

Providing New Diagnostic Possibilities in Tanzania

Like many others in developing countries, Iringa Regional Hospital in Tanzania faces many challenges in providing quality health services to the community. Alongside limited and inconsistent supplies of medicines, laboratory reagents and other hospital supplies, some essential equipment, such as certain diagnostic systems are lacking. The result is that even the hospital's most basic diagnostic capabilities are compromised on a daily basis. Toshiba recently donated an Aplio XG ultrasound system to the hospital and organized training in its use and maintenance to staff, supporting their efforts to provide better healthcare.



Entrance Iringa Regional Referral Hospital, Tanzania

Iringa, one of Tanzania's 30 administrative regions, has a population of over 1.5 million people, which grows by 1.6% per year. The region, which covers almost 60,000km², includes the Ruaha National Park, which has an abundance of wildlife and attracts approximately 7,500 visitors per year. Iringa Regional Hospital is one of 25 regional hospitals in the country. It is a referral center for six district hospitals in the region and more than 100 other medical facilities. The Hospital has 445 beds. Admissions commonly include children suffering from malnutrition, pregnant women with pregnancy related complications, or complications with childbirth and infectious diseases.

GROWING CHALLENGES

Dr. Nyakiroto, the Director of Iringa Hospital, described the immense and growing challenges that it faces.

"The disease burden in our region is very high. It includes high prevalence of malnutrition and HIV and its complications. The region also experiences 30% of the national cases of malaria, with more than 95% of these the most dangerous form caused by Plasmodium falciparum.

In addition, we see increasing incidence of diabetes and hypertension. And, because of the vast improvement of infrastructure in our region in recent years, the incidence of car accidents has strongly increased. Our hospital lacks facilities for this. While it has Medical-, Pediatric-, Surgical-, Orthopedic-, Traumatology-, Obstetric-, Gynecology-, Ophthalmology-, Dental-, Radiology- and Laboratory Departments, we have no special Casualty Ward or Intensive Care," he said. "We experience immense, daily challenges in obtaining qualified staff, basic supplies and equipment and in keeping the latter up-and-running. And with limited budget, the purchase of new equipment is mostly impossible."

REQUEST FOR HELP

A request for ultrasound equipment from the Hospital was relayed via Cees Stavenuiter, a general practitioner



Way to hospital departments



Pediatric department

from Denmark, who visited the facility in 2013 as part of a regional Corporate Social Responsibility (CSR) program. Through this, Richard Stavenuiter, Toshiba's Product Manager Ultrasound Systems became aware of the desperate need for support and took action.

"When I first visited Iringa Regional Hospital in 2013, I was struck by the lack of equipment, and the fact that much of the Hospital's existing equipment was broken and unusable, because they did not have the resources, personnel, and know-how to repair it," remarked Cees. "In all departments, the healthcare professionals simply did not have access to the resources that more advanced hospitals, in developed countries, have by default. Watching these dedicated professionals deliver the best possible healthcare under the difficult conditions and observing the ethical dilemmas that they faced under these circumstances emphasized the urgency of the question of how we could help in the best way?"

Particularly indicative of the lack of budget were the challenges faced by the Radiology Department. The needs were very basic. The Hospital was entirely lacking an operational ultrasound system. The existing ultrasound and X-Ray machines were so old that they were no longer functional. Mr. Festo, Head of Radiology at the Hospital experienced even more basic problems, such as lack of X-Ray films, which was exacerbated by regional administration. Managing the Radiology facility has

required extreme prioritization and optimizing the use of equipment and supplies to cope with such issues.

VERSATILE SOLUTION

After thorough consultation with the Hospital and TecMed - Toshiba's partner in South-Africa, who is also responsible for the Tanzania area, Toshiba decided to donate a used Aplio XG to the Radiology Department, as part of its own Global CSR Program¹.

"We agreed that an Aplio XG ultrasound system with five transducers would offer optimal service under the circumstances for a wide variety and many different clinical applications, including diagnostic imaging for Abdominal, Vascular, Breast, Cardiac, Obstetric and Gynecology indications," said Richard.

Shipment of the system was arranged through a reliable Danish charity organization, with experience in shipping donation goods to Tanzania. This was vital to ensure that the equipment arrived safely at the right destination.

"Importantly, we also realized that the Hospital required support in learning to use and maintain their 'new' system," added Richard. "So, we organized trainings for specialists in how to use the Aplio XG correctly and taught the technicians how to carry out some basic, first-line service. Toshiba Medical Systems Europe will also provide second-line support for some years ahead.



Doctor Trainees - Radiographers



Service maintenance training of hospital engineer



Hands-on training on the Toshiba Aplio XG ultrasound system

NEW DIAGNOSTIC POSSIBILITIES

All those involved at the Hospital were deeply grateful to Toshiba for donation of the Aplio XG ultrasound system, which opens a world of new diagnostic possibilities for them.

"Health professionals at the Hospital were forced to almost treat patients 'in the dark', as working without key diagnostic equipment meant they often did not definitively know the cause of patients' illnesses," said Richard. Now, the diagnostic results can provide a better direction in treatment. "In addition, the ultrasound system will also eliminate the need to refer patients to hospitals in Dar Es Salaam - a day's travel by car or public transport. A trip that deters many patients from obtaining the diagnosis that can help them."

Examinations and treatment for certain groups of patients and certain conditions require direct payment from patients in Tanzania. With the Aplio XG ultrasound system, the Hospital has the opportunity to generate returns that can be invested in other services. In addition, experts from other

hospitals will come to improve their ultrasound skills with the Aplio XG, with the specialists at Iringa Regional Hospital simultaneously benefitting from their expertise.

Toshiba's professional approach and the support provided in training with the system, as well as its commitment to follow up care and service was also highly appreciated. In the past, other companies have donated equipment to the Hospital, but with no after care, it has ultimately become unusable.

"Our new Toshiba Aplio XG ultrasound system will be the heart of the hospital for many years ahead," said Dr. Francis Nyabysani, Medical Officer at the Hospital. "Implementing a support strategy that provides maximal and longer term benefits to the Iringa Regional Hospital has required a close collaboration with the Hospital staff," concluded Richard. "We hope that the support will provide many years of enhanced diagnostic capacity for the health professionals there and enable them to help many more patients, despite the challenging conditions that they face."

References

1. <http://www.toshiba.co.jp/csr/en/report/download.htm>