

Infectious Diseases Institute College of Health Sciences Makerere University



Press release

Infectious Diseases Institute Announces Launch of New Medical Drones Program to Deliver HIV

Medications to People in the Kalangala District

Regularly scheduled flights carrying HIV medications are commencing

The new program is designed to be enduring and sustainable

Data gathered in the Kalangala District will help inform efforts to scale medical drone technology to help solve other last mile delivery challenges in Uganda and beyond

KAMPALA, Uganda, 28 April 2021 – The Infectious Disease Institute (IDI) at Makerere University, with the support of Johnson & Johnson, announced the launch of a new, collaborative program to pilot the use medical drones to deliver lifesaving HIV medications to people living in the Kalangala District more quickly, safely and efficiently than is currently possible. Regularly scheduled flights carrying antiretroviral therapies (ARTs) for the treatment of HIV are commencing in the region, which has the highest prevalence of HIV in the nation.

Uganda has made significant strides in reducing the burden of HIV over the past decade, but the Kalangala District has continued to report high rates of new cases and access to treatment remains inaccessible for many. The island geography of the region makes the delivery of health care difficult, as travel is possible only by boat and is inefficient, unreliable and potentially dangerous for the healthcare workers who journey from island to island to provide care. The medical drones will help overcome these challenges by serving remote landing sites in Bufumira sub-county, reaching and delivering ARTs to approximately 1,000 people living with HIV/AIDS.

"Closing the last mile of delivery and ensuring that people living in remote communities have equitable access to modern treatments for HIV is one of the most significant challenges in global health and in Uganda," said Andrew D. Kambugu, MBChB, M. Med, the Sande-McKinnell Executive Director of the Infectious Diseases Institute. "Medical drones can help solve this challenge by safely and reliably delivering lifesaving medications, thereby empowering frontline healthcare workers to allocate more time and resources to performing other essential services, resulting in healthier and more resilient communities."

Reliable delivery of medications and continuity of care are especially important in the wake of the COVID-19 pandemic, and the World Health Organization and the Joint United Nations Programme on HIV/AIDS (UNAIDS) have warned of the significant risks of not continuing to provide essential HIV services even as COVID-19 continues to spread. Innovative new solutions, like medical drones, are needed to meet this challenge and ensure that the world's hard-won gains against HIV and other global health challenges are protected.¹



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A Sustainable Model

The medical drones program has been designed and implemented from the ground up to be enduring, sustainable for continued operations and deliveries. The team needed to provide the technical and administrative support to maintain ongoing flights have been hired and trained locally, which will help contribute to a more robust local economy, health system capacity and infrastructure.

The program will also serve as an important opportunity for researchers to understand, assess and quantify how effective medical drones are at delivering medications to people living with HIV by planning a Randomized Control Trial (RCT). The data from this RCT will help inform future efforts to scale drone technology to solve other last mile delivery challenges, both in Uganda and elsewhere.

"In the near future, medical drones could be used to address a wide array of last mile challenges and deployed as integral parts of health systems, helping to deliver essential supplies, avoid stockouts and respond quickly to emergencies, crises and disasters," said Rosalind Parkes-Ratanshi, MBBS, MA, PhD, Director, Ugandan Academy for Health Innovation and Impact. "Thanks to the support and coordination of our partners, including Johnson & Johnson, this program will help gather the information and data needed to help make this future a reality, while also helping to deliver lifesaving care to people in need."

The medical drones program has been implemented in close coordination with the Kalangala District Local Government and is being supported by a public-private collaboration including the Ministry of Health of Uganda, Makerere University, Johnson & Johnson, The Ugandan Academy for Health Innovation and Impact, Uganda Flying Labs, Yamasec, Werobotics and John Hopkins University.

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About Makerere University's Infectious Disease Institute

The Infectious Diseases Institute (IDI) was established in 2002 in Kampala, Uganda, by the Academic Alliance for AIDS Care and Prevention in Africa, a group of infectious diseases experts from Uganda and North America whose vision and perseverance for an Africa free from the burden of infectious disease enabled the IDI to become a world-class center of excellence.

In 2004, ownership of the Institute was transferred to <u>Makerere University</u>. Today, a thriving IDI plays an integral role in the Ugandan health care system having developed strong and enduring links with the <u>Ministry of Health (MoH)</u>. IDI's driving mission is to strengthen health systems in Africa, with a strong emphasis on infectious diseases, through research and capacity development.

About the Academy for Health Innovation Uganda

The Academy for Health Innovation Uganda was formed after an MOU between the Ugandan Ministry of Health, Infectious Diseases Institute, the Janssen Pharmaceutical Companies of Johnson & Johnson, and the Johnson & Johnson Corporate Citizenship Trust. The Academy is the flagship home of Connect for Life™ – a collaborative program to empower healthcare workers, academics



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and patients to address critical health challenges, including HIV, tuberculosis (TB) and maternal and child health in resource limited settings.

Our vision is sustainable health care accessible to all in Uganda, and our mission is to improve health outcomes through innovations in clinical care, capacity building, systems strengthening and research, which inform policy and practice.

¹ World Health Organization. Benefits of continuing to provide life-saving HIV services outweigh the risk of COVID-19 transmission by 100 to 1. Available at: https://www.who.int/news/item/13-04-2021-benefits-of-continuing-to-provide-life-saving-hiv-services-outweigh-the-risk-of-covid-19-transmission-by-100-to-1. Last accessed: April 2021. d