

Philips streams health data securely with AT&T Global SIMs

Business needs

A way for emergency responders to transmit patient vital signs to hospitals

Networking solution

AT&T Global SIMs deliver reliable connectivity that sends data to emergency room personnel in preparation for patient treatment

Business value

Better-informed patient care, easier provisioning thanks to the AT&T Control Center SIM management platform

Industry focus

Healthcare

Size

71,500 employees in more than 100 countries

About Philips Healthcare

Philips Healthcare is a leading health technology company focused on improving people's health and well-being through innovation. Philips uses technology and clinical and consumer insights to deliver health solutions for consumers and healthcare providers and their patients, in the hospital, in the field, and in the home. Philips Healthcare is part of Royal Philips, a Netherlands-based company that is a leader in diagnostic imaging, ultrasound, image-guided therapy, monitoring, enterprise informatics, and personal health.

The situation

Philips designs sophisticated patient monitor/defibrillators to help first responders treat patients in the field. These connected devices communicate patients' vital signs to hospitals so doctors can be better prepared when patients arrive. Philips needs a reliable, secure way to send data from its medical devices to hospitals.

Solution

Philips has chosen to equip its lifesaving medical devices with AT&T Global SIM cards. Reliable IoT connectivity helps the company's monitor/defibrillators communicate vital patient data reliably and securely from first responders in the field to hospitals.

More than a century of innovation

Philips has a proud heritage of groundbreaking innovation that stretches back almost 130 years. Meaningful innovation focused on customers' needs remains at the heart of everything it does. The people of Philips work to improve health and well-being. They believe that patient-centric innovation can improve people's health and healthcare outcomes and make care more accessible, convenient, and sustainable.

The company's innovations are driven by consumer and customer needs. They help people live healthily and prevent disease and give clinicians the tools they need to make precision diagnoses and deliver personalized treatment. Philips products also aid patient recovery at home, thanks to a seamless flow of data.

Philips is working to improve 2.5 billion lives annually by 2030, including 400 million in underserved communities.



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Marketing Director, Emergency Care
Philips Healthcare

Lifesaving products

Matt Penzone, Philips's Marketing Director, Emergency Care, said the company's automated external defibrillators (AEDs) are used to help people experiencing sudden cardiac arrest. The AED is a sophisticated, yet easy-to-use medical device designed for ordinary people to use. It offers real-time, step-by-step voice prompts that help people respond to suspected sudden cardiac arrest.

“You're very likely to see AEDs in airports, sports arenas, gyms, and office buildings. If somebody collapses from a sudden cardiac arrest, a bystander can grab the AED and help treat the person. It doesn't require any special training,” Penzone said.

Within weeks of joining Philips, Penzone was part of a team that used a Philips AED to treat a coworker who collapsed at the office. “We grabbed an AED and got to him just as the office emergency response nurses had arrived with their own AED. We saw them cut the shirt off our coworker and shock him back to consciousness,” he said.

“This was my sixth week of work, and I saw the AED save the life of somebody I worked with. I thought, ‘This is the kind of product you can really get behind.’”

Better, more cost-effective patient care

More than 2.5 million Philips AEDs have been sold around the world. They can be found on board major airlines, in Fortune 100 companies, in the locker rooms of professional sports teams, and throughout classrooms, churches, and many other venues.

While its AEDs are designed to be used by people without medical training, Philips also offers lifesaving equipment designed for use by paramedics and other healthcare professionals. The Philips Tempus ALS is a patient monitor/defibrillator that offers a powerful, trustworthy approach to prehospital monitoring and defibrillation.

Emergency response personnel like paramedics use Tempus to assess and monitor a patient's symptoms during transport to the hospital, and to defibrillate a patient if necessary. Tempus replaces technology like the ECG monitors first responders used for years to monitor and diagnose cardiac issues. In the '90s and early 2000s, responders often used unreliable and sometimes clumsy dialup modems and fax machines to let medical professionals know a patient's status as they were being transported.



“They would send a picture of the patient’s ECG signal to the hospital in advance to support a more accurate diagnosis,” Penzone said. “The hospital team needs to know whether to activate a cardiac catheterization lab, and call in doctors if this happened during off hours.”

These preparations can be expensive, so it’s important to get an accurate diagnosis to provide the best patient care in a cost-effective manner.

Data security and control

Tempus has revolutionized emergency care by allowing first responders to stream extensive measurements like ECG, heart rate, temperature, respiration rate, blood pressure, and more to hospitals, enabling medical teams to make the necessary arrangements to treat patients more effectively on arrival.

As Philips planned to introduce the Tempus and market it to EMS and Fire Rescue teams, Philips realized that it needed a dependable way to communicate patient data to waiting physicians and other medical personnel. “As Philips was trying to bring this communication capability to Tempus, one of the first things we did was look at AT&T because of the network presence,” Penzone said. “AT&T is a reliable vendor with nationwide coverage that could provide exactly what we need.”

The company chose AT&T Global SIMs to provide connectivity to communicate patient data to hospitals. AT&T Global SIMs provide worldwide, end-to-end connectivity that adapts quickly to changing circumstances. It’s a simple matter for Philips to deploy and manage its medical devices using the AT&T Control Center.

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Marketing Director, Emergency Care
Philips Healthcare

Philips was especially impressed with the AT&T Business commitment to security. “AT&T would allow us to control the data and help maintain security,” he said. “That was paramount, because protecting patient data is critical and we wanted to minimize the risk of a data hack. We take IT security very seriously, because our customers do.”

Vital two-way communication

Dependability was another vital consideration for Phillips. Dead zones on the way to the hospital could be problematic. “Before Tempus, streaming data wasn’t broadly possible with the technology that existed; half of the patient record could be missing if there wasn’t reliable network coverage,” Penzone said.

“Being able to maintain security and network reliability for accurate and consistent flow of data was crucial for us,” he said. The Tempus monitor doesn’t just push ECG photos to hospitals and hope that someone is there to see it.

“Tempus actually allows two-way communication, so you can send digitally analyzable, measurable data sets and stream vital signs to support teams in real time, and they see exactly what you are seeing at the patient’s side,” Penzone said. “Doctors can even respond back to care providers in the field through Tempus and the same secure networks and methods. That’s unique. No one else can do it. And we do it with AT&T’s help.”

Support for better patient care

Penzone likes that AT&T Business understands the needs of first responders and healthcare workers. “The AT&T expertise is strong. They understand how to serve the needs of emergency care personnel. We didn’t have to convince AT&T that emergency care personnel have specific needs that had to be met.”

He’s also impressed by the AT&T IoT network capabilities. “Providers can capture information and get it where it needs to go, which can help the hospital team provide the best care in that moment. And AT&T’s connectivity helps us build a patient record automatically by being able to acquire and move data through Tempus.”

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Because Tempus allows you to easily capture information, first responders can input notes like medications administered or conditions noted. Without Tempus, they may have to make notes during transport and use a computer back at the station to record the patient assessment. “They would need to recall and gather all that information to build a patient record for documentation and reimbursement. Being able to avoid this saves time and money, getting EMS teams back into service faster,” Penzone said.

Tempus captures data quickly and relies on AT&T IoT connectivity to communicate it. “There’s no fax machine to dial into and try to transmit something over a dialup network. Everything is captured automatically and the data flows right up, so it can save time, is more convenient, and supports better patient care,” Penzone said. “AT&T’s technology is vital.”