



Helping hearts

Working to create a world where healthcare has no limits

We live in world of health that makes rapid and remarkable progress yet still faces so many heartbreaking challenges. Access to healthcare is one of them. That's why GE HealthCare is continuously looking for ways to bring hope and healing to more people in more places. Some of the latest philanthropic efforts with Vivid technology lead to The Gambia and remote Australia, where preventable heart diseases and other cardiovascular conditions are having devastating effects.



mitral valve and when you detect rheumatic heart disease early, treatment with monthly penicillin injections is very successful in reversing it,” Dr. Bo Remenyi explains.

She has also been working with colleagues Alex Kaethner, chief cardiac physiologist (echocardiography) with NT Cardiac and Associate Professor Josh Francis at Menzies School of Health Research to expand the use of vital cardiac ultrasound in these communities through education and training. The experts developed a curriculum that teaches Indigenous healthcare workers, and local doctors and nurses how to perform simplified echocardiograms.

“The training will be done on handheld devices, such as the GE HealthCare Vscan Extend,” says Kaethner. “These devices are affordable, easy to use and perform echocardiograms with good 2D images and good color flow, which is what we need to pick up rheumatic heart disease. The advancement of the Vscan technology is going to help us get echocardiography into these communities, where it’s most needed.”

The first of many firsts

Rheumatic heart disease also thrives in the Gambia. That’s the home of Dr. Lamin .E.S. Jaiteh, who is the African nation’s first interventionalist cardiologist. He returned a few years after extensive training in Kenya, Egypt, and Germany, determined to bring modern cardiology to the Gambia.



Part of his efforts are focused on reducing the burden of RHD. Dr. Jaiteh says too often patients come to him after the disease has progressed and their heart valves are severely damaged. Sadly, many don’t recover because patients can’t raise enough money or receive the financial aid needed to travel abroad for surgery.

“I usually see patients with advanced symptoms because of lack of proper public health intervention,” says Dr. Jaiteh, pointing to high costs and long lines. “We have fewer hospitals than we need in this country.”

Dr. Jaiteh says he also treats patients with heart failure and other cardiac conditions that are often misdiagnosed by doctors who don’t have cardiology training. His services are in such high

demand that he sees 30 to 40 patients during each 10-hour shift at Edward Francis Small Teaching Hospital in Banjul.

The shortage of care goes beyond hospitals and medical staff. Dr. Jaiteh estimates the Gambia has less than 10 ultrasound machines. And the cost for an echo scan in a Gambian private hospital can run \$20 or more, which is not feasible for many patients.

Still, Dr. Jaiteh refuses to be pessimistic. Back in 2021, Dr. Jaiteh and his friend & mentor in cardiology, Dr. Einar Gude hatched the idea of creating the Gambia’s first cardiac unit. Dr. Gude took on the role of lead designer and developer and they appealed to the Norwegian charity, ScanAid to help with fundraising efforts. The multi-million-dalasi cardiology unit was inaugurated in February.

“Healthcare is so fundamental for all nations to prosper to grow—and is needed for development. With this clinic and with these possibilities, many Gambians now face safer diagnosis and treatment, and are in a good facility for care,” says Dr. Einar Gude.

GE HealthCare donated two echocardiography machines and one EchoPAC™ Software Only to ScanAid Charity for the cardiology unit. Once again, the compact and highly portable Vivid iq Ultra Edition

presented several advantages, including the power to deliver exceptional 2D and 4D imaging. Now Gambians are also being scanned with the Vivid T8 Ultra Edition system. Designed for the most demanding practices, the reliable ultrasound utilizes AI-based tools to help reduce user fatigue and improve workflow efficiency. Both systems compatible with EchoPAC that support the doctor from prior exam reviews all the way through post exam interpretation, reporting, and archiving.

In addition to treating patients, Dr. Jaiteh is teaching a future generation of Gambian cardiologists and cardiac nurses. “Having someone who comes from the same place as you, the same socioeconomic background and having seen him go through all this—he’s a light in the middle of the dark,” says Dr. Landing B.M. Jarju, one of four local physicians Dr. Jaiteh is training.

Dr. Jaiteh’s goal is to have a fully functional interventional cardiology practice in five years that will include advanced imaging, a catheter lab, stent implantation and the valve replacement and repair surgery that is still out of reach to so many Gambians.

“It is a battle that is really difficult to win but I am trying to do my best,” says Dr. Jaiteh. “Maybe I’m too ambitious but I have to keep fighting.” ■

Disease of the disadvantaged

Rheumatic heart disease (RHD) affects 40 million people around the world and was linked to more than 305,000 deaths in 2019¹. It is most common among children and young people living in low-income countries, where poverty is widespread and there is limited access to basic health services². RHD often begins as strep throat and untreated infections can lead to acute rheumatic fever, which can cause life-threatening heart valve damage. While RHD is a substantial global health problem, it’s both preventable and treatable with the right resources and care.

The journey to end RHD in Australia

Little by little. Trek after trek. Scan by scan. A group of volunteer pediatric cardiologists and other healthcare professionals is working to stop the

spread of RHD in remote Indigenous communities in Australia. Supported by portable GE HealthCare Vivid iq Ultra Edition ultrasound systems, they screened hundreds of children last summer as part of the Deadly Trek program.

“Rheumatic Heart Disease is solvable, but people put it into the too-hard basket. This is a disease we can definitely get rid of in my lifetime,” says Dr. Bo Remenyi, who practices at the Royal Darwin Hospital, NT Cardiac and works with the Menzies School of Health Research.

Ultrasound is a critical tool in driving progress, and the ultra-portable Vivid iq Ultra Edition was the perfect companion for the recent trek. Not only is the system compact and lightweight, but it also makes scanning straightforward, allowing for fast and confident diagnoses.

“Ultrasound scans of the heart only take two minutes—it’s an abbreviated scan of the aortic and

1 Roth GA, Mensah GA, Johnson CO, et al. Global Burden of cardiovascular diseases and risk factors, 1990–2019. *J Am Coll Cardiol* 2020;76:2982-3021.

2 Auala, T.; Zavale, B.G.; Mbakwem, A.Ç.; Mocumbi, A.O. Acute Rheumatic Fever and Rheumatic Heart Disease: Highlighting the Role of Group A Streptococcus in the Global Burden of Cardiovascular Disease. *Pathogens* 2022, 11, 496.

Ultra Edition is not a product name, it refers to the 2022 release of the Vivid portfolio. All features or products may not be available in all markets, please contact your sales representative for more information.

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