



Seed
GLOBAL HEALTH



Annual Progress Report

Seed Global Health Uganda
July 2021 - June 2022

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Letter from The Advisory Board Chair



The past two years have been unprecedented and monumental to health systems across the world and the African continent was not spared. Hit by a global pandemic of Covid 19, the world came to a standstill with a lot of unknowns, with a lot of anxiety and fear of how this pandemic would affect our specific countries and the African continent.

In March 2020, under the directive of H.E. Yoweri Kaguta Museveni, Uganda instituted a total lock down as a preventive measure for Covid 19 to allow the Ugandan health system to prepare for the anticipated cases of Covid 19 that may need advanced care from tertiary health institutions. The education system was also halted as schools ranging from kindergarten to tertiary institutions were closed. In 2021, Uganda experienced a second wave of the pandemic leading to another total lockdown and closure of educational institutions.

Despite these challenges, Seed Global Health reprogrammed and was able to quickly pivot to support the national Covid response since 2020. Seed Global Health partnered with the Ministry of Health and National Council for Higher Education to advocate and develop a blueprint for the safe reopening of health professional training institutions that was used both in 2020 and 2021 and will be used for future epidemics.

Besides the support to the national response to fight the pandemic, Seed Global Health continued its critical mission of training future health professionals while harnessing the skills of in-service clinicians to best serve the needs of the Ugandan population. Seed entered Year 3 of partnerships with five training institutions to provide quality training in the areas of emergency care and maternal neonatal and child health. Seed has done all this in collaboration and consultation with the Advisory Board to ensure alignment with national priorities. As Seed enters Year 4 with partners, Seed Uganda's focus will be on demonstrating impact and ensuring investments and efforts lead to better patient outcomes for our population.

I wish to extend my sincere gratitude to the outgoing Board Chair, Dr. John Baptist Waniaye, the entire Advisory Board, Seed's, Managing Director Impact and Innovation, Dr. Bonaventure Ahaisibwe, Country Director Ms. Irene Atuhairwe and the entire staff of Seed Global Health, partners, Seed educators, donors, collaborators and colleagues.

The resilience and steadfastness you have exhibited the past two years has been exceptional and has positioned Seed for great success. I look forward to enhanced accomplishments and health outcomes in the years to come.

For God and My Country,
Dr. Vincent Oketcho
Advisory Board Chair

Letter from The Country Director



In 2022, there remains an inequitable divide in the availability of comprehensive, quality health care for too many, driven in large part by critical shortages of skilled health workers. Seed Global Health (Seed) envisions a world in which a robust health workforce can provide quality, dignified health care for all.

The Covid 19 global pandemic highlighted the critical role of health workers in sustaining the health systems in the world. As a result, the World Health Organization named 2021 as the “Year of the Health and Care Worker”. These further cement the need for the world and Uganda to invest in the health workforce through training, advocacy and ensuring a conducive environment for the delivery of health services. Seed Global Health has been steadfast in investing and advocating for the health workforce and the past two years have further solidified the need.

During this period, we saw Uganda launch its first national emergency medical services policy in November 2021. This policy highlights the need to build human resources for emergency care. To meet this need, Seed Global Health in collaboration with the Ministry of Health led the establishment of an innovative approach to building capacity for emergency care through the national emergency medical services ECHO. This is an online tele-mentoring approach using the hub and spoke method to train health workers in the provision of emergency services. For the period of November 2021 to July 2022, the emergency medical services ECHO cumulatively trained over 4000 health workers across 400 health facilities in Uganda.

This and many more examples from across our partnerships demonstrate why we need to increase our investments and commitment to strengthening the health workforce if we want to have strong health systems and achieve UHC, ultimately saving lives.

I therefore invite you to read our Annual Report for the Year 2021-2022 in which we share with you our achievements and key lessons from our implementation. We are grateful to all our partners, donors and stakeholders for your support, collaboration and partnership without which we would not achieve what we have this year. We continue to count on your partnership and collaboration in the coming year and beyond.

Warmly,

Irene Atuhairwe

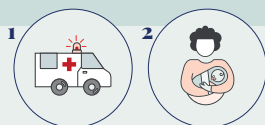
Seed Uganda Country Director

Overview

Our Vision & Mission

Seed envisions a world in which every country is strengthened by a robust health workforce to best meet the health needs of its population. We aim to do this through educating a rising generation of health professionals to strengthen access to quality care with a goal of saving lives and improving health.

Our Goal in Uganda



Seed's theory of change is grounded in the belief that people are among the most important levers of change in the health system. Physicians, nurses, and midwives have the expertise critical to addressing the triple burden of communicable and noncommunicable diseases and emerging threats — like COVID-19 — with which Uganda grapples.

Our goal in Uganda is to enable access to high-quality emergency care¹ and maternal, newborn, and child health² services that improve the well-being of those who seek them.

Our Strategic Pillars

Seed has served as a partner to the Government of Uganda since 2013. We work in all regions of the country alongside partners ranging from the Ministry of Health, to health facilities, to public academic institutions to strengthen the health system through evidence-based and locally-led solutions.

We work with students, faculty, clinical providers, institutions, and policy makers nationally across three core interrelated pillars: **education, practice and policy.**



EDUCATION

Strengthen health professional education by engaging partner institutions and their faculty and staff so that they are better able to provide quality teaching/training in medicine, nursing, and midwifery.



PRACTICE

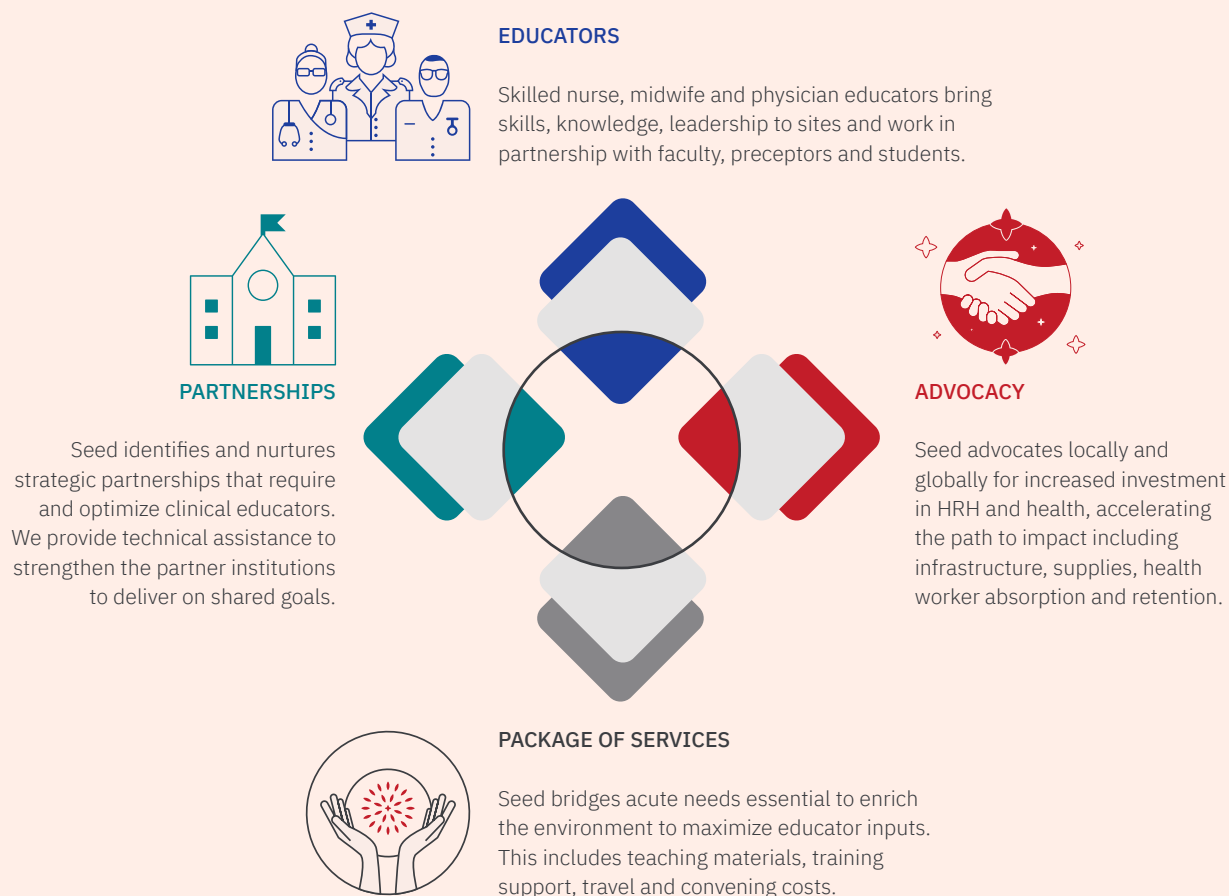
Enhance the quality of clinical practice by strengthening the skills of local health providers, faculty, and students/trainees through mentorship and training.



POLICY

Advocate nationally and globally to elevate policies that support strong health professional education and practice and create an enabling environment for health workers to deliver care.

Our Model



We collaborate with the government and our partners to:

- ⊕ Equip current and future physicians, nurses, and midwives with the knowledge and skills to deliver quality integrated emergency care and MNCH services.
- ⊕ Shape graduates into well-rounded community-based practitioners who deliver patient-centered emergency care and MNCH services and can train the next generation of providers.
- ⊕ Build leadership capacity for health professionals throughout the emergency care and MNCH systems and hone their skills so they can advocate for health care and practice policies, and provide lifesaving care to populations they serve.

One of Seed's core strategies, and often a primary entry point for its partnerships, centers on placing skilled and qualified educators (midwives, nurses and physicians) at partner institutions for a minimum of one year. Seed also supports educators, partner institutions and health system policies through a diverse and complementary package of services aimed at advancing health professional education in the classroom and clinical setting and enhancing health professionals' ability to deliver services effectively and sustainably where needed most. These services range from curriculum, training support, technical advice to policy.

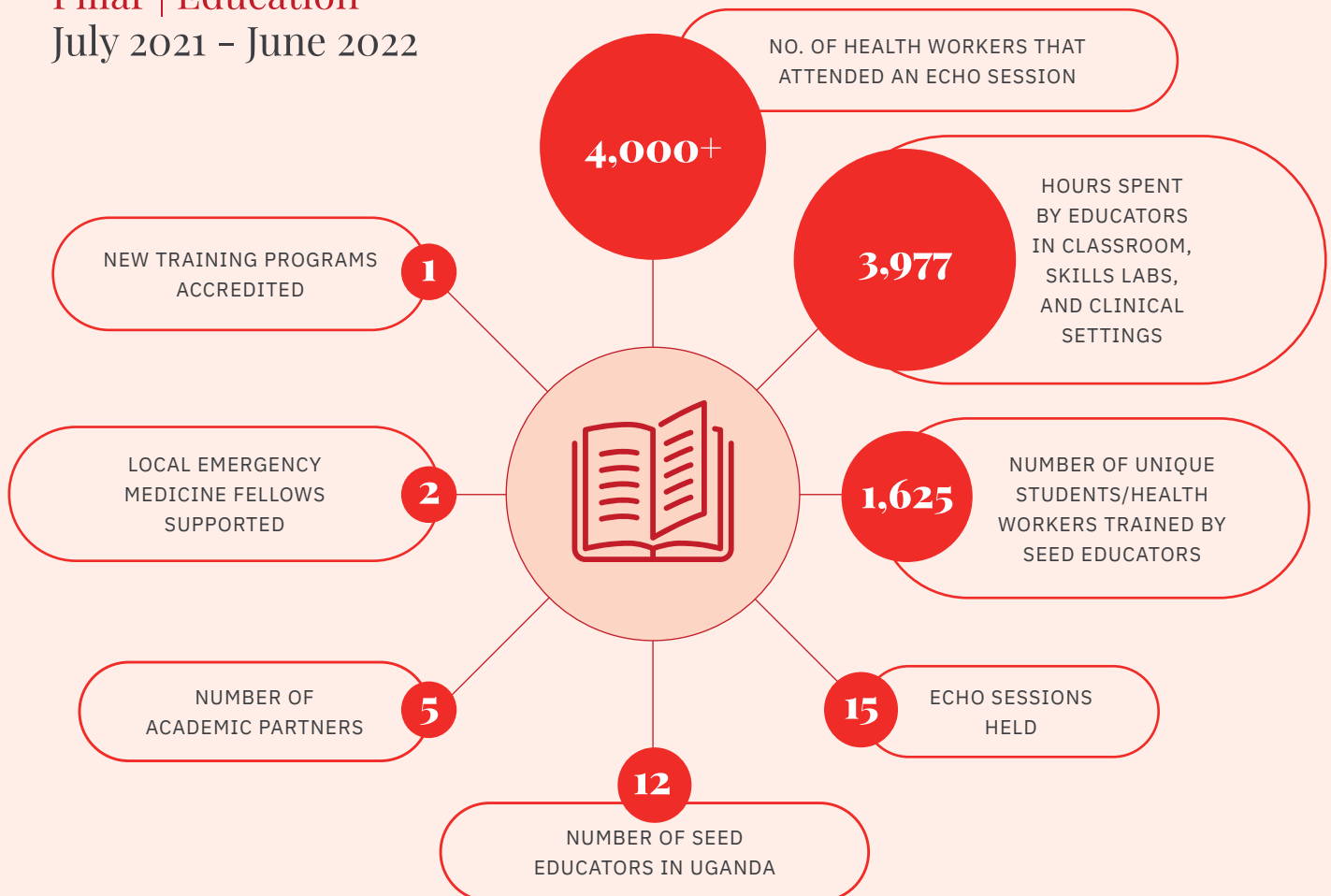
At a Glance

Seed's efforts this past year supported the Government of Uganda and institutional partners across the country to identify and innovate new ways to address COVID-19, in addition to upskilling and educating providers in our two priority areas of emergency care and in maternal, child, and newborn health.



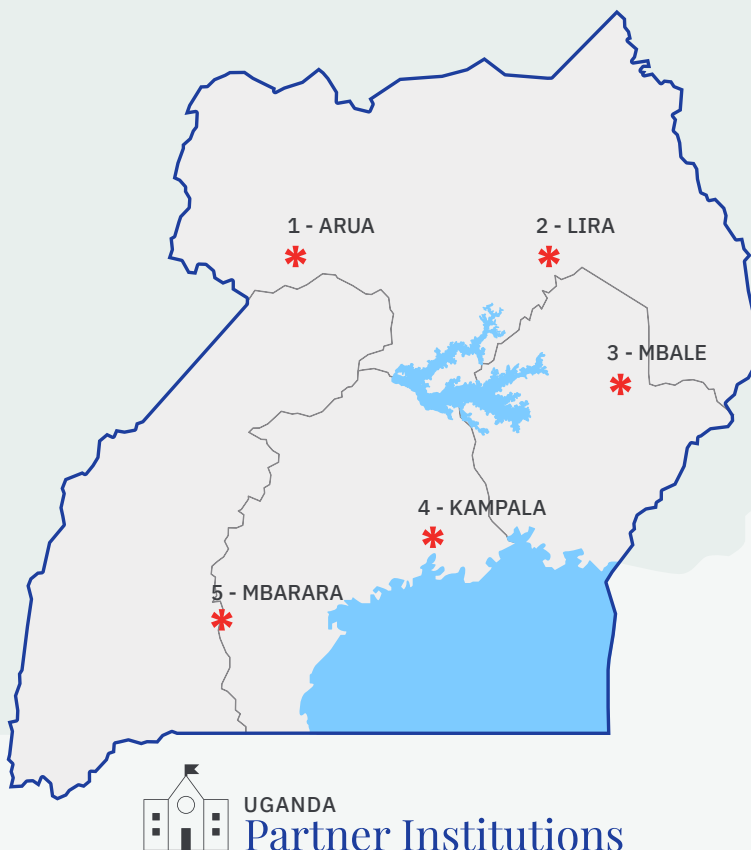
Pillar | Education

July 2021 – June 2022



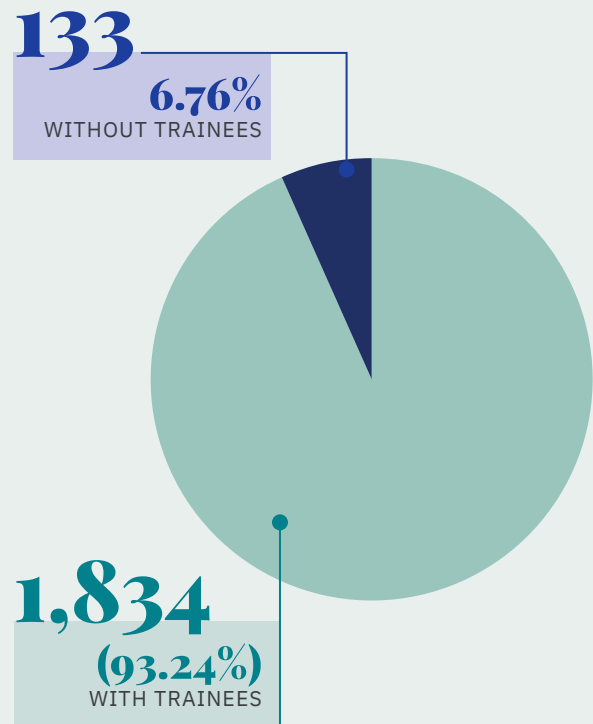
During Year 3 of our partnerships with Muni University, Lira University, Busitema University, Makerere University, Mbarara University of Science and Technology, Seed educators continued to be a critical input to provide classroom and clinical teaching, curriculum development, and mentorship related to the provision of emergency care and maternal, neonatal, and child health conditions. This past year, Seed educators mentored faculty and taught undergraduate and graduate students in midwifery, pediatrics, emergency care, and general nursing programs.

During this time of COVID-19, Seed also supported scaling up and rolling out virtual classrooms and remote learning, providing trainings to faculty and preceptors, supporting curricula adaptation and integration, and ensuring resource support for updated hardware and software needs. The Emergency Medical Services ECHO virtual education program was also successfully developed, piloted and scaled during this period.



1. MUNI UNIVERSITY
2. LIRA UNIVERSITY
3. BUSITEMA UNIVERSITY
4. MAKERERE UNIVERSITY
5. MBARARA UNIVERSITY OF SCIENCE & TECHNOLOGY

Patient Encounters

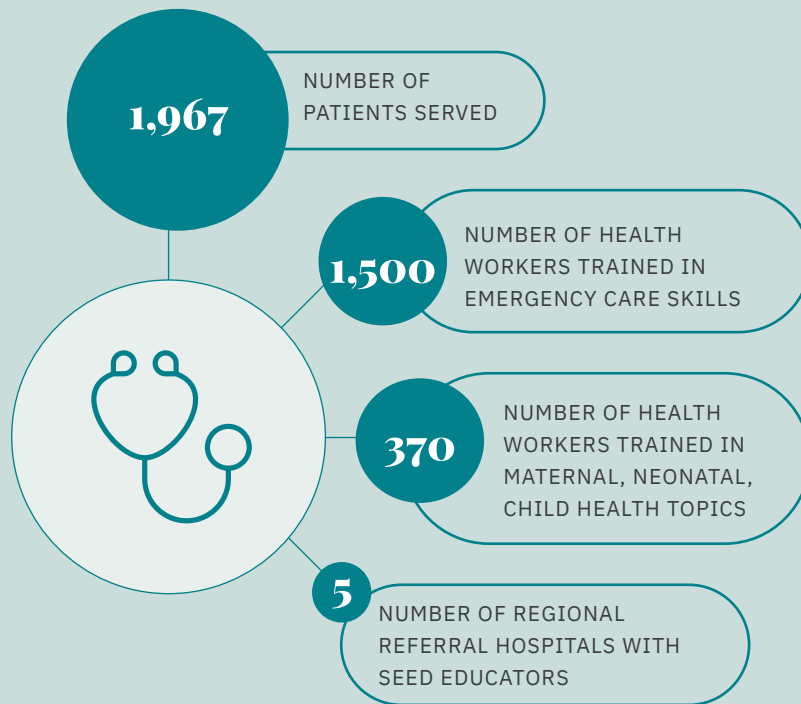


Additionally, in March 2022, Seed-supported consultants completed and formally submitted a series of 'First Measurement' reports. These reports, initially delayed due to the COVID-19 pandemic, provided analysis related to the current knowledge, skills, practices and infrastructure of the five institutional partners with whom we work (listed in map on left). Partners were a key collaborator in this project, and were involved in different stages of the exercise to ensure that it captured core aspects of the partnership in a meaningful way. Based on the findings of the reports, Seed has continued to refine its objectives, activities, indicators and measurement strategy with each partner to ensure we are targeting areas of need, and utilizing appropriate tactics to demonstrate impact.



Pillar | Practice

July 2021 – June 2022



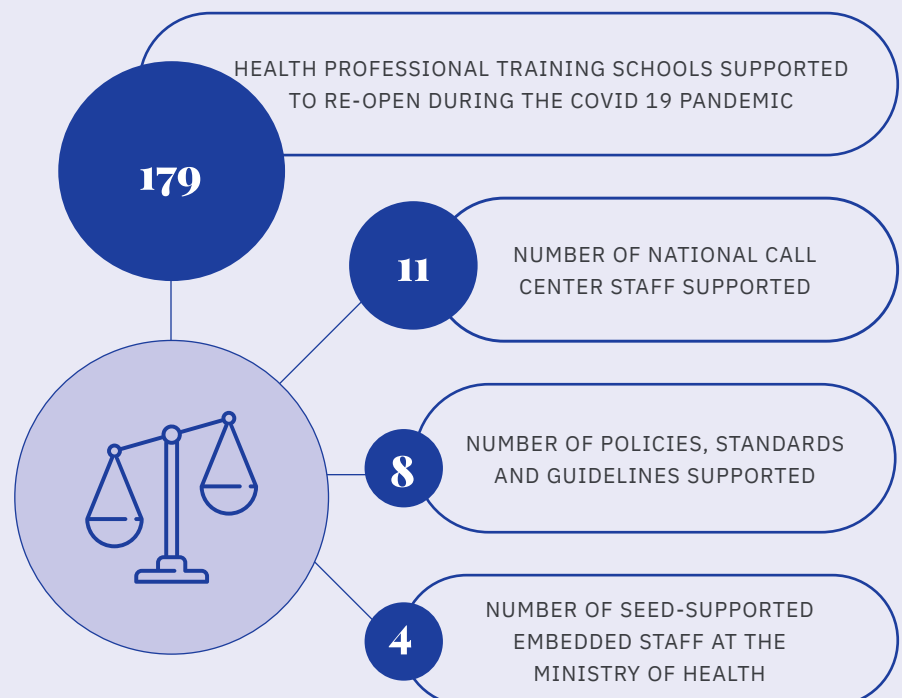
In addition to classroom teaching, Seed aims to build the capacity of the health workforce through enhancing the quality of clinical practice. In 2021-2022, Seed and partners strengthened the skills of thousands of local health providers, faculty, and students/trainees through mentorship and training. This was accomplished through bedside teaching, in-service professional development, training-of-trainers programs and quality improvement initiatives.

During the COVID-19 pandemic, Seed also facilitated critical personal protective equipment (PPE) to both institutional partners and other facilities so clinical practice could continue safely.

Over the past year Seed has collaborated with the Government of Uganda, Ministry of Health and Ministry of Education and Sports to ensure conducive policies and strategies are in place to enhance quality health professional education and strengthen the health workforce, all amidst the COVID-19 pandemic. This ranged from assisting with the development of the new National HRH Strategy 2020-2030, to creating guidance for the safe reopening of medical schools during COVID, to providing input to the National Emergency Services Strategic Plan 2018/19 – 2024/25, and supporting the development, approval and launch of the first ever, National Emergency Medical Services policy.

Pillar | Policy

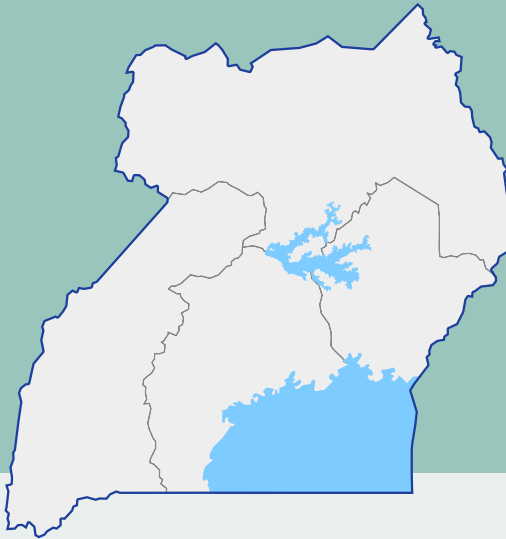
July 2021 – June 2022





Progress & Achievements

Emergency Care



Uganda

POPULATION (2020)

45.7 MILLION

DEATHS (EMERGENCIES)

1,191 / 100,000

DALYS (EMERGENCIES)

52,441 / 100,000

Uganda experiences one of the highest morbidity and mortality burdens from emergency-related conditions in the world, with leading causes of death attributable to acute illness and injury in rural areas: infections, dehydration, injuries, and acute exacerbations of chronic illnesses. Over half of deaths in low-income countries, such as Uganda, are caused by conditions that could be addressed by effective emergency care¹.

Compounding the inadequate emergency care system is the limited number of trained emergency care professionals: less than 9% of emergency ward staff have received specific training on management of a medical emergency, fewer than 27% of all medical facilities have permanent staff in their emergency units, and less than 25% of Level IV Health Centers offer 24-hour emergency care². Due to the nascent field of emergency medicine in Uganda, there are only two accredited programs nationwide to train physicians in emergency care at a graduate level.

Recognizing this, the Government of Uganda has identified emergency care as a priority investment, including development of service delivery, training, monitoring, and evaluation of

emergency care service provision in the country. Between July 2021- June 2022, Seed worked closely with public universities & training facilities in Uganda as well as the Ministry of Health (MOH) to support:

- ⊕ Emergency care mentorship training, including embedding physician and nurse educators at regional hospitals and academic institutions
- ⊕ Development of a comprehensive emergency medical services policy and emergency care guidelines and standards
- ⊕ Streamlining of the national emergency care referral process, and contribution to the establishment of a call and dispatch center
- ⊕ Creation and rollout of the national Emergency Medical Services ECHO telementoring program that has trained over 4000 health workers
- ⊕ Implementation of the 2022 Uganda Emergency Care Conference

1 Improving emergency care in Uganda. Bull World Health Organ. 2019 May 1;97(5):314-315.

2 Ningwa, A., Muni, K., Oporia, F. et al. The state of emergency medical services and acute health facility care in Uganda: findings from a National Cross-Sectional Survey. BMC Health Serv Res 20, 634 (2020).

Emergency Care

Institutional Partnerships



Seed Educator, Katie Anderson, leads a five-day WHO Basic Emergency Care course for nursing students at Makerere University.

For the past four years, Seed has worked with the following academic partners, and their associated practice facilities, to improve the quality of emergency care training. Seed has supported these institutions with year-long expert educators and resources to build the capacity of students, faculty and staff. Below are their goals, objectives and achievements during 2021–2022.



PARTNERSHIP

Makerere University College of Health Sciences

GOAL

By 2025, Makerere College of Health Sciences students and faculty demonstrate competency in research, teaching and clinical practices in emergency care and establish the Intensive, Perioperative and Emergency Care (INSPIRE) Institute

OBJECTIVES

By 2025:

- ⊕ Emergency medicine (EM) residents are trained to become competent emergency care practitioners
- ⊕ Undergraduate nursing students acquire and practice key emergency care knowledge and clinical skills
- ⊕ The Masters in Emergency Nursing is approved by the University Council and NCHE and is ready for implementation
- ⊕ The INSPIRE Institute, Emergency Medicine and Nursing Departments support and improve didactic and clinical teaching in emergency care at teaching sites

ACHIEVEMENTS

- | | |
|---|---|
| ⊕ Supported the retention of 2 EM residents as Seed Fellows to support the education pipeline for emergency care practitioners | ⊕ Integrated the World Health Organization's basic emergency care program into Bachelor of Nursing Science, Master of Nursing of Pediatrics and Child Health, Master of Emergency and Critical Care Nursing programs. |
| ⊕ Determined a business plan and organizational structure for the INSPIRE Institute | ⊕ Conducted a 5-day basic emergency care training for 48 students. |
| ⊕ Operationalized an EM mentorship program | ⊕ Created and operationalized Emergency Medicine social media platforms to disseminate updates on the program, and provide educational and informative emergency care information. |
| ⊕ Developed an ultrasound curriculum | ⊕ Emergency Nursing Program participated in community outreach to provide health education and preventive medicine. |
| ⊕ Received approval of Masters of Emergency and Critical Care Nursing curriculum at Makerere Nursing Department level; has been sent to School of Health Sciences for review. | |
| ⊕ Facilitated basic life support (BLS) training-of-trainers course to train 10 faculty and clinical instructors, who cascaded the BLS training to 40 Nursing students at Makerere University. | |



PARTNERSHIP

Mbarara University of Science and Technology

MBARARA REGIONAL REFERRAL HOSPITAL

GOAL

By 2025, MUST residents, faculty and clinical staff deliver quality emergency care to patients at Mbarara Regional Referral Hospital's emergency department

OBJECTIVES

By 2025:

- ⊕ MUST EM residents acquire knowledge and skills to deliver emergency care
- ⊕ The MUST/Mbarara Regional Referral Hospital emergency medicine department has improved capacity to deliver quality emergency care
- ⊕ MUST EM residents advocate for emergency care locally and nationally

ACHIEVEMENTS

- ⊕ Published 2 EM resident dissertation manuscripts in African Journal of Emergency Medicine and BMJ
- ⊕ Hired a MUST EM graduate as faculty to sustainably boost the MUST EM department, increasing retention of graduates from 20% to 40%
- ⊕ Established a formal mentorship program for 3 local EM faculty
- ⊕ Conducted 2-day pediatric advanced life support course for 16 EM and pediatric residents
- ⊕ Hosted a continuing medical education session for Mbarara Regional Referral Hospital staff on adult triage and emergency medical activation protocols
- ⊕ Revised the MMed EM curriculum which was approved by the MUST Senate Board
- ⊕ Developed the MUST-EM website to showcase EM, MUST EM and share opportunities, cases and patient approaches
- ⊕ 67% of MMed program students completed their dissertations and 1 graduated in May 2022
- ⊕ Implemented specialized rotations including Muhimbili National Hospital (Tanzania) and Nakasero Hospital Kampala
- ⊕ Hosted keystone course for both MUST and Makerere first year residents
- ⊕ Created a transition plan for the emergency department at Mbarara Regional Referral Hospital to be under emergency medicine leadership.



PARTNERSHIP

Busitema University Faculty of Health Sciences

MBALE REGIONAL REFERRAL HOSPITAL | MBALE COLLEGE OF HEALTH SCIENCES

GOAL

By 2025, Busitema faculty, students, and clinical staff have strengthened capacity to effectively manage Emergency Obstetric Neonatal and Child Conditions at Mbale Regional Referral Hospital

OBJECTIVES

By 2025:

- ⊕ Faculty and clinical staff apply best practices in training students in and delivering services for emergency obstetric, neonatal and child conditions
- ⊕ Students demonstrate skills in the provision of emergency care in maternal, neonatal and child health conditions
- ⊕ Mbale Regional Referral Hospital has strengthened capacity to provide evidence-based standards of care related to maternal and childhood conditions on the pediatric and maternity wards

ACHIEVEMENTS

- ⊕ Conducted trainings on Emergency Triage, Assessment, and Treatment (ETAT) for 100+ students and staff
- ⊕ Supported the perinatal death audit reviews, and maternal death audit reviews at MRRH
- ⊕ Procured, printed and delivered 100 pediatric mortality notification tools, 100 pediatric mortality review tools and 5,000 pediatrics admission and case files booklets
- ⊕ Hosted the nurses' day and skills lab open day during which students demonstrated skills in the management of medical emergencies using simulation techniques and mentored over 100 students
- ⊕ Developed EM in MNCH modules and uploaded them to the Learning Management System
- ⊕ Delivered and distributed QI manuals to all MNCH departments
- ⊕ Supported staff from Mbale regional referral hospital and Busitema university to attend the emergency care conference where the partnership's work on MNCH was disseminated.
- ⊕ Held bi-weekly virtual journal club sessions, a platform used to demonstrate and disseminate evidence-based works on EC, scientific writing and MNCH. This has attracted participation from other teaching and clinical institutions as well as the Ministry of Health and the district government with an average attendance of 40 per journal club meeting.

Spotlight: Building The Pipeline Of Emergency Medicine Faculty



DR. JUSTINE ATHIENO
ASSISTANT LECTURER
MBARARA UNIVERSITY OF SCIENCE AND TECHNOLOGY



DR. PRISCA KIZITO
HEAD OF THE EMERGENCY MEDICINE DEPARTMENT
MBARARA UNIVERSITY OF SCIENCE AND TECHNOLOGY

The Ugandan Ministry of Health has identified emergency care as a priority investment. The establishment of emergency medicine as a distinct field of practice—including a dedicated training pipeline to produce practicing physicians and university faculty—is a critical piece of that investment.

In 2017, Seed partnered with Mbarara University of Science and Technology (MUST) to help launch an emergency medicine residency program and began advocating for the Ministry of Health to direct funding toward emergency care training. Hands-on, high-speed training is essential in preparing any medical care provider for the kinds of work they will almost certainly face in the field. “We have unique needs, and most of our healthcare practice tries to forge ways around so many resource limitations,” explains Dr. Justine Athieno, a graduate of the MUST residency program. “So, if you train out of the country, in a resource-rich system, you might find it very difficult to practice here. But if you’re in Uganda, you’re able to get exposed to different gaps—both in resources and in advocacy. As you train, it’s the order of the day to talk about what Emergency Medicine is as many people are always puzzled when they hear about the new specialty.”

With Seed’s support of year-long educators and an accompanying package of resources, by 2020 the program had graduated its first cohort of 5 emergency medicine physicians, including Dr. Athieno. Now the challenge was to ensure that Uganda’s first emergency physicians trained in-country continued to progress in their careers toward a faculty appointment, to be able to locally instruct a new generation of emergency physicians.

To help bridge this gap between finishing residency and obtaining a faculty appointment, in 2021 Seed supported two pioneer graduates to be Seed Educators at MUST, serving as Clinical Assistant Lecturers. In this role, they received mentorship from Seed Educators and other MUST EM faculty, while still being able to work clinically and teach residents at MUST.

One of these educators was Dr. Athieno. As of June 2022, Seed is proud to share that Dr. Athieno has been fully absorbed as a MUST faculty member, joining her fellow pioneer graduate, Dr. Prisca Kizito, the Head of the Emergency Medicine Department. “I’m thrilled about this milestone. It shows MUST’s commitment to growing the seed that is being sown by Seed Global Health to see this new department thrive. I’m grateful to Seed Global Health for keeping me around MUST and preparing me for this new post through various faculty development ventures.” Seed is thrilled to see this trainee-to-faculty pipeline come to fruition and looks forward to continuing to build on this work in 2022.

Emergency Care

National Collaborations



Health workers in the emergency department of Mbarara Regional Referral Hospital utilize point-of-care ultrasound supported by Seed Global Health.

The COVID-19 pandemic further underscored the need for a functional public emergency care system including in-transport care and referral systems, and highlighted the urgent need for nationwide scale-up and innovative capacity development approaches to train frontline health workers on emergency care clinical conditions. Between 2021-2022 Seed collaborated with various national entities including the Ministry of Health and National Council for Higher Education to respond to the need for training, infrastructure and systems during the pandemic and beyond.

Direct Response to the COVID-19 Pandemic



Health Workers trained by Seed Global Health to appropriately don PPE.

Technical Assistance for Development of COVID Plans & Guidelines:

Seed provided technical assistance to the Ministry of Health to the development of the National IPC Strategic Framework and Plan, National IPC M&E Framework and National IPC Survey 2021 report. Seed facilitated one member of the National IPC secretariat to attain a Post Graduate Diploma in Infection Control (PIDC) at the Infection Control Africa Network (ICAN).

Technical Assistance for Development of COVID Plans & Guidelines:

Seed provided technical assistance to the Ministry of Health to the development of the National IPC Strategic Framework and Plan, National IPC M&E Framework and National IPC Survey 2021 report. Seed facilitated one member of the National IPC secretariat to attain a Post Graduate Diploma in Infection Control (PIDC) at the Infection Control Africa Network (ICAN).

Support of National Call Center:

Seed sponsored the hire of 11 National Call Center agents for 6 months to disseminate key health information and improve health service delivery and accountability at facility and community levels. Over 30,000 calls were received during this time, ranging from questions related to Covid-19 to HIV/AIDS to polio vaccination and other personal health related issues.

Provision of PPE:

Seed procured and distributed personal protective equipment (PPE) to 10 different partner institutions in Lira, Arua, Mbale, Mbarara and Kampala.

Medical Interns COVID Training:

In collaboration with the World Health Organization, Seed supported training of all medical interns in Uganda on Infection Prevention and Control amidst the post Covid-19 pandemic. Over 250 medical interns benefited from the training.

Development & Launch of National EMS Policy



Ministry of Health leadership with partners at the National EMS Policy launch.

After the launch of the Seed Uganda Country Strategy in 2019, Seed has collaborated with the Department of Emergency Medical Services to finalize the National Emergency Medical Services Strategic plan 2018/19-2024/25 which provides a roadmap towards building a comprehensive national EMS system integrated with the current service delivery system.

Additionally, Seed supported the completion of the Regulatory Impact Assessment for the National EMS Policy. Formally launched in November 2021, this comprehensive policy cascades over 20 years to full implementation, but outcomes will scale up necessary service needs including an emergency care workforce, the construction of five new regional trauma centers distributed across the country, and the purchase of 460 ambulances.

Seed has provided ongoing technical assistance to the department to support the development of needed standards, protocols and schemes of service for the absorption and delivery of emergency services both in the prehospital and hospital setting. Ministry of Health Commissioner of Emergency Services Dr. John Baptist Wanyaiye said, "The system that we have now doesn't function well. It's not efficient. Many avoidable deaths occur due to this. This policy will make sure that everyone in the country can access health care when they need. We are going...to ensure that all the regions are covered with the same quality of care."

Support of Emergency Medical Services Department

This past year, Seed embedded a technical advisor to the Emergency Medical Services Department within the Ministry of Health. Through her support, the following was accomplished:

- ⊕ Initiation, operationalization and practicing of protocolized care across the country using clear tools for patient outcome and health worker satisfaction
- ⊕ Institutionalization of uniform triage and basic emergency care in health facilities across the country
- ⊕ EMS HMIS forms were developed, printed and distributed to standardize and improve documentation
- ⊕ Facilitation of emergency care continuing medical education sessions
- ⊕ Scale up of EMS services in lower health facilities in the Rwenzori, Hoima and Soroti regions through trainings on improved basic emergency care (1000 health workers trained) and strengthened referral systems for patients who require advanced care
- ⊕ Mentorship provided to health workers in 30 districts in over 305 facilities

Emergency Medical Services ECHO



The Seed Uganda Team and Ministry of Health Officials at the inaugural EMS ECHO session.

To amplify emergency care training, Seed was called to be the lead support to the Ministry of Health on a rollout of a national EMS tele-mentoring program: the EMS ECHO. The Extension for Community Healthcare Outcomes (ECHO) model works by linking clinical care providers with subject matter experts through regular training sessions via teleconference to collaboratively review clinical cases and discuss best practices. A needs assessment in 117 high volume facilities was carried out to inform the program. Then, between November 2021 and June 2022, 15 ECHO sessions were conducted with over 4,000 health workers from across Uganda participating; an average of 270 health workers/session. These sessions ranged in topic from airway management to adult resuscitation to essential equipment for emergency care; part of a carefully curated curriculum developed by the Ministry of Health's EMS Department with input by regional and international experts. In partnership with the Uganda Medical Association, participants were able to earn CPD points for each session.

National Emergency Care Conference



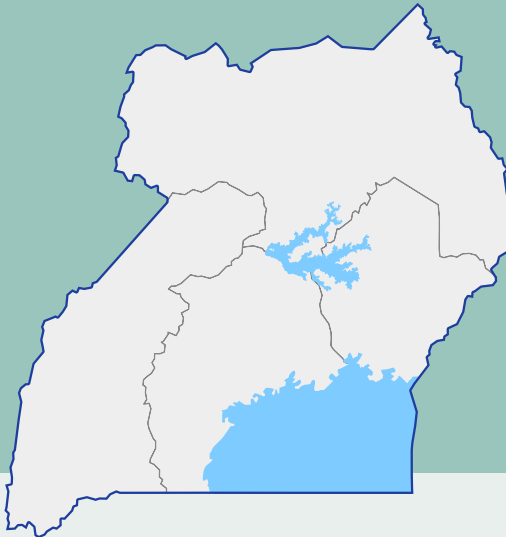
The Seed Uganda Team, Emergency Care Educators and Partners at the 2022 Emergency Care Conference.

In April 2022, Seed supported the Government of Uganda-led Emergency Care Conference 2022, bringing together a multidisciplinary group of delegates from all over the world to present and exchange break-through ideas relating to emergency care at Mbarara University of Science and Technology. Seed was well represented, with educators, staff and academic partners giving a total of 5 presentations.



Progress & Achievements

Maternal, Newborn & Child Health



Uganda

POPULATION (2020)

45.7 MILLION

MATERNAL MORTALITY

336/100,000

INFANT MORTALITY

43/1,000 LIVE BIRTHS

Despite recent gains, maternal, newborn, and child mortality remain unacceptably high. Limited access to skilled health professionals before, during, and after childbirth is one of the central bottlenecks to reducing maternal mortality from 336 per 100,000 live births to the SDG target of 70 per 100,000 live births; currently only 74¹ percent of the deliveries in Uganda are attended by a skilled practitioner. There is a need to improve the number, competence, and distribution of essential health workers to improve maternal, newborn and child health.

In this programming area, Seed supports Uganda's human resources for health (HRH) agenda within each of our three pillars by engaging in partnerships that aim to:

- ⊕ Develop new programs in MNCH
- ⊕ Develop the faculty required to train a national pool of MNCH providers
- ⊕ Strengthen pre-service and masters level training of doctors, midwives, and nurses by improving competence and skills in the management of common causes of maternal, neonatal, and childhood death and disability
- ⊕ Strengthen specialist training in pediatrics/neonatal care, obstetrics, and midwifery to support specialist centers and provide training and leadership for primary care
- ⊕ Strengthen the clinical instruction and supervision provided by clinical faculty and preceptors at teaching hospitals and practicum sites to bridge the theory to practice gap
- ⊕ Provide training on latest, locally appropriate technology and equipment
- ⊕ Support the development, implementation, and or evaluation of policies to facilitate improvements in MNCH
- ⊕ Advocate and support HRH planning (including MNCH) through thought leadership and technical assistance

¹ <https://data.unicef.org/country/uga/>

Institutional Partnerships



Julius Wandabwa, Professor and Dean at Busitema University's Faculty of Health Sciences, speaking during Preeclampsia Grand Rounds.

For the past four years, Seed has worked with the following academic partners, and their associated practice facilities, to improve the quality of care for patients, most notably mothers and children. Seed educators supported these partnerships in curriculum development, direct classroom teaching, clinical supervision and improvements to skills/simulation laboratories.

GOAL

By 2025, Midwifery graduates from Lira University's Master of Midwifery Science (MMS) and Bachelor of Midwifery Science (BMS) demonstrate skills in management of emergency obstetric and neonatal conditions

OBJECTIVES

By 2025:

- ⊕ Lira University enrolls and trains at least 25 students/year in the MMS program
- ⊕ At least 90% of staff (faculty and clinical preceptors) are competent in the use of EMONC simulation
- ⊕ At least 50% of faculty and clinical preceptors practice mentorship and student-centered teaching to enhance EMOC skills
- ⊕ At least 95% of midwifery students demonstrate competence in Emergency Obstetric and Newborn Care (EMONC) in clinical settings

ACHIEVEMENTS

- ⊕ Finalization of curriculum and accompanying accreditation from NCHE on Master of Midwifery Science program. First cohort of students are expected to commence in September 2022.
- ⊕ Developed and distributed training tools for Master of Midwifery Science program (mentorship guide, student centered teaching guide, prospectus, clinical logbook) for faculty and preceptors.
- ⊕ Conducted a 2-day simulation center benchmarking activity at Mbarara University of Science and Technology to improve the existing simulation program at Lira University.
- ⊕ Sponsored a team of consultants from Makerere University Institute of Open, Distance and eLearning (IODeL) to build e-learning capacity with Lira faculty.
- ⊕ Developed and implemented mentorship program with 37 trainees.
- ⊕ Hosted 3-day manuscript writing and article review workshop for faculty.
- ⊕ Supported a benchmarking exercise at Victoria University to learn about their nursing and midwifery program.
- ⊕ Facilitated a visit to four clinical sites (St. Francis Hospital, Nsambya, Neogenesis Fertility Center-Bukoto, Cure Children's Hospital of Uganda and Terrewode Women's Community Hospital, Soroti) to meet with clinical mentors at the clinical sites in preparation for clinical preceptorship starting in September 2022.
- ⊕ Formalized placements for the Masters of Midwifery science program.

GOAL

By 2025, Muni University Nursing faculty, students and Arua Regional Referral clinical staff apply best practices in patient-centered maternal, neonatal, child health and emergency care in Arua Regional Referral Hospital

OBJECTIVES

By 2025:

- ⊕ Muni nursing faculty, students and Arua clinical staff demonstrate patient centered care in Arua Regional Referral Hospital
- ⊕ Muni faculty and Arua Regional Hospital clinical staff demonstrate competency in teaching EMONC and basic emergency skills (BEC, BLS, ETAT)
- ⊕ Students from Muni University demonstrate Emergency Maternal Obstetric Neonatal Child skills (EMONC)
- ⊕ Students from Muni University demonstrate Basic Emergency Care skills (BEC, BLS, ETAT)

ACHIEVEMENTS

- ⊕ Supported 2 patient centered care CMEs with attendance of 38 and 30 nurses & clinical officers
- ⊕ Facilitated 4 one-hour radio talk shows and 120 spot messages on patient centered care (PCC) on two local radio stations
- ⊕ Supported 4 community sensitization outreaches with an average attendance of 100 community members per sensitization
- ⊕ Formed 10 member PCC committee at Arua Regional Referral Hospital with membership comprising of in charges from the maternity, OPD, Emergency and Neonatal units
- ⊕ Developed and administered training modules and evaluation tools on PCC
- ⊕ Incorporated patient-centered care competencies into clinical rotations
- ⊕ Student led PCC campaigns were held at Vurra HCIII and Oli HCIV with a total of 69 participants including Health Unit Management committee members
- ⊕ Facilitated a consultative stakeholder meeting for development of Bachelor of Midwifery program with 18 stakeholders after benchmarking trip to Lira
- ⊕ Supported an ETAT training using simulation techniques/methodologies for 17 health workers and faculty
- ⊕ Conducted a Training-of-Trainers for Arua Regional Referral Hospital MNCH staff on Essential Newborn Care (ENBC) and Helping Babies Breathe plus (HBB+)
- ⊕ Supported BLS training sessions for 9 nurses from ARRH emergency, postnatal, and medical wards, with an 25% average gain in knowledge
- ⊕ Conducted an Advanced Cardiac Life Support training and ECG training for 10 faculty, with a 23% average gain in knowledge
- ⊕ Supported training for 25 faculty and ARRH health workers on quality improvement methodologies, with 1 pediatric QI project as a result
- ⊕ 8 faculty developed four simulation scenarios in the disciplines of Surgical nursing, Medical nursing and Pediatric nursing



Spotlight

Developing the Nursing Workforce at Mbale Regional Referral Hospital

Pictured: Sr Christine Limio, BSN, Principal Nursing Officer Mbale Regional Referral Hospital

It took Christine Limio, Principal Nursing Officer at Mbale Regional Referral Hospital, by surprise when she was called by Dr. Rebecca Nekaka from Busitema University to attend an international benchmarking trip to Muhimbili University in Tanzania in 2019. Until that moment, Christine was not aware of the recently formed partnership with Seed Global Health that aims to strengthen emergency care for maternal, neonatal, and child health conditions. Christine's interest in the Seed-Busitema University-Mbale Regional Referral Hospital-Mbale College of Health Sciences partnership was piqued. After attending the benchmarking trip which aimed to better understand implementation of emergency care MNCH services in the East African setting, she became a key team member in the Seed partnership.

Over the past three years, Christine has been actively involved in planning for several activities under the partnership and has participated in cross-learning opportunities with other Seed partner institutions. This has ranged from maternal and perinatal death surveillance and response activities to simulation training to mentorship and continuing medical education sessions. Some of her highlights include:

- ⊕ Participating in quality improvement training and emergency care modules where she gained skills that enabled her to train other nurses and midwives, especially in emergency triage, assessment and treatment, as well as management of obstetric emergencies like post-partum hemorrhage, antepartum hemorrhage, and neonatal resuscitation. In turn, she has trained others in Emergency Triage and Assessment (ETAT).
- ⊕ Championing partograph use at Mbale Regional Referral Hospital which has helped to improve the monitoring of mothers. Seed has supported with a printer for printing partographs in the ward.
- ⊕ Attending the partnership scientific writing and systematic review workshops. Christine quickly realized more nurses needed to be involved; she has since spearheaded a research group known as the 'Nurses and Midwives Research Hub'.

From Christine's perspective, "the benefits [of the partnership] have been enormous. It has improved my knowledge and skills on how to perform my daily activities, and the quality of the services I and my colleagues provide at our hospital. We used to have a slightly high number of maternal deaths but it has improved drastically because of follow-up and having both perinatal and maternal audit reviews with the lower level facilities. We are grateful for the partnership and to Seed for the support."



Spotlight

Patient-Centered Care in Arua

Pictured: A nurse providing patient-centered care at Arua Regional Referral Hospital

Patient-centered care (PCC) is considered a salient component of quality health care. The term has been widely used in the healthcare literature since its inclusion as one of six domains of quality care by the Institute of Medicine's (IOM, 2001). The Ugandan Ministry of Health has adopted the Institute of Medicine definition of patient-centered care (PCC). This is defined as the delivery of health care which ensures that decisions respect patients and families wants, needs and preferences and patients have the education and support they require to make decisions and participate in their own care (The Republic of Uganda Ministry of Health, 2015). The adoption of PCC was identified as part of the Ugandan Ministry of Health strategic plan, but specific policies or implementation plans were not put in place. Therefore, it is not surprising that PCC has not been fully translated into practice in Uganda. Innovative solutions and adapting a PCC approach to varying cultural therefore needed.

Although Patient Centered Care approach has been shown to improve patient satisfaction and patient outcomes, these approaches have not being consciously implemented in Uganda. The identified gaps prompted Muni University (MU) in partnership with Seed Global Health and Arua Regional Referral Hospital (ARRH) to make patient centered care an implementation and evaluation priority.

In 2019, Seed Global Health began implementing a 5-year partnership with MU and ARRH. The goal of this partnership is to enable nursing faculty, students, and clinical staff to deliver quality maternal, neonatal and child health (MNCH) and emergency care (EC). To achieve this, there has been a focus on building the capacity of the Muni University nursing faculty, students, and ARRH clinical staff to teach and demonstrate patient centered care. In 2020, a successful 1-day workshop was held among Muni University and ARRH staff to reintroduce PCC.

In the 2021-2022 academic year there were several activities which were implemented to increase uptake and delivery of PCC. These include:

- ⊕ Nursing students of MUNI University on PCC
- ⊕ 4 hospital CME's conducted with staff from all wards to increase awareness and discuss implementation
- ⊕ PCC committee formed in ARRH and one meeting held
- ⊕ Quarterly review meetings were held to monitor and evaluate status of PCC
- ⊕ Radio talk shows, radio spot messages, face to face community dialogues and sensitization
- ⊕ Student led PCC program in collaboration with Patient Centered Care Africa Movement (PaCem-Afro) in the neighboring health facilities.

After introduction of the above activities in July 2021, a survey was conducted in February 2022 to evaluate PCC activities among patients of ARRH. These results were compared with a survey conducted by Seed

Global Health in May 2021. The results indicated that overall patient satisfaction with health care was 72%, 70% and 58% for maternal, child and neonatal health services provided at the hospital, respectively. Specifically for maternal health services, family involvement in patient care improved from 44% to 69%, provision of information, education and communication services improved from 50% to 70%, coordination of care improved from 46% to 73%, respect for patients preferences values and needs improved from 80% to 84% and emotional support improved from 60% to 70%.

One of the outcomes of adoption of PCC is that Muni University students are now grounded in the practice of PCC during their routine clinical practice. This is clearly seen while the faculty supervise and examine the students. The students are now confidently championing PCC in the surrounding health training institutions and health facilities.

Maternal & Child Health: National Collaborations



A presentation during the Preeclampsia Grand Rounds at Busitema University.

In recognition of preeclampsia as one of the leading causes of death among mothers, Seed partnered with the Ministry of Health, Lira University, Makerere University, Busitema University, Mbale Regional Referral Hospital, Arua Regional Referral Hospital and Muni University to organize and implement grand rounds across four regions of the country (Lira, Mbale, Kampala and Arua) in commemoration of World Preeclampsia Day on May 22. The grand rounds were attended by faculty, health workers, medical interns, students, MOH officials and the general population. In addition, there were medical simulation sessions on eclampsia management, which were conducted by a combined team of faculty and students.

Other Health Workforce Building

National HRH Strategy

This past year, Seed embedded technical experts and advisory resources within the Ministry created a Human Resources for Health (HRH) framework and holistic strategy to build, absorb and retain a strengthened health workforce. These efforts most recently resulted in the new National HRH Strategy 2020-2030.

Safe Schools Initiative

Over the last two years, Uganda's lockdown periods have caused national disruptions to health professional education, as medical and nursing schools were forced to close. In response, Seed developed a blueprint with National Council for Higher Education (NCHE) and Ministry of Health to support safe reopening of health professional training institutions in Uganda, known as the 'Safe Schools Initiative'. As a result of this, medical schools successfully reopened on August 13, 2021. Part of this initiative included supporting a collaborative visit with national officials to Mbarara University of Science and Technology and Busitema University to conduct a robust assessment on barriers and facilitators of the Covid-19 standard operating procedures and guidelines proposed by the MOH and NCHE.

Communications And Advocacy Campaign: Pan-African COVID-19

In 2021, COVID-19 safety guidance and education rollouts across communities were disrupted by harmful misinformation spreading as fast as the virus itself. Seed joined a coalition of partners—the Access Challenge, the World Health Organization, the Africa CDC, the African Union, Rockefeller Foundation, and Clouds Media—to execute a Pan-African COVID-19 communications and advocacy campaign, “One by One: Target COVID-19”. The campaign mobilized influencers from all sectors of society to use their platforms to promote critical and accurate prevention, education, and vaccine information developed by the Africa CDC. The coalition's tracking analytics revealed 363 million impressions across 76 million people, and our social media partner was able to quantify an “excellent” level of change in many of the important areas of COVID-19 prevention behaviors, such as masking, social distancing, and vaccine trust.

Student-Led Initiatives

This year also saw Seed supporting student-led initiatives, including the Patient Centered Care Movement Africa (PaCeM-Afro) and MedXMentor. PaCeM-Afro, which advocates to elevate the visibility of Patient Centered Care (PCC) among students, established new chapters in 7 countries (Uganda, Kenya, Rwanda, Tanzania, Nigeria, Zambia, and South Africa) and 14 universities. Accomplishments include presentations at 5 international conferences and acceptance of two secretariat members to the 2022 Clinton Global Initiative University for personalized PaCeM-Afro mentorship. MedXMentor was formally launched in February with a

mission to spearhead the drive towards developing the next generation of medical professionals in Uganda. Over 484 virtual participants and 70 physical participants participated in the launch event. A mentorship program has been developed and has begun to be implemented through online webinars, a physical bootcamp and workshops.

Global Health Course 2021

Global Health Course 2021 was a five week online learning opportunity for healthcare students that saw over 300 participants from 23 universities and 7 countries engage in navigating global health concepts. Seed helped facilitate this course, providing lecturers and guest speakers from our Uganda Seed office. As part of the course, students generated interest areas and were linked with mentors with whom to network with.

Federation of Medical Students Association

From January 22-23rd, Seed supported the National Federation of Medical Students Association's (FUMSA) Medical Quiz attended by over 200 medical students from 7 medical schools in Uganda. The annual medical quiz is aimed at developing technical competence and clinical problem-solving skills among medical students in Uganda. In addition, the quiz acts as a healthy competition to foster cooperation among medical students for future collaborative and better health care delivery during practice. Seed officiated at the function, and supported our partner Busitema University as they hosted the event.

Nurturing The Seed: Strengthening Our Work



Seed Global Health's Impact Team, June 2022.

Impact Team Retreat

Since January 2022, Seed has embarked on a more data driven approach to programming. In early June, Seed brought together global staff representatives from relevant programmatic and monitoring, evaluation and learning (MEL) teams for an internal Impact Team Retreat in Kampala, Uganda. A core objective of the retreat was to align on what and how we measure and demonstrate our impact, as well as how we use and learn from the data we collect. As a result of this refocused programming, Seed is strengthening our MEL systems at every level. This is a critical first step in supporting our teams and partners in monitoring partnerships and using the data for program improvement and decision-making, and we hope this will result in improved patient care, program design and policy changes.

Throughout the month of June, the Seed Uganda team visited each of our Seed partnerships for Year 4 Annual Planning. These collaborative meetings focused on refining objectives in line with Seed's Theory of Change,

setting Year 4 priorities areas, and, lastly, identifying key indicators for the partnership. To support these conversations and inform any shifts, our teams utilized information gathered over the past three years, including each partnership's 2020-2021 first partnership measurement report.

Seed is focused on streamlining the indicators collected from both educators and partners in Year 4. The categories of indicators include:

- ⊕ Educational outputs and outcomes
- ⊕ Practice-Level outputs and outcomes
- ⊕ Patient-Level outcomes
- ⊕ Policy/advocacy outputs and outcomes

Seed remains responsive to the needs of our partners, and will ensure the data collected is both meaningful and feasible to collect. A recent survey conducted at Arua Regional Referral Hospital revealed an approximate 20% increase in patient satisfaction with staff as a result of the implementation of patient centered care at Muni University and Arua Regional Referral Hospital. We hope to show more results like this in the coming year.



Where we work

Seed Global Health
20 Ashburton Place, 6th Floor
Boston, MA 02108

United States

Uganda
/ Plot 31, Bukoto Crescent - Naguru
/ P.O. Box 12491, Kampala, **Uganda**

Malawi
/ Area 12, Plot 12/112, Umodzi Road, Capital City
/ P.O. Box 30111, Lilongwe, **Malawi**

Zambia
Plot 15584/1, Katimamulilo Road
Sunshare Tower, 3rd Floor, Suite 304
Lusaka, **Zambia**

Sierra Leone
1 Ahmed Drive, Off Sir Samuel Lewis Road,
Aberdeen
Freetown, **Sierra Leone**