

KYABIRWA SURGICAL CENTER

ANNUAL REPORT

YEARS 2023-2024
ISSUE 3

SOARING HIGHER WITH RURAL SURGERY

Expanding Facilities at KSC to
Cater for Surgical Diversity

Expanding the Center to
Allow for More Surgery
Related Services

Launch of Gynecology Clinic

The Evolving Lab - Future of
Histology

The Birth of the Simulation
Center

Future Research and
Community Education

Empowering Surgical Minds
through CMEs Programs

The Future at KSC
Research Committee







TABLE OF CONTENTS

	Navigating the Surgical Horizon Letter from the Director	Page 5
	Influence and Metrics Evaluating the Reach and Numbers in 2023	Page 6
	Launch of Gynecology Clinic Triumphs	Page 8
	Uniting for Surgical Excellence A Story of Collaboration	Page 9
	Telesurgery at KSC Revolutionizing Surgery	Page 10
	Patient's Journey A Child's Tale from the North	Page 11
	New Construction Building a Sustainable Future	Page 12
	Eco-Revolution Shining with Solar, Conserving with Care, and Embracing the Paperless Path	Page 13
	The Evolving Lab and the Future of Histology The Glissando Slide Scanner	Page 14
	Simulating Excellence The Birth of the Simulation Center	Page 15
	Expanding Ties Building Bridges with the Ministry of Health	Page 16
	Royal Health Rescue A Story of Kingly Care	Page 17
	Continuing Medical Education (CMEs) Empowering the Surgical Minds	Page 18
	Nurturing Future Professionals Students in Anesthesia, Nursing, and Surgery	Page 19
	Exchange Program Fostering International Collaboration	Page 20
	Recovery at Home Program We Deliver Accessible Care Anywhere	Page 21
	Community Outreach Extending Our Hands Beyond Hospital Walls	Page 22
	Creativity Unleashed Building the Future at KSC Research Committee	Page 24
	Frontiers Unveiled Novel Research Initiatives	Page 25
	No Shows No More Catching Up with Social Work	Page 26
	New Faces, Bright Futures and Building a Stronger Team Fostering International Collaboration	Page 27
	Special Thanks Getting in Done, Together	Page 28







Navigating the Surgical Horizon

Letter from the Director

I am thrilled to share the milestone achievement of expanding our center into the new structure we proudly call Kyabirwa Surgical Center Ward. The design of the Kyabirwa Surgical Center Ward was driven by a 'needs-based' program conducted after three years of dedicated service to identify constraints and areas for improvement. The expansion comprises five fundamental structures at what is now the Kyabirwa Surgical Center Campus:

1. ***Kyabirwa Surgical Center - Phase 1*** - this expansion will include five more consultation rooms, a phlebotomy space, a sonography room, and a drug dispensary window.
2. ***Kyabirwa Surgical Center Ward - Phase 2*** - the ward includes spacious office space, a state-of-the-art laboratory, a groundbreaking simulation lab (the first of its kind in Eastern Uganda), a cafeteria, and a patient observation area.
3. ***Doctors' Lodge***
4. ***Patients' Waiting Pavilion***
5. ***Ambulance Shelter***

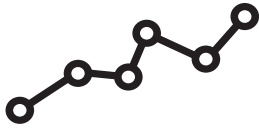
In addition to the expansion, we are proud to introduce the Women's Health Clinic program, addressing our community's critical need for gynecological surgical services. The gynecology department has already performed over 50 successful cases within six months of its establishment, demonstrating significant progress in meeting the healthcare needs of our patients.

Overall, patient numbers have increased by 40% compared to 2022, with surgical procedures showing a growth of 15%. As we celebrate these achievements, our research department will disseminate over 20 studies through publications and conferences in 2024.

Having had the opportunity to visit Mt. Sinai's healthcare system earlier this year, I was inspired by the vision that prioritizes excellence, safety, and affordability in surgical care. I am eager to lead our team into the next chapter of growth and impact at the Kyabirwa Surgical Center Campus. Thank you for your unwavering support and dedication to our shared mission.



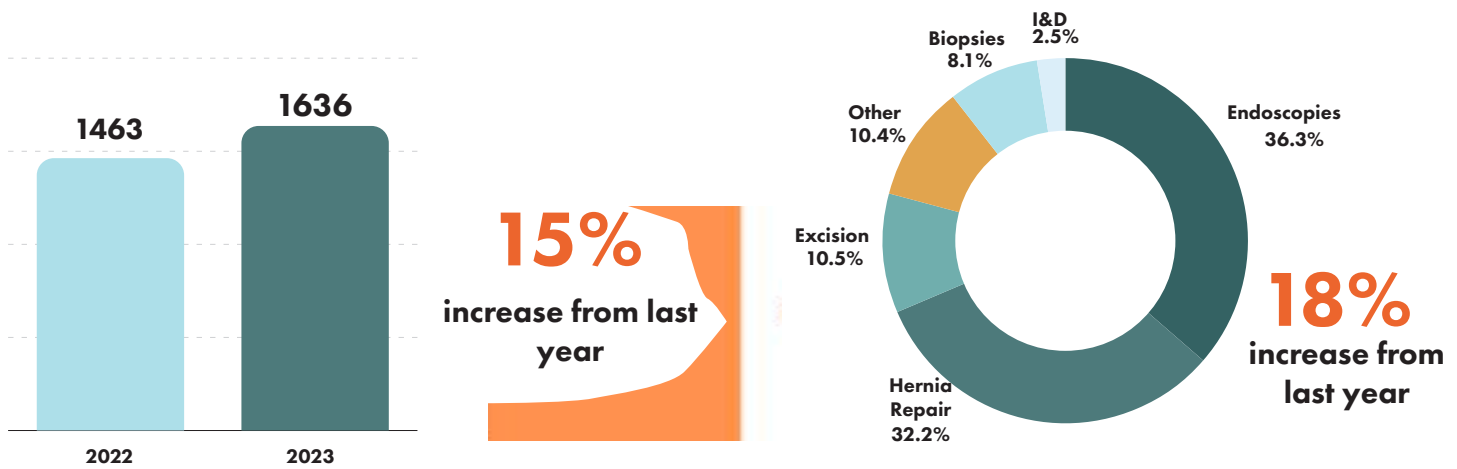
“Our story is only beginning, we look forward to what's ahead and am excited to be in the lead of this beautiful story.
- Anna Turumanya Kalumuna , Director”



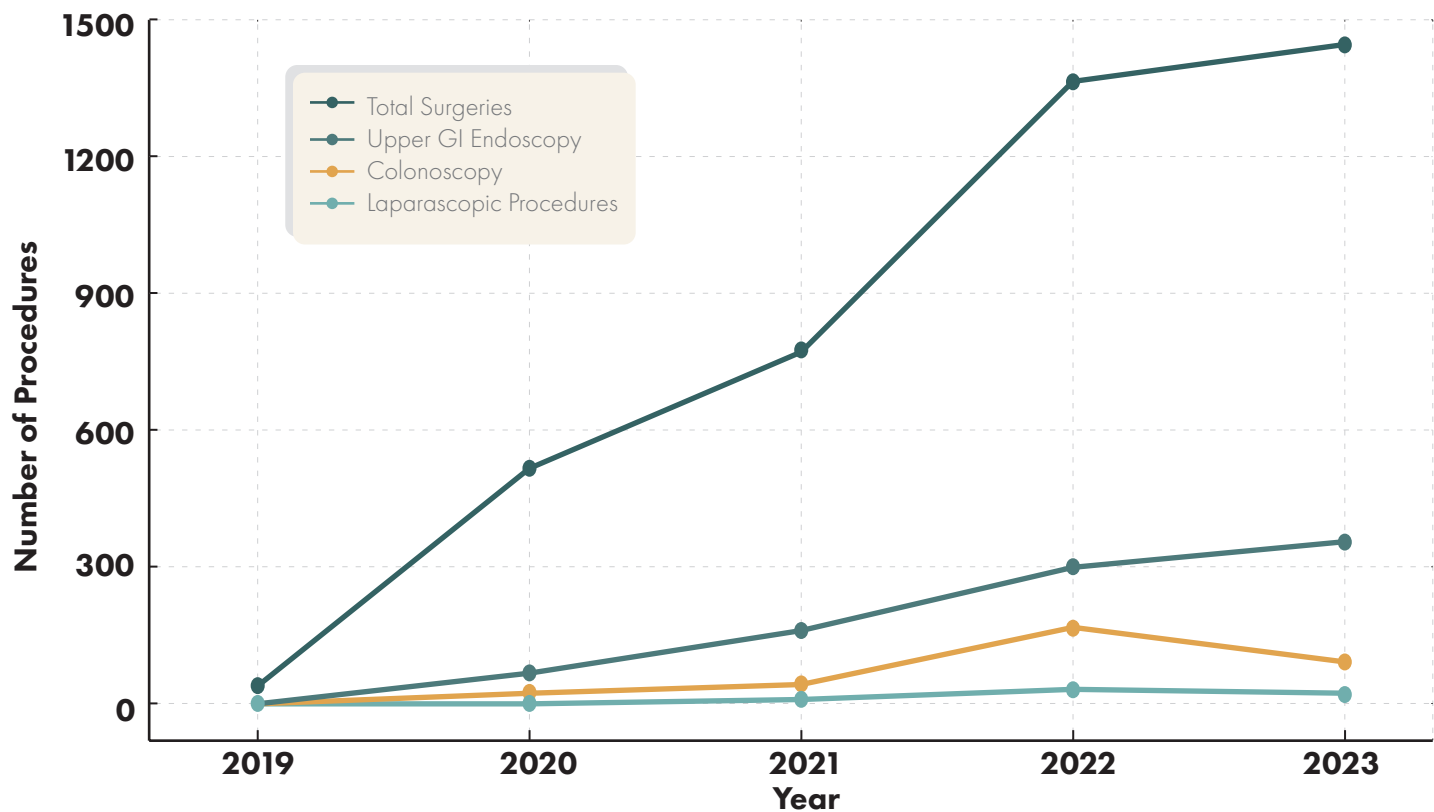
Influence and Metrics

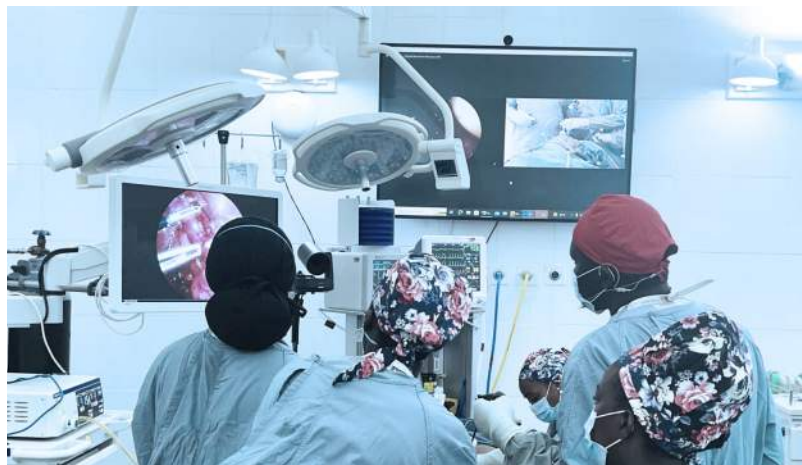
Evaluating the Reach and Numbers in 2023

▶ Surgery Statistics and Types



▶ Trends of Surgeries in the Past 4 Years





SURGICAL MILESTONE

LAPAROSCOPIC CASES SPOTLIGHT

Our laparoscopic surgery services are growing since its inception in October 2021. It's an important tool for daycare surgery since patients experience less pain and recover much faster, as compared to traditional open surgery. In 2024, we look forward to increasing the range of surgeries we perform laparoscopically, and to begin gynecology laparoscopic procedures.

The KSC doctors continue to receive valuable telementorship in laparoscopic and endoscopic procedures (as well as open surgeries) from more experienced colleagues overseas. We thank our dedicated colleagues from the Mount Sinai hospitals who continue to devote time for this program.



In 2024, we will roll out our TeleApp, designed to facilitate telecollaborations in surgery.

4371
Total procedures
performed since 2019

65-75%
Anticipated
surgical care to the
community

54
Laparoscopic
procedures since
2019



Launch of Gynecology Clinic

Triumphs



Dr. . Head of the Gynecology Departmen

“ Every women has a story and we are here to help them... from the first consultation to the their home. ”

-Dr. Carol Oleo, Head of Gynecology Surgery

▶ **Launching a New Era in Gynecology Healthcare**

In 2023, the Gynecology Department at Kyabirwa Surgical Center, led by Dr. Carol, made a significant contribution to women’s health. The department distinguished itself as a pivotal provider of gynecological surgical services.

▶ **The Power of Patient Narratives: Stories of Healing and Gratitude**

The real measure of our success lies in the stories of the 375 women we served, including the 50 who underwent surgical procedures. Their journeys of recovery and gratitude shine a light on the impact of our care.

▶ **Comprehensive Surgical Care: A Testament to Expertise**

Under Dr. Carol’s guidance, the Gynecology Department transcended boundaries, offering a spectrum of services from routine consultations to intricate surgical procedures. The department’s ethos exemplifies Kyabirwa as a sanctuary for comprehensive and empathetic women’s healthcare. Our services include a wide range of specialized procedures, each a stride towards empowering women’s health:

- Myomectomy for uterine fibroids and Adenomyomectomy for adenomyosis.
- Hysterectomies, encompassing both Total Abdominal and Transvaginal approaches.
- Diverse surgeries such as Ovarian cystectomy, Ovarian drilling, and Endometrial ablation.



Vision for the Future: Advancing Women’s Health

Our vision for 2024 is to embrace advanced surgical techniques, introducing hysteroscopy surgeries. Our expanded offerings will include:

- Advanced laparoscopic procedures, furthering our commitment to minimally invasive surgeries.
- Enhanced diagnostic techniques, bringing precision to the forefront of women’s healthcare.
- A holistic Women’s Health Program, dedicated to encompassing every aspect of women’s wellness.



Uniting for Surgical Excellence

A Story of Collaboration



At **Kyabirwa Surgical Center (KSC)**, a remarkable story unfolds, highlighting the power of collaboration in surgery. A patient faced a daunting prognosis due to a giant ovarian cyst. Dr. Joseph Okello Damoi, the head surgeon at Kyabirwa Surgical Center, along with Dr. Ann Tran from Mount Sinai, worked together to perform a groundbreaking telesurgery to remove the ovarian cyst. This remote surgery is a testament of teamwork and technological healthcare advancement.

Dr. Joseph Okello Damoi's medical knowledge and expertise joined forces with Dr. Ann Tran, who is skilled in pelvic and reconstructive surgery, bringing a new dimension to telesurgery at KSC. Their international remote collaboration represents a beacon of hope that illustrates that working together can lead to successful outcomes in complex medical cases.

The patient's journey, from diagnosis to recovery, showcases the impact of international medical collaborations. This story is a powerful reminder that unity in the telesurgery medical community can transcend geographical barriers, offering advanced care to those in need, even in remote or resource-limited settings.



Watch Madina Kyomugisha Surgical Story by Scanning Here



Swift Healing: A Patient's Thanks to Kyabirwa's Team



During the procedure the process went on smoothly and in a few hours, I was able to get back on my feet for walking exercise. The good thing is that the doctors took me through everything I would experience before and after the surgery, so I was ready for every experience. And so, I would like to take this opportunity to thank the whole team that made this easy for me. I don't have much to send in appreciation to the team but I promised myself to do so one day no matter how long it will take thank you all.





Telesurgery at KSC is revolutionizing surgery education, extending its reach across East Africa

Anna, our director, collaborated with Tellistic, an IT company, to speak at the Ubuntu conference. The conference focused on identifying community challenges and opportunities, translating them into academic research, and developing innovative solutions.

KSC presentation highlighted the successful implementation of telesurgery in the facility to advance the education of colleagues and surgeons across East Africa.

The UbuntuNet Connect 2023 Conference brought together diverse participants, including Information and Communications Technology (ICT) directors, librarians, researchers, academics, students, government officials, and industry professionals.



Related Research

Ubuntu

Telesurgery is not only about Kyabirwa patients; it's about lifting the region!

Hannah Naughton, Ivan Lumala, Joseph Damoi, Chelsia Melendez, Anna Kalumuna, Linda P. Zhang

Background: The Kyabirwa Surgical Center (KSC) in rural Uganda, established through a collaboration between Mount Sinai Department of Surgery and local Ugandan surgeons, showcases a pioneering model in surgical training using teleproctoring.

Findings: A 7-mile fiber optic cable and solar power enables KSC to facilitate real-time, remote surgical training. Local surgeons have mastered various surgeries, including endoscopies and laparoscopies, under New York experts' supervision. This efficient and scalable model enhances surgical skills in remote regions, greatly aiding undeserved communities.



Patient's Journey A Child's Tale from the North

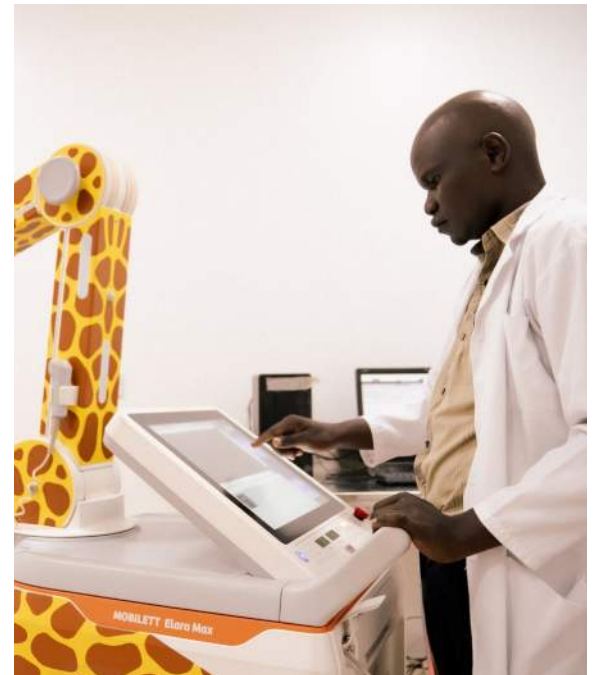
In 2023, our endoscopy center performed 437 upper endoscopies with exceptional skill, achieving a remarkable milestone. Each procedure represents precision, care, and medical excellence. **One particular case highlights our commitment and impact best...**

A 4-year-old child ingested a pin and was examined at a surgical camp organized by the Annual Association of Surgeons of Uganda (ASOU). Social worker **Shafiga Baborye** and medical student **Chelsia Melendez** referred the patient to **Kyabirwa Surgical Center**, which was **300 kilometers away**, due to the urgency of the situation.

Our KSC team, understanding the critical nature of this case, immediately set the wheels in motion for the child's transfer. Overcoming the challenges of a long, overnight bus journey, the child, accompanied by his parents, arrived at our center in the early morning.

Dr. Joseph Okello Damoi and the nurses welcomed the child and their parents warmly. They performed the intricate procedure with remarkable skill and care, removing the foreign object and ensuring a swift recovery. By nightfall, the child was ready to return home, healthy and safe.

Our center plays an essential role in the community, as this story shows. We provide life-saving endoscopic care of the highest caliber, weaving narratives of hope, resilience, and healing. We are motivated to uphold our mission and continue to serve those in need.



1162

**Endoscopies Performed
from (2019-2023)**

437

**Endoscopies
Performed in 2023**



The American Institute of Architects (AIA) has awarded the Kyabirwa Surgical Center national, state, and desing awards. The awards highlights the conceptual strenght that was used to solve the aesthetic, social, functional, and sustainability concerns associated with a health care setting.

AIA AWARDS LIST

- 2023 New York State AIA Award
- 2023 Progressive Architecture Citation
- 2022 AIA National Healthcare Award
- 2021 AIA Tristate Merit Award
- 2020 AIA New York Design Award
- 2020 AIA Healthcare Design Award



New Construction Building a Sustainable Future

The overnight stay ward building construction is complete, and the building is currently being furnished for patient and staff occupancy. The state-of-the-art pathological lab is operational, and the cafeteria is equipped with energy-efficient kitchen appliances and induction cooktops.

Lodge construction is ongoing and is expected to be completed in the next two months. The new lodge will offer much-needed short and long-term housing for visiting dignitaries and medical students.

The proposed new patient waiting and triage pavilion is currently midway through construction. The new pavilion will include a small triage, cashier, reception counters, and an airy and pleasant waiting area for patients and their families. The pavilion's architecture will resemble historic clay tile roof buildings in the Jinga area.

Across the main road, a new Medical Equipment Maintenance Facility/ Ambulance shed is under construction. This facility will enable the maintenance and repair of various medical equipment for the Surgical Center. The building will also house an IT maintenance facility, welding workshop, and maintenance staff lockers.

All construction materials and methods are selected to achieve maximum sustainability goals.



Eco-Revolution

Shining with Solar, Conserving with Care, and Embracing the Paperless Path

SOLAR POWER

Addition of 240 New Solar Panels: This expansion boosts our solar energy production by 1.5 times, solidifying our role as a leader in renewable energy.

Zero-Emission Goal: Our new building is a beacon of sustainability, running entirely on solar power and achieving a 100% renewable energy usage with zero emissions.

Solar Captured Vs. Solar Power Used



Solar Power Used Vs. Grid Power Used



WATER USAGE

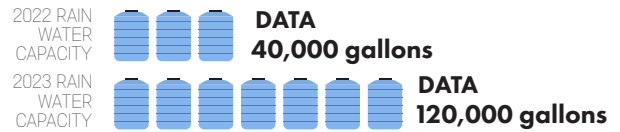
Enhancement of Water Harvesting: With the new building expansion, our water harvesting capacity has tripled from 40,000 to 120,000 gallons.

Advanced Water Filtration: Implementation of a centralized water treatment plant, featuring a reverse osmosis system with a capacity of 500 liters per hour, significantly reducing mineral deposits and eliminating contaminants.

Rainwater Captured Vs. Rainwater Used



Rain Water Capacity Collection



GOING PAPERLESS

Our IT team's collaboration with Tellistic has led to significant enhancements in going paperless, leading to the improvement of procurement, patient consent processes, and anesthesia management, demonstrating our commitment to technological innovation.



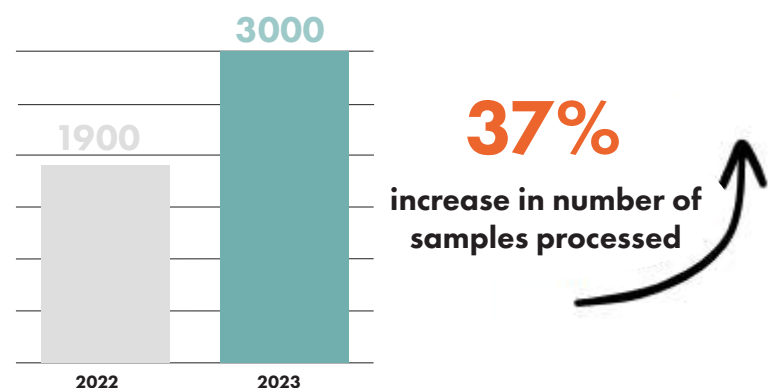
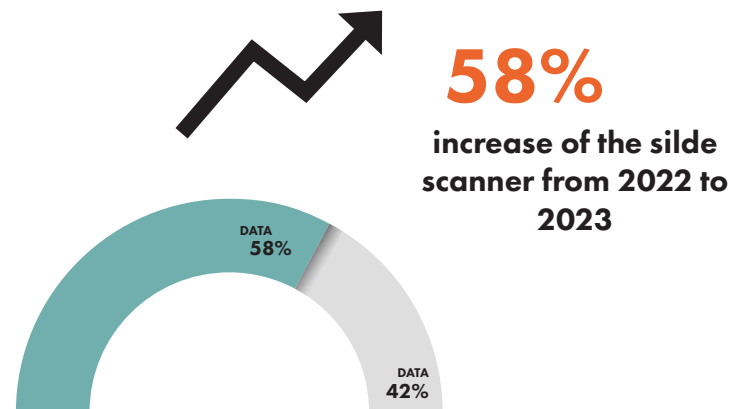


The Evolving Lab and the Future of Histology

The Glissando Slide Scanner

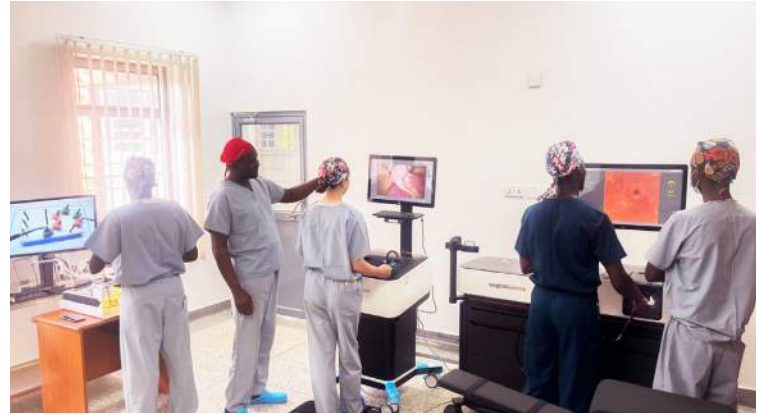
The Glissando Slide Scanner has been instrumental in Kyabirwa Surgical Center's remarkable progress in pathology services. This advanced piece of equipment enables us to convert traditional histology slides into high-resolution digital images, facilitating remote diagnosis by experts worldwide. With this technology, we've not only increased our sample processing by 37% but also enhanced our histological analysis capacity by 58%. The scanner's precise imaging allows for more accurate and expedited readings, significantly improving our diagnostic services and contributing to our growth as a future research center.

The construction of the new building brought in the new laboratory expansion and the construction of a new lab promise a future of comprehensive on-site tissue processing, innovative services like **biobanking and immunohistochemistry**, and the establishment of a cutting-edge research center in pathology. This progress marks a pivotal step toward our goal of becoming a fully integrated pathology center by 2024.





Simulating Excellence The Birth of the Simulation Center



A new, simulation center is set to open at KSC in 2024, offering an advanced platform for medical education across Uganda. The simulation center will be equipped with technology and provide diverse training programs in various fields, such as minimally invasive surgical procedures, laparoscopy, endoscopy, anesthesia, and nursing.

The laparoscopic training program will be one of the main programs offered at the center. It will provide a six-month curriculum led by local and international experts. The program will include lectures, hands-on simulations, and live operating room experiences. Upon completing it, participants will have the opportunity to earn the KSC Fundamentals of Laparoscopic certification.

KSC will also offer an endoscopy training program that uses the Symbionix GI Mentor simulation platform. Symbionix GI Mentor is a comprehensive simulation platform that provides an unparalleled learning experience for various procedures.

Lastly, the anesthesia training program at the KSC simulation center will provide various emergency and advanced training scenarios to enhance skills in Basic Life Support and Advanced Cardiac Life Support.

These training programs will be offered to KSC medical staff, doctors, nurses, and students across Uganda looking to advance their medical education and skills.



“This center is not just a training facility; it’s a beacon of surgical excellence, set to illuminate the path for healthcare professionals across East Africa.

- **Dr. Linda Zhang, Mount Sinai.**

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Expanding Ties Building Bridges with the Ministry of Health

Kyabirwa Surgical Center recently welcomed Uganda's Minister of Health, Dr. Jane Ruth Aceng, in a collaboration with the government. During her visit, Dr. Aceng commended our ambulatory surgical model, which allows patients to return home on the same day post-operation. She highlighted how this model has played a crucial role in addressing Uganda's surgical backlog and was optimistic about the potential of this model to be scaled across Uganda's healthcare landscape.

During a recent dialogue with Dr. Jane Ruth Aceng, the possibility of formalizing a partnership with the government was discussed. Talks are underway to develop a Memorandum of Understanding with the aim of improving the delivery of surgical services in Uganda. The partnership seeks to ensure that all Ugandans have access to safe, timely, and affordable healthcare.



What I have seen today and heard from them [KSC staff] gives me hope that this is the way to go for any of our surgical cases that can go back home...

- Dr. Aceng noted, underlining the potential to alleviate the strain on tertiary facilities.



**Don't just Read about us
Watch the Ministry of
Health at KSC**





Royal Health Rescue A Story of Kingly Care

STORY BY: WILLIAM , EMERGENCY TEAM STAFF AND HEAD OF OPERATIONS

Kyabirwa Surgical Center demonstrated its commitment to community welfare by significantly contributing to two major cultural events. During the Royal Wedding, the team provided over 200 free surgical consultations. In addition, the team extended ambulance and emergency services during the Coronation of the Busoga King, reinforcing their dedication to the community's well-being.

The Royal Wedding on November 18, 2023, was a landmark event for the Busoga kingdom. Kyabirwa Surgical Center played a crucial role during the event by providing ambulance services. Team members William, Salaama, and Samuel were essential in ensuring safety and emergency response readiness, particularly within the King's convoy. Amidst the celebrations, the team skillfully managed an emergency involving a family in a road accident. Their quick response and competent handling of the situation led to the prompt transportation of the injured to Jinja regional referral hospital, showcasing their ability to tackle challenges and save lives in demanding conditions.

Kyabirwa Surgical Center's Ethos:

Always save a life with the little influence that you have, for it creates a big impact on generations.





Continuing Medical Education (CMEs) Empowering the Surgical Minds

Client Relations and Marketing Officer, Salaama Nabirye, and Dr. Joseph Okello Damoi organized an important CME on Laparoscopic Surgery at Iganga Hospital and the Hope and Healing Center, a private non-profit facility located in the rural setting of Kimwanyi village. Healthcare providers showed a growing interest in advanced surgical techniques.

Our educational outreach efforts have gone beyond physical workshops. We recently organized a successful virtual CME on Cancer of the Esophagus, which is prevalent in the region. This was done through the Busoga Health Forum. Our doctors have also been invited as regular guests on local TV and radio shows, where they address surgical conditions and dispel health misconceptions within the community. Furthermore, we have hosted external CME workshops on Genital Prolapse and Endoscopy, not just at the Jinja and Iganga Regional Hospitals, but also in Kiwanyi. Our participation in these forums has been instrumental in reinforcing GSI's reputation and expanding our referral network.



Nurturing Future Professionals Students in Anesthesia, Nursing, and Surgery



“During my time at the Global Surgical Center - Kyabirwa, I learned valuable skills and gained insights into outpatient surgery in resource-constrained setting. I gained foundational surgical skills through engagement in the operating theater, which I believe will be pivotal for their forthcoming journey in clinical practice. One most special experience was the way the center emphasized interprofessional collaboration and synergy, which elevates the quality of healthcare delivery and enhances patient care. I was able to appreciate the diverse patient population and multilingual exposure, which helped me understand the importance of cross-cultural competency in medical professionals. The center’s is located in rural area, that make it easier for patients in from the local and diverse regions of the country accessible and affordable to all.”



*Davis Banturaki MBChB IV
Makerere University*

INTERVIEW WITH ROTATING MEDICAL STUDENT DAVIS BANTURAKI AND HIS EXPERIENCE AT KSC

▶ Question 1: What motivated you to pursue a surgical rotation at Kyabirwa Surgical Center, particularly in a resource-constrained setting?

Answer: My primary motivation was to immerse myself in an environment that starkly contrasts with the high-resource settings I’m accustomed to. I wanted to understand the dynamics of delivering high-quality surgical care with limited resources. Kyabirwa Surgical Center, known for its innovative approaches to outpatient surgery and commitment to serving diverse populations, presented a unique opportunity to learn and contribute to impactful healthcare delivery in a rural setting.

▶ Question 2: Can you describe a particularly challenging case you encountered during your rotation and how you managed it with the resources available?

Answer: One challenging case involved a patient requiring emergency surgery for an abdominal condition. The complexity lay not just in the surgery itself, but in managing it with limited resources. We had to improvise with the equipment available, prioritizing the patient’s needs while ensuring safety. This experience taught me the importance of adaptability, resourcefulness, and teamwork in ensuring the best possible outcome for the patient.

▶ Question 3: How did your experience at Kyabirwa Surgical Center enhance your understanding of interprofessional collaboration?

Answer: The center excels in fostering an environment where nurses, surgeons, anesthesiologists, and other healthcare professionals work seamlessly together. This collaborative culture was evident in daily rounds, where each professional’s input was valued in devising treatment plans. It emphasized that quality patient care is the result of cohesive teamwork and that every role is vital in the healthcare delivery process.

▶ Question 4: In what ways did the rotation at Kyabirwa Surgical Center prepare you for your future career in medicine?

Answer: The rotation was eye-opening, enhancing my surgical skills and understanding of healthcare in a rural setting. It taught me the importance of cultural competency and the need for innovative, adaptable approaches to address the unique challenges of rural healthcare. These experiences have profoundly influenced my approach to medicine, emphasizing the importance of tailoring healthcare solutions to meet the specific needs of rural populations.

▶ Question 5: Reflecting on your time at Kyabirwa Surgical Center, what is one key takeaway that you would like to share with future surgical students considering a rotation there?

Answer: Embrace the opportunity to learn beyond the technical aspects of surgery. The experience at Kyabirwa Surgical Center is a profound journey into understanding the broader impacts of healthcare, including the socio-economic factors affecting patient care. It’s a chance to develop a holistic view of medicine, where compassion, resilience, and the drive to innovate are as crucial as surgical skills. Future students should come prepared to learn, adapt, and contribute to this vibrant learning environment.



Exchange Program Fostering International Collaboration



Anna T. Kalumuna, the KSC Director's Journey to New York City

In 2023, visa issues prevented the director of KSC, Anna Turumanya Kalumuna, from attending the SAGES conference in Montreal, leading her to participate in an exchange program at Mount Sinai in New York. Highlights of the trip were participating in events such as World Earth Day in Times Square and the Global Citizens annual conference, where she discussed topics relevant to Kyabirwa like water conservation and renewable energy. She also had the chance to meet philanthropists crucial to the success of Kyabirwa Surgical Center, enhancing both the professional and cultural dimensions of the international collaboration.



Saran Kunaprayoon, surgical resident, Journey to Uganda

Saran Kunaprayoon, a third-year resident in general surgery, recently joined the Global Surgery Rotation in Kyabirwa. Saran Kunaprayoon has lived in Thailand, Canada, and the U.S. and has always been fascinated by the varied healthcare systems in these countries. During his time in Uganda, he gained valuable insights into the healthcare challenges faced by low-middle income countries. Saran visited a city hospital in Jinja and a sister facility in Kyabirwa, which reinforced his belief that Mount Sinai could help improve patient care in Uganda by providing better infrastructure, education, and financial aid.



Dr. Arthur Emoru, Anesthesiologist and Head of Research Committee, Journey to San Francisco

Dr. Arthur Emoru recently participated at the Anesthesia Conference in San Francisco with Dr. Yan Lai from Mount Sinai, where they attended a standout regional anesthesia workshop. This session not only refreshed Dr. Arthur's skills but also provided a valuable opportunity to network with anesthesiologists from around the world.



Recovery@Home Program We Deliver Accessible Care Anywhere

Kyabirwa Surgical Center’s Recovery@Home mobile app has been an essential aspect of KSC’s postoperative care. The app integrates on-call patient engagement and home visits by field nurses, demonstrating KSC’s commitment to improving the patient experience after surgery.

Achievements

The percentage of successful home visits has increased from 66.9% last year to 73.5% this year, thanks to the Recovery@Home mobile app approach to patient care. These visits have been crucial in detecting postoperative complications early, which has helped reduce the need for patients to revisit the hospital.

Complications Encountered

Tracking postoperative complications is made easy with the Recovery@Home mobile app. The most common complications include pain above 3/10, surgical site infections, and seromas.

Complications	Percentage
Surgical Site Infection	0.22%
Pain Above 3/10	0.55%
Seroma	0.25%



Nurse Jotham Azirembuzi visiting patients from the Recovery@Home app.



“Through rain or shine, we successfully reached 1,209 patients in their homes.
- Jotham Azirembuzi, Recovery@Home Nurse”



Community Outreach Extending Our Hands Beyond Hospital Walls

Creating Awareness and Relationship Building Outreach Program

In 2023, the outreach program was able to reach 124 villages in the eastern region, engaging with 3,856 individuals across four sub-counties. During this period, the team conducted 507 consultations, addressing health concerns and educating community members about surgical conditions. Through interactive sessions, the community was able to learn about the intricacies of surgical procedures, dispelling myths and gaining a deeper understanding.

The Community Outreach Program has had a profound impact on the Kyabirwa Surgical Center. Patients who were previously hesitant to seek surgical interventions are now better informed and more willing to entrust their health to KSC. This has had a ripple effect as satisfied patients become advocates and share their positive experiences within their communities. This word-of-mouth promotion has led to increased trust in the center and a growing number of invitations from communities that have yet to be reached.

The community outreach program has been instrumental in removing obstacles to outpatient surgery. Several members of the community have reported gaining a better understanding of the medical interventions, resulting in better-informed healthcare decisions. Moreover, the program has tackled misconceptions surrounding surgeries, cultivating a more supportive and receptive attitude toward surgical interventions.

With this outreach approach, a group of healthcare professionals, including doctors, nurses, social workers, outreach workers, community mobilizers, and supporters, collaborated to provide a comprehensive solution for various communities in the Eastern region.

124
Villages Reached

3856
Villagers Educated

507
Community Walk-in
Consultations







Creativity Unleashed Building the Future at KSC Research Committee

*The formation of the **KSC Research Committee** marks a significant milestone in kickstarting new research initiatives and fostering staff development. This is bolstered by monthly topic discussions designed to stimulate active involvement from the staff.*



Staff Research Initiatives

Presently, a dozen KSC staff members are deeply engaged in their own research endeavors, reflecting the rich diversity of interests and skills within our team. Some of the standout projects are:

- ▶ Director Anna K.'s investigation into **"Exploring the Acceptability of a Non-Cash Payment Scheme."**
- ▶ Dr. Carol's study on **"Patient Satisfaction in Gynecology Ambulatory Surgery."**
- ▶ Community Nurse Samuel's research into the **"Response to Anesthesia Medication and Its Determinants Among Post-Operative Patients."**

This spotlight showcases the remarkable progress the KSC team has made in medical research, particularly in the areas of anesthesia and patient care, guided by the leadership of Dr. Arthur and Job, the research consultant.



New Research Committee; Ambrose Nuwahereza, Saul Kibirango, Job Nanyiri, Dr. Joseph Okello Damoj, Anna T. Kalumuna, Dr. Arthur Emoru - Head of Research committee.



Frontiers Unveiled Novel Research Initiatives

CUGH

Impact of Financial Distress on the Quality-of-Life Domains among Cancer Patients in Rural Uganda

Chelsia Melendez, Shafiga Babirye, Daniel Mukusia, Hena Kadri, Anna Kalumuna, Linda Zhang

Background: This study explores how financial distress affects the quality of life (QoL) of cancer patients in rural Uganda, using the EORTC QLQ-C30 questionnaire, a tool previously untested in such a setting. It aims to understand this relationship to inform better interventions for improving patient outcomes in resource-limited areas.

Findings: Conducted with 50 patients from Kyabirwa Surgery Center, the study found that greater financial distress significantly worsens various QoL domains, including physical, cognitive, and social functioning, and increases symptoms like pain and fatigue. The results emphasize the need to address financial challenges in cancer care, suggesting that alleviating financial burden could enhance overall well-being for patients in rural, resource-scarce settings.

SAGES

The Value and Safety of Remotely Taught Endoscopic Palliative Stenting for Esophageal Cancer in Rural East Africa

Marnie Abeshouse, Joseph Damoi, Callie Horn, Jerome Wayne, Moses Binoga, Michael Marin, Linda Zhang

Background: Esophageal cancer is highly prevalent in East Africa, with limited access to essential endoscopies due to a lack of trained endoscopists. This study investigates the effectiveness of remotely training surgeons in rural Uganda to perform endoscopic stenting for palliative care in advanced esophageal cancer cases.

Findings: In a study at Kyabirwa Surgical Center, Uganda, from 2020 to 2022, remote training enabled surgeons to successfully place stents in 18 of 64 esophageal cancer patients, providing significant dysphagia relief without procedural complications. This approach demonstrates the potential of remote training to improve access to vital medical interventions in resource-limited settings.

CUGH

Factors and Perceived Barriers in Patient's Decision to Undergo Surgery in Rural Uganda

Unwana Abasi, Daniel Mukisa, Makda Zewde, Anna T. Kalumuna, Michael Marin, Linda Zhang

Background: At Kyabirwa Surgical Center in Uganda, a study was conducted to understand the factors influencing patients' decisions to undergo surgery, focusing on their perceived barriers prior to the surgical consultation.

Findings: Surveying 183 patients, the study found that longer symptom duration, previous medical interventions, and higher treatment spending increased the likelihood of opting for surgery. Major concerns deterring surgery included fear of anesthesia and pain, mistrust in care, and logistical challenges like travel. Contrarily, financial constraints and health literacy were less significant in the decision-making process.

ACS

Impact And Effectiveness Of An Ambulatory Surgery Center In Rural Eastern Uganda

Moses Binoga, Unwana Abasi, Joseph Damoi, Dylan Thomas, Anna Kaluuma, Linda P. Zhang

Background: Uganda's surgical rate falls well below international guidelines, prompting Kyabirwa Surgical Center (KSC) to pioneer as the first ambulatory surgical center in the country, aiming to increase access to surgical care.

Findings: Between 2019 and 2021, KSC served 7,391 patients and conducted 1,355 procedures in general surgery and endoscopy without postoperative readmissions or deaths. Serving a population of around 570,795, KSC added 581 annual procedures, enhancing surgical capacity by 42.2% and averting 2,193.16 disability-adjusted life years (DALYs), showcasing ASCs' role in bridging healthcare gaps in rural Uganda.





No Shows No More Catching Up with Social Work



No-Show Patient Reduction: Our focused intervention achieved a significant decrease in no-show patients, from 429 to 274, compared to last year. Additionally, we successfully rebooked 100 patients through dedicated social work efforts. Our team's commitment to making at least 200 calls weekly effectively addressed patient apprehensions, leading to a notable rise in surgery acceptances.

63%
decrease in no-show
patients from last
year

36%
rebooked patients
through social work
this year

Prior to becoming a patient at KSC, Specioza, a 70-year-old individual, had difficulties finding adequate healthcare assistance at rural healthcare centers. It was only after the joint efforts between Rays of Hope Hospice and KSC that Specioza could access the necessary resources to make a positive change in her healthcare journey. Phoebe, the social worker at KSC, went above and beyond by visiting Specioza in Namizi due to her financial difficulties. The shocking conditions of her home highlighted the urgency of the situation, prompting social workers and KSC staff to step in and explore options.

Dr. Carol's thorough examination and diagnosis revealed the gravity of Specioza's condition—Uterine Prolapse. This diagnosis provided clarity and relief for Specioza regarding her health issues. Rays of Hope Hospice generously covered the subsequent surgery, which would have been a financial burden. This act of kindness addressed Specioza's immediate health needs and renewed her hope for a better future.

Specioza's testimony of improved health and a better life is a testament to the impact that coordinated healthcare and support systems can have on individuals. Her smile and newfound joy are a reminder that, even in the face of adversity, compassion and collaboration can bring about positive change.



New Faces, Bright Futures and Building a Stronger Team Fostering International Collaboration



Samuell Louis Okitto - Registered Nurse

“ Since joining Kyabirwa Surgical Center’s global initiative, my experience has been positive and inspiring. The team’s confidence and professionalism ensure every patient is cared for attentively. As a nurse, this environment fosters continual learning and goal-setting. Working here is deeply rewarding, and I envision contributing for decades, feeling proud and admiring our collective efforts daily. ”



Samuel Banturaki - Clinical Officer and Sim Lab Coordinator

“ Working at Kyabirwa Ambulatory Surgical Center is like living a dream, where providing top-notch patient care is deeply rewarding. Being part of a team that combines advanced treatment, high-tech facilities, and an impactful community outreach is incredibly fulfilling. I’m grateful to contribute to our center’s excellence in healthcare. ”



Gloria Christabel Achieng - Human Resources

“ This year at GSI, under my guidance, we’ve seen remarkable growth in Human Resources. We welcomed 9 new team members, enriching our family to 52, and focused on nurturing team cohesion and setting clear objectives. My passion for employee welfare and fostering a supportive management culture has been central to enhancing our department’s effectiveness and camaraderie. ”



Vincent Bukenya - Registered Nurse

“ I take this opportune moment to thank the administration of Kyabirwa SC for giving me this golden opportunity to be part of it and the entire staff for warmly welcoming and supporting me in the orientation process. It’s been a short time with you but I have learnt a lot from each and every one in your different departments. Moving forward, I extend my appreciation to the team for the tremendous work and efforts towards serving and changing the remote Budondo into a national referral Center through affordable surgeries. ”

Other New KSC Personnel Additions:



Eve Wabule
Medical Officer



Carolyne Oleo
Women Health Specialist



Mayanga Joshua Joy
Medical Imaging Technologist



Kisige Elvis
Housekeeper



Mudembula Ivan
Registered Nurse



Special Thanks

UGANDAN ORGANIZATIONS

While we are so proud of all the work that we have accomplished this past year and in the years since opening, we know that we could not have done it without help from our community and trusted advisors. We want to give our profound thanks to these organizations in Uganda that support us in our efforts to help us grow and reach all those in need of our services.

Ministry of Health
Rays of Hope Hospice
Busoga Health Forum
Tellistic Technologies LLC
Local TV and Radio Uganda shows

Ugandan Cancer Institute
Soft Power Health
Kamu Medical Center

Photography Credits
Kagonyera Busingye
Russel Pictures Entertainment

His Majesty William Kadhumbula Gabula Nadiope IV, Kyabazinga
King of the Busoga Kingdom

INTERNATIONAL ORGANIZATIONS

We would also like to extend our thanks to these international organizations that have donated either their time, money, or knowledge to support our efforts.

American College of Surgeons (ACS)
CUGH
Society of American Gastrointestinal and Endoscopic Surgeons (SAGES)
Mount Sinai Health System

GKG Architect
Americares
Olympus Health
Johnson & Johnson

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“Beneath the Stars of Healing Light: At Kyabirwa Surgical Center”

BANTURAKI SAMUEL

In the heart of healing's gentle embrace, A haven of care, and comforting space.
Kyabirwa Surgical Center, we sing your praise, A beacon of hope in life's complex maze.

Settled beneath the skies of Uganda's grace,
Where hands skilled and hearts compassionate trace, The stories of lives transformed anew,
In the corridors where miracles brew.

Surgeons dance with precision and gifted hands, Nurses and staff, with tender, and diligent care.
Every heartbeat, every sigh, every whispered prayer, Echoes gratitude in the evening air.

In the heavy woven cloth, each stitch you weave, A testimony of love, a legacy to believe.
From sunrise to sunset, your lights brightly gleam, Illuminating a path where dreams find their beam.

Oh, Kyabirwa, with walls that echo with cheer, A haven of health, where joy draws near.
At this year's end, we stand hand in hand, To honor the work of this noble band.

Raise a toast to triumphs, to challenges faced, To the lives touched and moments embraced.
May the coming years unfold a tale,
Of Kyabirwa's excellence, ever set to sail.

As stars twinkle above in the midnight sky, Reflecting the sparkle in every patient's eye,
Let this celebration be a resounding cheer, For Kyabirwa, a haven we hold dear.





Immense Gratitude

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