In rural locations across Africa and the rest of the world, communities sometimes have a gap of weeks, months or even years between visits from healthcare workers. Most rural villages lack a permanent healthcare facility, so these sporadic visits from medical staff are often the villagers’ only opportunity to receive medical care. And even when healthcare workers do visit, they may not have access to tools and resources necessary to diagnose or treat every medical condition they encounter.

This is why eHealth solutions are critical to medical care provision in rural communities. Using these solutions, remote medical workers are able to gather diagnostic information whilst on site, share it with their colleagues in urban hospitals and clinics and collaborate to facilitate diagnosis and treatment, which would otherwise be impossible for villagers to access.

However, these solutions can only be effective if the location they are used in has access to voice and data connectivity. Cellular and terrestrial services are in short supply in these locations, if they are available at all. Inmarsat’s global 3G satellite network delivers 99.9% availability over its satellite and ground network, providing voice and broadband connectivity no matter how remote the location, which is why SOS Children’s Villages Benin and Safe Triage Ltd chose to use Inmarsat’s BGAN Link service for their eHealth initiative in Benin, Africa.

Early diagnosis enables preventative treatment

In rural locations across Africa and the rest of the world, communities sometimes have a gap of weeks, months or even years between visits from healthcare workers. Most rural villages lack a permanent healthcare facility, so these sporadic visits from medical staff are often the villagers’ only opportunity to receive medical care. And even when healthcare workers do visit, they may not have access to tools and resources necessary to diagnose or treat every medical condition they encounter.

In September 2014, SOS Children’s Villages Benin and Safe Triage Ltd, in conjunction with Inmarsat, began a three-month initiative of Safe Triage, an eHealth solution that holds

“The connectivity provided by the BGAN Link service was integral to the success of this pilot. The reliability of the data connection meant that patient data could quickly and efficiently be shared with medical clinics from the village, and more importantly, enable us to diagnose chronic illnesses amongst the women and children of these rural communities and refer them for immediate treatment.”

Mr Salimane Issifou, National Director, SOS Children’s Villages
a range of medical data from patients on a shared server, from which doctors could remotely monitor and diagnose patients. This data was transmitted in real-time over Inmarsat’s BGAN Link service.

The project involved SOS Children’s Villages Benin working with clinics in rural locations in the Abomey and Dassa–Zoumè regions of Benin, and used a series of community consultation programmes to monitor, diagnose and treat men, women and children. The clinics utilised the Safe Triage telemedicine applications to gather the patients’ medical information on smart tablets, which were then sent in real time via satellite to a secure server, which doctors in hospitals and clinics used to monitor and evaluate the villagers’ health.

The impact of eHealthcare

Over the course of the three month initiative, the clinics met with more than 850 men, women and children through their Family Strengthening programme and Family Based Care programme. These initiatives allowed the villagers access to the medical expertise and resources of larger urban hospitals, which would have previously been out of their reach. Thanks to the real-time sharing of medical data over BGAN Link, doctors were able to identify instances of diabetes, hypoglaecemia and hypertension and other conditions, and refer these patients for treatment. By catching these conditions early, and not waiting for more serious symptoms to develop, treatment becomes easier and safer. The programmes identified more than 70 individuals with serious conditions that required immediate treatment, treatment that they would otherwise have been unable to access.

Safe Triage

Safe Triage enables remote medical teams to capture and share relevant patient medical information in real-time back to receiving hospitals where specialists are able to assess and advise appropriate interventions. The easy to use, ruggedised tablet PC, utilises a simple touchscreen interface to capture patient details and information about their condition with appropriate vital sign monitoring equipment linked wirelessly to the device. All information is transmitted via satellite or GSM networks to a secure web based information portal in the hospital or clinic for relevant healthcare professionals to access.

“We were delighted to support SOS Children’s Villages Benin in their vision and that the ST Telemedicine Unit worked so effectively in the assessment and treatment of patients in remote areas of Benin who would normally have difficulty accessing specialist care,” said David Morgan, Medical Director, ST.

BGAN Link coverage

The BGAN Link service is available in most countries. BGAN Link Geo plans are available in Eastern Europe – Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Mongolia, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. LatAm – South American region including Mexico and some Caribbean islands. Sub-Sahara Africa – all African countries excluding Morocco, Algeria, Libya, Egypt, Southern Sudan, Somalia, Tunisia and Western Sahara. APAC – Australia, New Zealand and some Pacific islands.

Reliable, affordable connectivity for long term projects

BGAN Link is an affordable, fixed L-band satellite broadband service. Designed for use in one location, BGAN Link offers high data volumes for a fixed monthly cost, and provides speeds of up to half a megabit, making it an attractive choice for longer term aid and humanitarian projects. As well as being ideally suited to provide connectivity for eHealth and telemedicine initiatives, BGAN Link can easily handle the demands of a remote office – VPN, email, corporate applications, internet and intranet access, so any project can be administered on site, saving time and resources. Accessed through robust terminals, designed for harsh conditions and with low power consumption rates, BGAN Link can be deployed quickly and easily to almost any location on the planet, no matter how remote or challenging.

About Inmarsat

Inmarsat plc is the leading provider of global mobile satellite communications services. Since 1979, Inmarsat has been providing reliable voice and high-speed data communications to governments, enterprises and other organizations, with a range of services that can be used on land, at sea or in the air. Inmarsat employs around 1,600 staff in more than 60 locations around the world, with a presence in the major ports and centres of commerce on every continent.

Learn more about how Inmarsat’s services enable Aid and Humanitarian agencies to deliver effective eHealthcare: