

Aga Khan University Hospital Introduces Technology to Optimise Radiation Safety for Patients

Nairobi, Kenya, June 26, 2026 — Aga Khan University Hospital, Nairobi (AKUH,N) has implemented an advanced radiation dose management system that ensures imaging of patients adheres to the **As Low As Reasonably Achievable (ALARA) principals**, lowering radiation exposure without compromising the quality of their diagnosis.

The technology, DoseMonitor® is connected to the hospital's imaging equipment and automatically captures information on the amount of ionising radiation used during an imaging procedure, analyses it, compares it against international safety benchmarks, and alerts clinical teams where further review or adjustment may be needed.

Every day, thousands of patients undergo radiological imaging procedures such as X-rays, CT scans, mammograms, fluoroscopy examinations, SPECT-CT scans, PET-CT scans and cardiac catheterisation procedures. While these procedures are essential for accurate diagnosis, they also expose patients to varying levels of ionising radiation.

“This system incorporates internationally recognised radiation dose reference levels and benchmarks drawn from global best practice, providing clinicians with real-time insights to support safer and more informed decision-making,” said Dr. Khalid Makhdomi, Chair of the department of Radiology at AKUH,N.

He added that the technology will support more personalised and safer imaging decisions for patients.

“DoseMonitor® is a radiation dose tracking and analytics platform that is particularly valuable in paediatric imaging, where minimizing radiation exposure is a key priority,” added Dr. Bernadette Muthee, Pediatric Radiologist at AKUH,N.

AKUH,N CEO, Rashid Khalani, said the introduction of the technology marks an important milestone in the hospital's commitment to placing patient safety at the centre of care.

“In the same way patients ask about the quality of care they receive, they should also feel empowered to ask how their radiation exposure is being monitored and managed. DoseMonitor® gives clinicians the tools to do this more effectively and consistently,” he added.

Mike Battin, COO of PACSHEALTH, LLC, the developer and distributor of DoseMonitor® said, “Opening the door to innovative technologies that improve patient care is the core of our business. We are pleased to be able to add Aga Khan University Hospital, Nairobi to our global portfolio of DoseMonitor® customers and congratulate them on being the first site in the region to undertake dedicated patient radiation dose monitoring to improve patient outcomes. We thank them for their enthusiasm and professionalism throughout the process.”

Kaye Bonython, Managing Director for PACSHealth, Ltd. UK/EMEA added, “ We have been delighted to work with the team at Aga Khan University Hospital in Nairobi to successfully implement our DoseMonitor® patient monitoring software. We know that the team are already using the tool to manage radiation doses to provide the best imaging using lowest dose, save staff time in assessing dose parameters and enable improved patient care for adults and children, including expectant mothers. We wish them every success as they continuously manage patients in this way.”

Beyond patient care, the implementation of DoseMonitor® presents an important opportunity for scientific research and innovation. Many international radiation reference levels have been developed using data from populations in Europe and North America. While these standards provide valuable guidance, differences in patient demographics, body habitus, disease patterns and healthcare environments may influence what constitutes optimal dose levels in different regions.

“By leveraging data generated through DoseMonitor®, Aga Khan University Hospital will be well positioned to use the data to contribute to the development of locally relevant radiation reference levels for African populations. This work has the potential to inform future policy, improve patient care standards and strengthen radiation protection practices across the continent,” added Stacy Achoki, Radiation Safety Officer at AKUH,N.

As the first hospital in Africa to deploy DoseMonitor®, Aga Khan University Hospital continues to demonstrate leadership in adopting advanced technologies that improve quality of care, enhance patient safety and support better clinical outcomes.

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