members.

$90,000
IN ASSETS1

135
MEMBERS

1 Unaudited data
EDUCATING GIRLS AS A POWERFUL LEVER OF COMMUNITY HEALTH

For every year a girl remains in school, the likelihood of an unwanted pregnancy or HIV infection decreases. And, studies show that children of educated moms have better health outcomes.

We work with 13 government primary schools, partnering with communities to launch their own solutions and advocate within the education system.

School-led solutions include: sexuality education, reproductive health access, provision of uniforms and sanitary pads, linkages to secondary scholarships, and digital access to textbooks.

And, through our Broadened Horizons program, we support girls who have dropped out due to pregnancy to re-enroll in school. We provide them mentorship, scholastic support, school materials, and a small cash transfer to subsidize costs.

REACHING GENDER PARITY IN PRIMARY SCHOOL COMPLETION RATES

<table>
<thead>
<tr>
<th>BOYS COMPLETION RATE</th>
<th>GIRLS COMPLETION RATE</th>
</tr>
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<tbody>
<tr>
<td>63%</td>
<td>54%</td>
</tr>
<tr>
<td>60%</td>
<td>56%</td>
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<td>58%</td>
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<td>56%</td>
<td>48%</td>
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<td>48%</td>
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</table>

LWALA COMMUNITIES


37% | 40% | 42% | 45% | 46% | 44% | 44% | 52% | 51%
EXTENDING OUR IMPACT THROUGH RESEARCH

In partnership with the Vanderbilt Institute for Global Health, we are producing peer-reviewed research designed to inform local policy makers and build the global body of knowledge around community health.

Among other studies, over five years we are measuring Lwala’s multi-sectoral impact through a quasi-experimental study design, collecting repetitive cross-sectional survey data to track key indicators like child mortality. Our baseline data collection kicked off in 2017 and we are actively surveying over 4,000 treatment and comparison households using Vanderbilt’s REDCap electronic survey tool.

COMMUNITY HEALTH IMPACT COALITION

Lwala joined 9 peer organizations to coordinate research and catalyze the adoption of high-impact community health design. This year, the coalition worked with USAID and UNICEF to update the Community Health Worker Assessment and Improvement Matrix and contributed to the World Health Organization’s guidelines on community health worker programs. Together, we are leveraging our knowledge and research for global impact.

TECHNOLOGY-ENHANCED ITERATIVE LEARNING

Through our customized CommCare application, Lwala Mobile, Community Health Workers collect data and receive decision support in real-time. With the addition of Salesforce analytics, our team and government policy makers are empowered to make patient-centered, evidence-based decisions. Through this system we track individual-level, longitudinal data across 12,000 households and counting.

Lwala is pioneering new ways to connect our clients and front-line staff with data-driven decisions that save more lives.

– VINCENT OKOTH, MONITORING, EVALUATION, AND LEARNING MANAGER
OUR TEAM

90 full-time professionals and hundreds of Community Health Workers bring together expertise in global health, community development, research, and operations management.

Ash Rogers  Julius Mbeya
Executive Director  Managing Director

Co-Founders: Milton Ochieng’ & Fred Ochieng’

Leadership Team: Daniele Ressler, Doreen Awino, Elizabeth Owino, Robert Kasambala, Rose Adem, Vincent Okoth, Winnie Oyugi

The Lwala Village Development Committee (LVDC), Kenya Board and Global Board are comprised of a diverse group of individuals committed to wholeness of life in Lwala & beyond

Board: Thomas Glanfield (Global Board Chair), Bonnie Miller, Chris Hobday, Dave Eilers, Elizabeth Carr, Fred Ochieng’, Jessie Adams, Joel Stanton, Lindsey Toomey, Melisza Mugyenyi, Milton Ochieng’, Susan Douglas, Richard Wamai, Gervasse Nykiyne (LVDC Chair), Shem Ooko, Charles Obong’o, David Odwar, Perpetua Okong’o, Charles Obunga, John Obunga, Rose Onyango, Samson Mbori, Robinson Mbori, Musa Odhiambo
I come from this area and have experienced the struggle of being a new mother. I like to share my knowledge with my people. – NANCY, NUTRITIONIST

Nancy had her first child as a teenager and moved into our community to be with her new husband. She was searching for an outlet for her talent and joined the first class of Lwala Youth Peer Providers. Nancy and her colleagues were tasked with advocating for youth access to reproductive health services. At the time, this was still a highly controversial topic in the community and youth contraceptive use was low. She spent her days in deep conversations with teachers, village elders, parents, and other young people. Over the course of that year, she witnessed a slow transformation in the community conversation around reproductive health and was proud to watch her peers begin using contraceptives and getting tested for sexually transmitted diseases.

The training she received from Lwala on self-agency and negotiating skills also impacted her personal life. She began talking with her husband about her dreams and he agreed to support her to go back to school.

The next year, Nancy pursued a diploma in nutrition and returned to Lwala in 2017 as an intern. From shadowing Community Health Workers, witnessing gardening trainings, and treating patients in the hospital, Nancy identified a need for a specialized nutrition program for our most vulnerable households. She tells of a particularly impactful client named Naomi:

“Naomi was suffering from mental illness and her two twins were severely malnourished. I began visiting them weekly, bringing them supplements and therapeutic food. I would spend time encouraging the mother and listening to some of the challenges she faced. Over time, the children gained weight and the household stabilized. Now that they are doing well, I no longer visit them as a health provider, I visit them as a friend.”

Soon, Lwala asked Nancy to join the team full-time and help us build up our nutrition program for priority households, just like Naomi’s. Nancy now balances clinical hours and home-visits with tailoring a new nutrition curriculum. Ask Nancy why she does what she does and she’ll tell you, “I come from this area and have experienced the struggle of being a new mother. I like to share my knowledge with my people.”
AGENCY, HEALTH, AND
WHOLENESS OF LIFE

www.lwala.org
Lwala Community Alliance
is a tax-exempt 501(c)(3)
nonprofit