

# "Empowering Families, Growing Futures: Improving Maternal & Infant Care in East Africa"

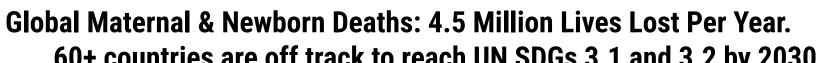


Rotary Program of Scale - District 9213 Application Overview - July 2024

#### **District 9213's Proposed Program of Scale in 2 minutes:**

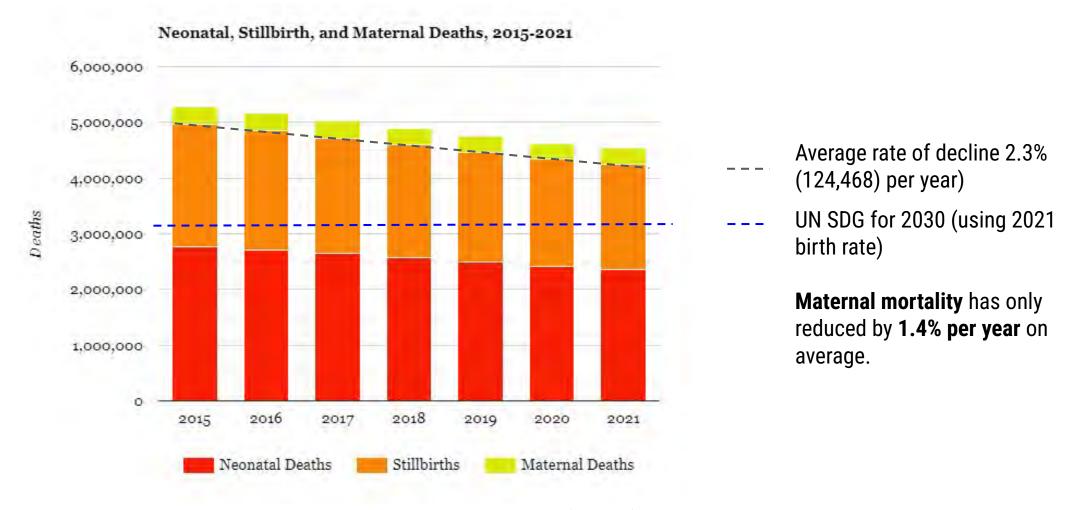








# 60+ countries are off track to reach UN SDGs 3.1 and 3.2 by 2030.



70% in Africa. >75% preventable and treatable (WHO).

Source: UNICEF



Neonatal Disorders are the leading cause of mortality in Africa.

#### **Top 3 Cause of Death in 28 African Countries:**

#### **#1 Cause of Death (8 countries):**

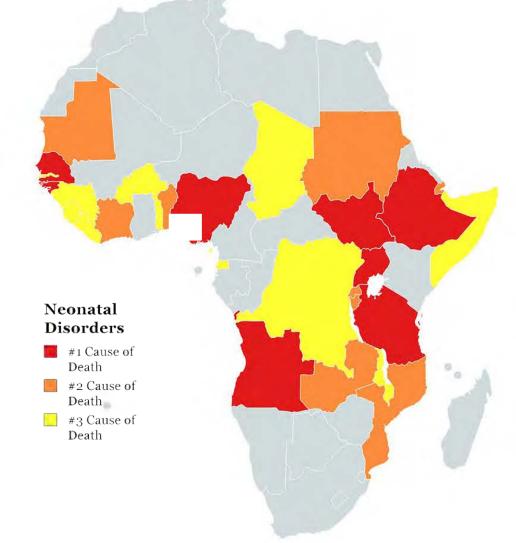
Nigeria, Ethiopia, Tanzania, Uganda, Angola, Senegal, South Sudan, Guinea-Bissau

#### #2 Cause of Death (9):

Sudan, Mozambique, Ivory Coast, Zambia, Rwanda, Benin, Burundi, Mauritania, Djibouti

#### #3 Cause of Death (11):

Malawi, Burkina Faso, Chad, Guinea, Somalia, Togo, Sierra Leone, Liberia, Equatorial Guinea, Gambia, D.R.-Congo



#### **Lifetime Maternal Mortality Rate\* (2020)**

\*Women 15 years and older dying due to pregnancy or childbirth complications

Sub-Saharan Africa: 1 in 41 women

East Africa\*\*: 1 in 58 women

South Sudan: 1 in 20 women

Burundi: 1 in 38 women

• Kenya: 1 in 52 women

Uganda: 1 in 60 women

Tanzania: 1 in 83 women

Rwanda: 1 in 95 women

#### Regional:

• Somalia: 1 in 25 women

• D.R.-Congo: 1 in 29 women

• Ethiopia: 1 in 86 women





#### **A Global Crisis:**

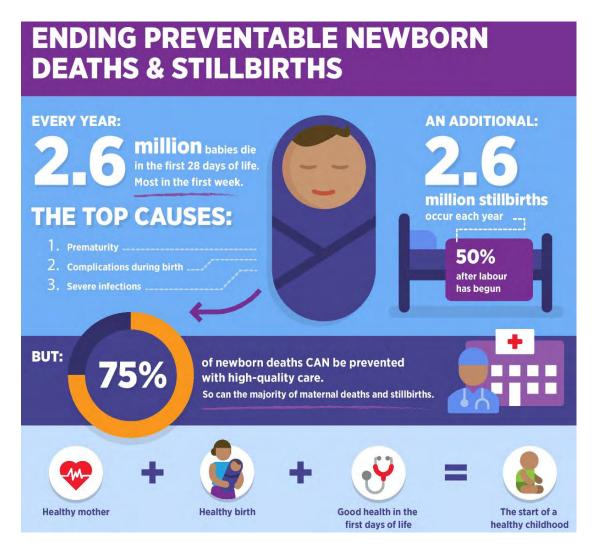
- 4.5 million deaths per year occur in pregnant women (290,000 maternal deaths), neonatal mortality (2.3 million) & stillbirths (1.9 million)
- Since 2015, global progress in reducing these deaths has <u>stagnated</u>
- Maternal death or disability poses major risk to infants, siblings, families...
- Many countries' public health facilities lack the training, equipment, and systems needed to deliver proven standards of care

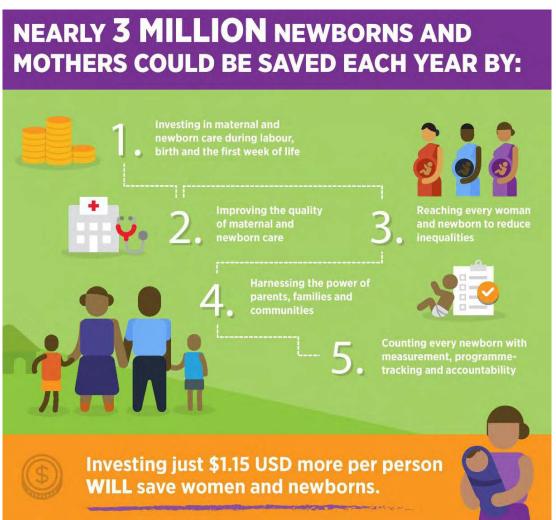
#### Most importantly:

- >60 countries not on track to meet UN SDGs for maternal and newborn mortality
- WHO estimates >75% of the causes of newborn and maternal deaths are preventable or treatable



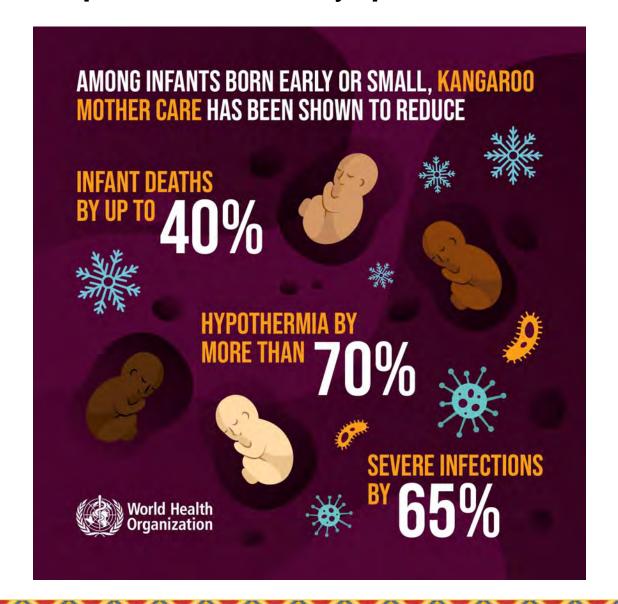
#### WHO: 75% or more of newborn deaths can be prevented with quality care.





# WHO: Kangaroo Mother Care reduces deaths for small or premature infants by up to 40%





- WHO KMC <u>global position</u>
   <u>paper introduction</u>
- WHO KMC <u>global position</u>
   <u>paper full report</u> (pages 1-3)



## **Uganda's Status:**

- In Uganda, neonatal disorders are the leading cause of death (<u>IHME</u>)
- 19 neonatal deaths per 1,000 live births in recent **UNICEF** data
- Neonatal mortality rate: 1 death per 50 births, or 2% of all newborns dying
  - Main causes include: asphyxia at birth, prematurity, and sepsis/infection
- Perinatal mortality: 19 deaths per 1,000 births (<u>UNIPH</u>).
  - Includes fresh stillbirths: >50% treatable or preventable with quality care
- Lifetime maternal mortality rate: 1 in 58
- Most Ugandan women give birth at health facilities
  - But 36% of Ugandan women give <u>birth at home</u> (p. 46)



#### Meet a baby named Miracle:

- May 2023: Born choking / not breathing in rural eastern Uganda
- Mother's life in danger
- 3rd hospital mother goes to provides a C-section free of charge
- Father calls home: "They are trying to save the mother, but the baby is lost"
- Maternity workers trained by Rotary and Bulamu Healthcare in WHO Essential Newborn Care did not give up
- Following ENC training: they assumed the baby might still be alive though no detectable heartbeat
- Born not breathing
- Resuscitated at birth & named Miracle!



8 months later: Miracle and her mother, both in good health



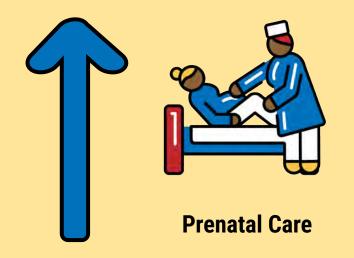
## Solutions exist. They must be delivered:

- Maternal and neonatal mortality have been reduced in many contexts through proven standards of care
- Implementing WHO Essential Newborn Care (ENC) standards can reduce neonatal mortality by up to 50%
- Maternal and newborn mortality have multiple simple, evidence-based interventions
  - ENC training, mentoring & ongoing Quality Improvement (QI) works
  - o Implementing "Helping Mothers Survive" maternal care standards: Comparable results
  - Contraceptive use has reduced maternal mortality by 44% (<u>Johns Hopkins</u>)
- In Uganda, Rotary, Bulamu Healthcare and partners have built a track record for improving MNCH and more, working on Ministry of Health priorities
- This is a crisis that Rotary can take action on at significant scale



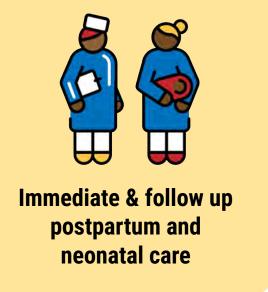
# Rotary can help more mothers receive quality care at public maternity facilities in Uganda & beyond:

#### What Leads to a Safer Birth Experience?











#### Low-cost, proven interventions are the key levers for change:

#### Delivering quality, respectful, improving care will result in:

- Increasing antenatal care: avoiding complications during pregnancy and at birth
- Increasing deliveries at professional health facilities
- Increasing women and infants receiving maternity/postpartum and neonatal care
- Services to increase include family planning for mothers and Kangaroo Mother Care for babies two low-cost interventions that are proven to reduce maternal, newborn & infant mortality rates

#### **Key levers to achieve sustainable change include:**

- Training, mentorship & support to deliver quality care
- Community Outreach to drive awareness and demand/use of health facilities' services
- Ongoing partnership and management



# "Empowering Families, Growing Futures: Improving Maternal & Infant Care in East Africa" Program of Scale Objectives:

- 1. Support Uganda's Ministry of Health to reach UN Sustainable Development Goals related to maternal and newborn mortality
- 2. Increase access to and delivery of quality, respectful care for mothers and newborns at **200+** public maternity facilities that deliver **175,000 babies** per year
- 3. Reduce maternal and newborn mortality at partner health centers, supporting more than 1 million mothers and infants (500,000+ births) over 4 years
- 4. Share learnings and best practices via Rotary in East African neighbors (Years 3-4+)
- 5. Help Rotary grow its public health programs that address pressing global problems at scale



## Rotary District 9213 & Partners' Maternal & Child Health Program:

- Health Worker Skill Building: WHO Essential Newborn Care and Helping Mothers
   Survive trainings in proven standards. Follow-on mentoring. Training of trainers,
   especially teachers at schools for midwives & nurses.
- 2. Maternal and Newborn Care **Equipment** (including CEmONC, ultrasounds with training at specified facilities)
- Support Systems (Emergency Transport referral app, C-section and family planning supplies & delivery tracking, etc.)
- 4. **Community Awareness:** Rotary clubs' engagement informs partner districts on importance of prenatal care, delivering at public health facilities & more
- 5. **Data-Driven Management** via MNCH dashboard now being piloted + QI mentoring for facility, district & overall leadership to drive action
- 6. **Leadership Network** for health workers (builds **Sustainability** via district champions who oversee future mentoring)



#### Who We Are:

- Rotary District 9213
- Uganda's Ministry of Health & 200+ partner public health facilities (based at 15-20+ Ugandan districts)
- 100+ Rotary Clubs and Districts pledging support
- Financial partners include: Stanbic and Centenary Bank (Ugandan Private Sector Federation leaders)
- Bulamu Healthcare (US & Uganda NGO, implementing partner)
- Imaging the World (US & Uganda NGO, implementing partner)
- Implementing partners include: Makerere School of Public Health, Northwestern University, and leading Ugandan neonatologists, OB/GYNs, and researchers
- Technical partners include: UNICEF, medical professional associations, the American Association of Pediatrics (developer of WHO's program), Laerdal Global Health, and USAID implementing partners in Uganda



#### Maternal, Newborn & Child Health (MNCH) Results since 2023:

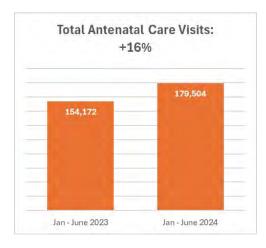
- Multiple global grants implemented over 5+ years
- "Model Districts for Maternal & Child Health" global grant underway
- **256** midwives trained in Essential Newborn Care serve at **109** public maternity health centers that delivered **70,000 babies** in 2023. **+36** trainers trained.
  - 100% of public maternity facilities' teams trained in 8 districts
- 60,000+ safer births supported (post-training)
- 1,500+ newborns successfully resuscitated at birth (post-training)
- Newborn Care Units trained & launched: 10 partner Health Center IVs
  - More than 1,000 small and sick newborns treated in NCUs since 2023
  - More than 90% of babies treated in NCUs treated within their home districts
  - Very important for babies whose mothers cannot afford to take them for care

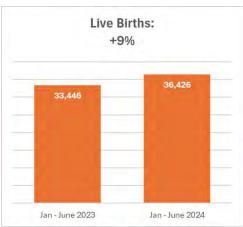
We now support more than **75,000 safer births** per year in **8 districts** (going forward)! When **12 districts** are trained, we will support **17%** of the population of Uganda.

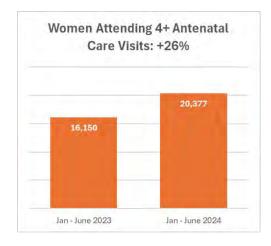


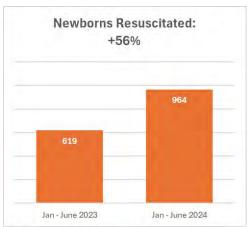


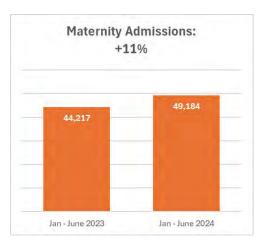
Comparing Jan.-June 2023 with Jan.-June 2024, from 109 Essential Newborn Care-trained health facilities in 8 partner districts in Uganda:

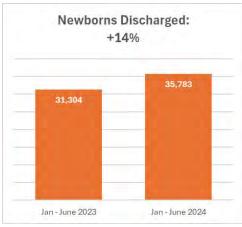














#### **Key Activities:**

- 1. Train **1,000** maternity workers at **200+** public health facilities in WHO Essential Newborn and Maternity Care (Helping Mothers Survive <u>program</u>)
- 2. Deliver MNCH equipment with training to **all** public maternity facilities in partner district. Goal of **200 health facilities** in approx. 15-20+ districts
- 3. Provide **Support Systems** to all partner districts
  - a. Emergency Transport referral app to help health facilities coordinate care
  - b. Monitor C-section and family planning supplies to improve service delivery
  - c. Maternity client treatment forms to support health workers to provide professional prenatal care, deliveries at facilities, and family planning
- Community Awareness led by Rotarians through existing community networks. Rotarian
   P.R. expertise → Text, radio campaigns + in-person
- 5. **Data Dashboards** help health workers & leaders review KPIs regularly, driving Q.I.
- 6. **Leadership Network** & capacity comes from integrated approach at scale



## Funding Summary: 5,000,000+ USD so far. More pledges likely

- 1. 2 million USD from Rotary International (if selected)
- 2. 250,000 USD cash from Rotary Districts and clubs globally (Estimate that may increase. Pledges are only for years 1-2)
- 3. 1 million USD from Bulamu Healthcare. 400,000 USD total from 2 major Ugandan banks
- 4. Gifts in Kind (Technical): 1.3+ million USD from MOH of Uganda, ITW-A, ADARA
- 5. More funders reviewing. Multiple potential donors need more time but will consider funding if Program of Scale proceeds
- Multiple pledged donors have expressed interest in renewing or increasing their pledges in years 2 on

Our plan for **5+ million USD** may increase to **6+ million USD total**.

# **WHO Essential Newborn Care trainings underway:**









# Kangaroo Mother Care Corners set up at 34 public health centers in Uganda in 2023:



Here, midwives practice helping mothers provide KMC as part of the WHO Essential Newborn Care training.

Through follow up mentoring, we have ensured KMC is now delivered at 109 partner health facilities.





# Before & After: Turning an empty room into a Neonatal Care Unit (NCU) at a community hospital



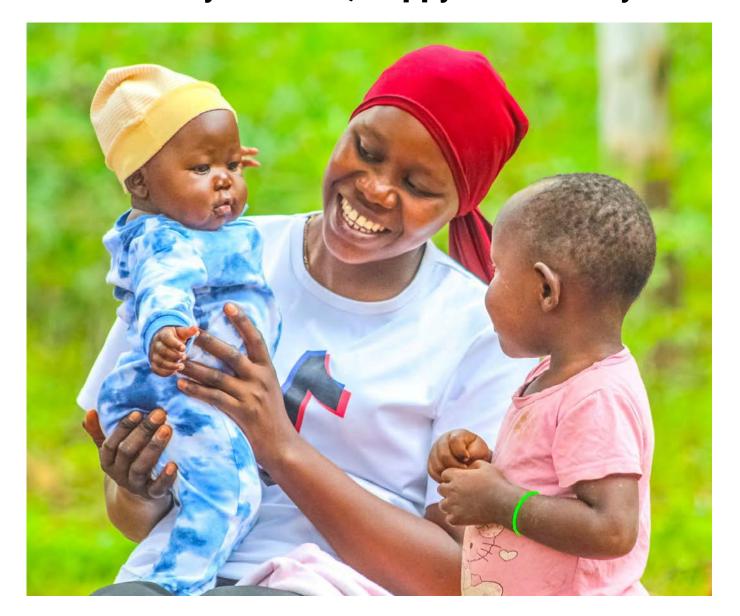
#### A baby receiving dignified care at her <u>local</u> HC IV's Newborn Care Unit:





## Months later: The same baby at home, happy and healthy...







#### Our Plan:

- Key ingredients for success in global health campaigns:
  - Committed group of partners with defined vision for success (UN SDGs or better for partner maternity facilities)
  - o Focus on what works: Delivering standards of care
- Builds on work underway through Rotary District 9213, MOH of Uganda, Rotary Clubs, Bulamu Healthcare, and Imaging the World Africa
- Rotary's community outreach capacity is core to making sustained progress
- Working through MOH (teams, facilities, and leaders), not separately
- **Timeline:** 4 years from August 1, 2025 to July 31, 2029



#### Main preventable causes of maternal & early neonatal mortality\* include:

- Maternal: Severe bleeding\*\*, infections, high blood pressure (pre-eclampsia and eclampsia), complications from delivery, and unsafe abortion
- Newborn: Asphyxia, prematurity, sepsis/infection

All are often preventable

All are addressed by WHO standards for quality maternity and newborn care Implementation gap (to ensure access to quality care) is a chasm. This program's focus. We address via training, mentoring & more. Integrated, multi-level interventions are key

<sup>\*</sup> Early Neonatal Mortality: Death during days 0-7 after birth.

<sup>\*\*</sup>A new <u>standard of care</u> for postpartum hemorrhage, the E-MOTIVE protocol, was published and WHO recommended in 2023. We have begun to support this protocol in Uganda.



#### **Community Outreach:**

- Opinion leaders from Rotary will be key to sharing vetted messages and information that leads to better public health outcomes
- Rotary Community Corps will oversee outreach messages proven to lead to better health outcomes. Rotoract Clubs will also support
- Stanbic (Uganda's largest bank) leadership and marketing team have offered support for the marketing materials for this campaign
- Many Rotary clubs in Uganda will "adopt" their local maternity facility to support upgrades to the facility, community outreach, and leadership engagement & oversight
- Messages will include: i) the importance of antenatal care for safe birth outcomes for mother and newborn, ii) the importance of delivering at a health facility with a professional health worker, and iii) spacing births (using family planning) as a way of improving health for both mother and children
- Free radio airtime is often given in Uganda for campaigns. Free SMS messages may also come from UNICEF's system or major telecoms (MTN or Airtel)



#### **Our Data Systems Approach:**

- At MOH of Uganda's request, Bulamu Healthcare developed an open source data system to support Maternal, Newborn & Child Health programs
- Multiple dashboard reports provide monthly data on facilities and districts
- This system provides timely insights and supports active management of the health system by using "data as an intervention"
- Built with MySQL database, selected by MOH of Uganda's IT leaders for future integration with MOH's national data system (DHIS2).
- 70 low-and middle-income countries use DHIS2 for their health data making future scaleup of our MNCH data dashboards inexpensive if countries ask for it
- Please see attached example dashboard reports in separate file



#### **Our Philosophy:**

- Focus on the 3 Delays that affect mothers and babies:
  - Deciding to get care, Getting to care, Receiving quality care
- Delays + Lack of access to Quality Care = Delivery gaps we address
- Focus on Quality: We will support providing quality care through 200 partner health centers. And will learn and prepare for further scale.
  - Quality = Technical (delivering standards of care) and experiential (respectful maternity care)
- Health equity as a global human right
- We set ambitious goals and plan to achieve or exceed them over time
- This crisis requires action appropriate to the scale of the problem



#### **Sharing & scaling best practices with East African neighbors:**

- After partner health facilities have reduced maternal & newborn mortality
  - & after they have met UN SDGs 3.1 and 3.2 (on average)
- In years 3-4, if these benchmarks are met, we will use <10% of the program budget to help</li>
   1-2 more countries in East Africa grow their Maternal, Newborn & Child Health programs
- Working with Rotary Club/District leaders, we would provide the most effective interventions from our program to MNCH leaders in neighboring countries.
- Interventions may include:
  - Train the Trainers (may be via American Assoc. of Pediatrics, which has recently provided online trainings for pediatricians/midwives in Rwanda and South Sudan)
  - Supporting trainers to deliver the training & mentoring
  - Data system to provide ongoing support (scales at very low cost, because it is already built)
  - Quality Improvement training and programs



#### Our approach to sustainability (1):

#### People:

- Sustainability starts by building the number of well-trained people and effective leaders who can lead in a field
- 100 trainers will develop at 3 levels:
  - District champions to ensure training in each partner district (30+)
  - Teachers at major schools for midwives and nurses (40)
  - National MOH trainers to continue the work throughout the country (30+)
- 1000 licensed midwives/maternity workers trained in WHO Essential Newborn Care and Helping Mothers Survive
  - = 100% of maternity workers at public health facilities that deliver babies in 15+ districts throughout Uganda (containing 17-20+% of the country's population)
- This will be a 10x increase in trained personnel for Uganda many of the trainees will develop into trainers themselves



## **Sustainability (2):**

#### Embedding the program in public institutions:

- MOH of Uganda is committed to sustaining this work on an ongoing basis
  - Overseeing policy, implementation (via MOH teams), and long-term financing
- 3 groups of people will be able to lead future trainings: District Champions, teachers at Midwifery & Nursing Schools, and MOH training teams & implementing partners
- Current institutions supporting this kind of work include: UNICEF, Global Financing Facility (Gates Foundation-led, World Bank managed), USAID, ELMA Philanthropies
- We have budgeted for the equipment needed and will donate to partner institutions

#### Results by mid-2029:

- >10x more people (both trainees and trainers) to carry this work forward
- "Whole system" approach will produce leaders, significant results, community ownership, and momentum
- Multiple teams will carry this work forward. Results may justify more funding & scaleup

#### **Theory of Change**

#### **ROTARY:**

Raising funds & resources
Catalyst for organizing partners (local & international)
Mobilizing volunteers



#### **PARTNERSHIPS:**

Ministry of Health of Uganda (MOH) 50+ Rotary clubs in Uganda and intl. Bulamu Healthcare (implementing partner) Imaging the World (implementing partner)

UNICEF. University public health leaders Prof. Medical Associations & CSOs



#### **INVESTMENT:**

The Rotary Foundation: \$2M Partner NGOs: \$2.1M & rising

District 9213 fundraising: \$1M & rising

TOTAL: \$5.1M & rising



#### **INPUTS:**

Rotarian leaders for MCH in Uganda Volunteers & Community Support Training materials Medical supplies and health systems Health workers & leaders (local & natl.)

#### **PRECONDITIONS:**

- WHO-endorsed trainings on proven standards of care
- Health workers who want to be trained in proven standards
- Communities motivated to reduce maternal and newborn mortality
- Rotary's network can address this crisis at scale

#### **OUTPUTS:**

- Licensed maternity workers trained to provide proven standards of care for mothers and newborns
- Health workers supported by equipment, mentoring and other health systems
- Social behavior change campaigns implemented
- Greater community use of health system for MCH care
- Rotary members active in 16+ districts & national MCH program

#### INTERMEDIATE OUTCOMES:

- 1,000 maternity workers trained and mentored in WHO Essential Newborn Care and Helping Mothers Survive deliver quality care to mothers and newborns
- 200 health facilities better equipped & supported
- 500,000+ mothers and 500,000+ babies receive quality maternity & newborn care over 4 years
- **100+** new trainers (including Rotarians)
- Improved referral options for maternal and newborn care
- MOH & public health systems strengthened
- Track record supports more Rotary MCH programs and funding, leading to further scale

#### LONG-TERM OUTCOMES:

- Reduced maternal and newborn mortality rates
- Improved care and wellbeing for mothers and newborns
- Partner health facilities meet and exceed UN SDGs 3.1 and 3.2
- Rotary-led campaign scales and shares lessons in more countries

#### s

#### **ASSUMPTIONS:**

- There is a major lack of WHO-aligned newborn and maternity care training & standard of care delivery in LMICs
- Women face a 1 in 41 lifetime risk of death related to pregnancy in Africa
- Most dangerous births happen at home or at facilities that cannot provide standards of care
- Best MCH outcomes: prenatal care and delivery at professional health facility
- More accurate data may show higher mortality rates in early years
- Ministry of Health and many partners' support will be key to national scale



Serve to change lives.

#### **HOW DO WE TRACK OUR PROGRESS?**

10% of RI funds for Monitoring & Evaluation
MCH Data Dashboard & Annual Reports
Learning improves implementation & scaleup



## "Empowering Families, Growing Futures" Operations Plan

	Current Rotary Work	Year 1	Year 2	Year 3	Year 4	4-Year Total
	2023 - July 2025	Aug. 25-July 26	2026-2027	2027-2028	2028-2029	
Number of Districts	8	7	10	13	16	16
Number of Maternity Facilities Served	75 (begun)	75 (continued)	100 (25 new)	150 (50 new)	200 (50 new)	200
Number of Births Supported	125,000	75,000	100,000	150,000	200,000	525,000+
Mothers & Newborns Supported	250,000+	150,000+	200,000+	300,000+	400,000+	1,050,000+
Intervention	Current Rotary Work	Year 1	Year 2	Year 3	Year 4	4-Year Total
WHO Essential Newborn Care: Unique Maternity Workers Trained Per Year	250	200	200	300	300	1000 maternity workers
Helping Mothers Survive: Unique Maternity Workers Trained Per Year	100	200	200	300	300	1000 maternity workers
Total Maternity Workers Mentored	250	400	600	900	1200	1200 maternity workers
MNCH Equipment: Total Facilities Reached	75 maternity facilities (begun)	75 maternity facilities (continued)	100 maternity facilities (25 new)	150 maternity facilities (50 new)	200 maternity facilities (50 new)	200 maternity facilities
New Ultrasound Equipment & Training	3 maternity facilities	4 maternity facilities	4 maternity facilities	4 maternity facilities	4 maternity facilities	16 maternity facilities
New MOH Trainers Developed (including midwifery school professors)	36	35	35	30		100 trainers
Support Systems: Total Districts Served	8 districts	8 districts	10 districts	13 districts	16 districts	16 districts
Community Outreach & Leadership Networks		8 districts	10 districts	13 districts	16 districts	16 districts
Ongoing Quality Improvement for MNCH, Improving Health Outcomes + Local Ownership for Sustainability		8 districts	10 districts	13 districts	16 districts	16 districts







A mother doing skin-to-skin (KMC) at a health facility where we provide training and ongoing management systems support.

For more information, please contact PDG John Magezi Ndamira (District 9213: <a href="magezindamira@yahoo.com">magezindamira@yahoo.com</a>) or Steve Jambor (RC Wilmette, <a href="magezindamira@yahoo.com">srjambor@launchagents.com</a>)