

Challenges

- For specialized medical care, residents of the small community of Filipina, Panama would have to travel two hours and it would cost one to two weeks' salary to get there.
- To integrate telemedicine into its annual trips to Panama, FSU needed something highly portable for travel by plane and bus to various temporary clinics.
- The traveling team had to be able to accommodate varying Internet or cellular connections to share images and data securely with specialists at FSU.

Value Created

- GlobalMed's TES™ solution is a carry-on size case with wheels that integrates with Avaya Scopia Desktop and Mobile for portable, easy-to-use, high-definition videoconferencing between Panama and Florida.
- Scopia automatically adjusts the image quality to account for connectivity changes and maintains the highest possible quality transmission at all times without dropping data.
- FSU students gained valuable telemedicine experience.
- Patients received specialized care in their own town – a level of care that they likely would never have received without Avaya Scopia and the TES™.



Florida State University – FSUCares

FSU Medical School Treats Panamanian Patients via Videoconferencing

GlobalMed, Avaya Scopia® Enable High-Definition Connection to Specialists



In the small community of Filipina, Panama, a woman visits a temporary clinic for difficulty breathing. She is relieved to learn it is an upper respiratory infection – a very treatable condition.

The method of her diagnosis is becoming more common in remote, underserved areas of the world. A doctor at Florida State University's Pensacola Regional Medical School Campus performed the exam by videoconference, guiding a team of FSU doctors and medical students onsite in Panama on what tests to perform.

New technologies and more widespread Internet and cellular coverage allow healthcare providers to deliver care via telemedicine to patients in underserved areas. In the next five years, the global telemedicine market is expected to more than double to \$27.3 billion.

“We find the Avaya Scopia solution very easy to use and intuitive, making interfacing simple.”

- Ashley Droege, Director of Product Management, GlobalMed

Bringing Care to the Underserved

FSUCares is an organization of medical students devoted to helping underserved and underprivileged populations both locally and internationally. The group delivers health services to those who would otherwise not have ready access to care, allowing students to experience an interactive, clinical learning environment.

Since 2002, a team of doctors and medical students from the FSUCares program has traveled to Panama on annual medical missions. The group identified a particular need in the community of Filipina, a town about two hours from Panama City.

“The entire community of Filipina would have to travel to another town to get healthcare once a month, or would have to travel to a medium-size city, which was very cost prohibitive,” said Mark Stavros, M.D., who coordinates the emergency medicine curriculum and training of third- and fourth-year medical students at the Pensacola Regional Medical School

Campus. Stavros has traveled to Panama with FSUCares nine out of the last 11 years.

Until recently, Filipina lacked a health clinic of its own. FSUCares worked to establish a permanent clinic that is recognized, supported and staffed by the government.

During FSU’s annual spring trip, faculty doctors and students join with the Filipina clinic staff to run temporary clinics at schools throughout the area. Their efforts create an opportunity for locals to receive care that would otherwise be difficult to obtain, especially for those needing specialized medicine.

Portable, High-Definition Telemedicine

This past year, the FSU team expanded its reach by connecting virtually with doctors back at the FSU campus in Pensacola. GlobalMed loaned the team the TES™ (Transportable Exam Station™), a highly portable “exam room-in-a-box.”

The TES™ comes with an HP tablet and integrated medical devices, such as GlobalMed’s TotalExam™ 2 Examination Camera and CapSure® Store-and-Forward Image Automation software, USB otoscope and an electronic stethoscope.

For videoconferencing, GlobalMed integrates Avaya Scopia® video technology to enable high-definition,

face-to-face video interaction between a practitioner in the field and a specialist at a primary site. GlobalMed chose Avaya from among a host of other video conferencing solutions based upon image quality and ease of use.

“The last thing you want is for a clinician to fumble with an application or platform while with a patient. We find the Scopia solution very easy to use and intuitive, making interfacing simple,” said Ashley Droege, Director of Product Management, GlobalMed.

The Scopia platform is designed to work well outside highly controlled corporate networks. For image quality – critical to some health assessments – Scopia video is the only solution that automatically adjusts image quality to account for network issues and to maintain the highest possible quality transmission at all times without dropping data.

A Carry-On-Size ‘Exam Room’

From the airport, to the bus, to the clinic, Stavros found the TES™ simple to transport and use.

“The TES is a compact case on wheels that I put in the overhead bin like any carry-on. It comes with all the peripherals we need to do the exam and connect with colleagues. It’s an extension of our own hands,” Stavros said.

To enable videoconferencing, Stavros and the team used Scopia Desktop, a web browser plug-in, on the TES™ laptop and on a computer at FSU. Stavros purchased an air card in Panama to connect via cellular service, which was available in most of the clinic locations. He also had the option to use Scopia Mobile on his Android tablet.

When the connection temporarily did not enable live streaming, the team took photos and recorded exam notes, and later sent them to the secure cloud where colleagues in Florida could access and review them. Patient data was protected by Scopia with an advanced encryption that meets HIPAA regulations.

Connecting Patients with Specialists 3,000 Miles Away

While in Filipina, the team saw a broad range of cases: chronic issues, broken bones, bug bites and other tropical medical needs. The high-definition video enabled by the TES™ and Scopia Desktop allowed doctors and students to capture and share very clear images with colleagues.

“The TES is a compact case on wheels that I put in the overhead bin like any carry-on. It comes with all the peripherals we need to do the exam and connect with colleagues. It’s an extension of our own hands.”



“We did a head-to-toe exam on the woman with shortness of breath,” Stavros said. “My colleague at FSU, Dr. Kim Landry, directed us, saying, ‘I want to listen to her heart. I’d like an EKG.’”

It was particularly rewarding to see one young woman receive confirmation that she was pregnant and to witness her seeing her baby for the first time on ultrasound, made possible by the TES™.

For medical students, first-hand telemedicine experience adds dimension to their education. For patients, the technology provides rare access to medical specialists. For that kind of care, patients would otherwise have to go to a more populated area -

travel that’s expensive and difficult, especially for those who are ill.

“Typically if someone needs more specialized care, you would have to travel 25 miles and it would cost you one to two weeks’ salary to get there. Imagine how life-changing telemedicine can be for a community like this,” Stavros said.

In the future, Stavros sees an opportunity to apply telemedicine on a more regular basis, by equipping the permanent clinic in Filipina with the tools that will enable connectivity with students and faculty at FSU, and by sending students on their own to Filipina to conduct exams with virtual support from faculty.

“I’d like to set up a program where part of the students’ experience was going to Panama and interfacing with the faculty here to render care,” Stavros said.

Solution

- Avaya Scopia Desktop and Mobile, connected through an Avaya Scopia Elite Series MCU
- GlobalMed TES™ (Transportable Exam Station™)

Learn More

For more information, contact your Avaya Account Manager or a member of the Avaya Connect channel partner program, or access other collaterals by clicking on Resource Library at www.avaya.com.

ABOUT FSUCARES

FSUCares is a dynamic medical student organization devoted to helping the underserved and underprivileged populations both locally and internationally. The group's mission is to provide health services, including medical care, education, and counseling to those people who would not otherwise have access to care while providing an interactive, clinical learning environment for FSU College of Medicine students.

About Avaya

Avaya is a global provider of business collaboration and communications solutions, providing unified communications, contact centers, networking and related services to companies of all sizes around the world. For more information please visit www.avaya.com.