



Groundbreaking UK telehealth solution is put to the test in one of the world's most-remote communities

AN ONLINE health service designed in the UK is being used to deliver pioneering telehealth solutions to residents living in the remote village of Gerkhutar in Nepal, one of the world's most-rural areas.

Developed by Meddserve, Medsystem Online and Medrecord Online offer residents the opportunity to have indepth consultations with healthcare specialists based 65km away – a journey that would normally take a villager and their family two days to complete.

The venture is showing the impact telehealth services can have at a time when NHS trusts in the UK are planning to increase their own use of such technology in a bid to offer patients more-convenient healthcare options.

The technology was piloted in the village using only a basic computer and dial-up internet connection, but can be used in any hospital, anywhere in the world.

During the trial, residents spoke confidentially to a nominated healthcare representative, giving details of their symptoms and general examination data like height, weight, blood pressure and body mass index. Patients were also able to mark on a 3D body image unusual injuries or where they were experiencing pain or discomfort. Pictures were then uploaded securely to Medrecord Online and a referral made to a specialist in Kathmandu, who could use the information to give a diagnosis and to advise on treatment.

The technology has been designed to include an integrated healthcare management system, which is set to improve the day-to-day running of healthcare establishments and the way patient information is stored and accessed.

Dr James Britton, who developed the service with Meddserve's technical team, said: "Gerkhutar is not easily accessible by car, so it was the perfect location to trial telehealth services.

"We have been working on this technology for 10 years and we believe it to be the most-advanced system in the world. It ensures that everyone, no matter where they live, has access to healthcare services and, because it is delivered through the internet, it means it can be used to benefit 80% of Nepal's population that live in rural areas."

Dr Britton is a consultant in dermatology, but also has a background designing IT systems for genetic research. The creation of this new technology has enabled him to combine both these specialisms.

A Meddserve spokesman said: "Together we have developed a system that has very low set-up and running costs and can be easily integrated into hospitals around the world. It is easy to use, offers 100% data protection and uses technology that is not currently being used in the healthcare world.

"Since the successful pilot, the Nepal government wants to roll the technology out across the country and has already earmarked two more villages where it will be used. Plans are currently in place to start these pilots in April."

Krishna Pandey from the Nepal High Commission for Information Technology led the pilot project and told *HES*: "The villagers were extremely excited to see such a reliable and easy system on their desktop, from which they could get help regarding all health services. The first villager who registered said it was like a senior surgeon was in front of them, which was excellent feedback."

* About Medsystem Online: The service runs the functions of a hospital such as patient appointments, shift patterns, patient test results, fully-integrated PACS, bed admissions, specialist referrals and telemedicine. The built-in referral system and messaging means there is no chance of losing data and no breach of confidentiality

* About Medrecord Online: An online health record system, this technology stores patients' medical history, allowing individuals to access and control their own health records, whenever they want to and wherever they are in the world. Each person carries a Medcard with a unique number allocated to them and a barcode on the back. No data is stored on the card, so it can be lost without fear of information breaches