EXPERIENCES AND CHALLENGES OF ESTABLISHING A SIMULATION CENTER IN UGANDA

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Introduction In countries where laparoscopic and endoscopic training are uncommon, surgical simulation-based training may offer an alternative method of preparing surgeons for basic laparoscopic and endoscopic skills. The newly established simulation center at the Kyabirwa Surgical Center (KSC) in rural Uganda is equipped with laparoscopic and endoscopic simulators, aiming to prepare healthcare providers for clinical practice and for the Fundamentals of Laparoscopic Surgery (FLS) and, Fundamentals of Endoscopic Surgery (FES) exams.

Methods A multidisciplinary team from the Mount Sinai Hospital (MSH) and KSC was formed comprising of surgical residents, practicing surgeons, the KSC director, and the Mount Sinai Hospital simulation center director, and identified four major challenges to making an efficient simulation center:

- Securing financial support
- Addressing logistical needs
- Training personnel
- Developing comprehensive curricula.

Results

Challenges	• Methods and actions taken
Financial Support	• Grants and donations provided by the Mount Sinai Hospital Department of Surgery through philanthropy
Logistics	• Essential supplies shipped or hand-carried to Uganda by residents participating in their global surgery rotation and other US visitors from 2022-2024. • Simulation director identified.
Training	• Simulation director training by surgical residents for over 40 hours, including inventory management, tool functionality, and technical troubleshooting. • Simulation director passed FLS Proctor exam in fall of 2024.
Curriculum Development	• Partnered with SAGES to launch the Global Laparoscopic Advancement Program (GLAP) in October 2024. • Plan to host an esophageal stenting course in 2025 with the African Esophageal Cancer Consortium (AfECC). • Plan to launch 2nd GLAP program in August 2025



Conclusion With a well-equipped space, an organized lab coordinator and a comprehensive curriculum, KSC is one of the few simulation centers in Africa with the capability of training the laparoscopic surgeons of tomorrow.

