News Release
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CLEMSON UNIVERSITY SECURES FUNDING TO IMPROVE RURAL HEALTH OUTREACH BY WIRING SOUTH CAROLINA UNDERSERVED COMMUNITIES

Clemson University has been awarded a funding commitment from the **Universal Service Administration Company** (USAC) Rural Health Care Program to bring high speed broadband technology to 102 health care sites across South Carolina to improve the efficiency of rural health outreach efforts. The three-year funding commitment amounts to $5.24 million with the anticipation of renewal at the end of the funding term.

Clemson's **Joseph F. Sullivan Center** began pursuing the funding in 2015 with the goal to improve telecommunication capability at health care sites frequented by its mobile clinic and those from other health care organizations. The funding will provide wireless broadband technology to stationary health sites and mobile clinics that will allow both entities easy, secure and reliable access to electronic health records and telemedicine for patients in rural, remote areas.

According to Paula Watt, director of the Clemson's Sullivan Center, the funding is set to streamline the way mobile clinics operate in rural areas and provide an economic boost to South Carolina companies tasked with hardwiring sites and mobile clinics. However, the real beneficiaries will be the people in underserved communities who stand to gain the most from this infusion of technology. "*The Sullivan Center has spent decades bringing health care to communities that face an absence or limited amount of services*," Watt said. "*Hardwiring these health care sites will increase the number of people our mobile clinic and these sites can serve and improve every service we offer*."

Improved Mobile Clinic Experience

Watt said the enhanced technology should make a night-and-day difference in the way Clemson's mobile clinic can serve its patients. The clinic's staff often waits up to five minutes per patient to connect to a health record that is protected through private networks. This process repeats each time service drops off, which is a regular occurrence.

The delay in service is part of the reason the clinic has gotten creative over the years. It moves patients through three or four different programs to provide comprehensive care in order to buy time lost by spotty connections. In the more remote locations, clinic staff resorts to paper documentation, which has to be transcribed and added later to their patient electronic health records. An improved, stable connection takes away the need for paper documentation and the extra staff hours and risk of mistakes that come along with it. It also means the clinic can see more patients. "*Currently, if patients come steadily we can make it work, but if they happen to come all at once, the technology has tied our hands*," Watt said. "*A patient who just shows up—even if they qualify—frequently can't be seen because of delays in service. A stable connection changes all of that*."

A Benefit for All

To secure funding, the Sullivan Center partnered with **Mobile Connectivity Solutions (MCS)**, a team of mobile health care, marketing and telecommunication professionals. The Sullivan Center, along with other health care systems that run mobile clinics including the **Medical University of South Carolina**, **Self Regional Healthcare**, and **Servants for Sight** worked with MCS to iron out the details so that each system would enjoy the benefits of improved technology across the state.

James McElligott serves as medical director for the Medical University of South Carolina Center for Telehealth and as co-chair for the South Carolina TeleHealth Alliance advisory council. He's interested in any opportunity to partner with like-minded institutions that will expand access for mobile clinics or pursue interventions that increasingly require a quality telecommunication connection. McElligott said many gaps in care for diabetes, cardiovascular health and pre-term deliveries for pregnancies are due to lack of access to prevention and screening. Although MUSC has been involved in telehealth initiatives since 2005, McElligott has seen the number of related initiatives accelerate in the last five years.

"*This is another reason to bring MUSC and Clemson closer together to collaborate and accomplish great things in the realm of public health.*" McElligott said. "*It gives us all more options when we strategize our delivery of health care to the people who need it. This is a tangible and real front that we can work on and further develop*."

A Mobile Connectivity How-To Manual

More than most, Darien DeLorenzo, CEO and President of **Mobile Connectivity Solutions (MCS)**, understands the evolution of mobile health care outreach and the increasing need for mobile clinics to benefit from reliable and secure broadband connections. She worked in health care marketing for over 40 years and served as a consultant to the American Hospital Association. DeLorenzo was also instrumental in launching the first mobile health care conference and the national Mobile Healthcare Association, which allows clinic operators to network and share knowledge. She said the move to electronic health records—and the basic infrastructure to make accessing them possible—was a lingering question on the minds of most mobile clinic operators. She founded MCS to find the solution to the connectivity problems that had plagued them. "*I believe this funding commitment is the answer for fixed health care locations and mobile clinics*," DeLorenzo said, "*but we needed a partner and client that would go through this learning curve with us. Clemson was that partner*."

DeLorenzo said the benefits for mobile clinics and the locations they serve will be felt for years to come, but she doesn't want them to overshadow the additional benefits that will come as Clemson partners with GTT Telecommunications, Inc., to wire each fixed and mobile location. Roughly 70% of all installations will be completed by local South Carolina carriers that GTT subcontracts with to complete work at each site, so a considerable amount of these funds will be funneled to local companies to complete the extensive installation work. "*The work Clemson and its partners have put in over several years won't just pay off in health outcomes for South Carolina citizens*, *the state economy also stands to gain from this funding,"* DeLorenzo said.

Clemson's work on this project has required cooperation with other South Carolina health care systems and the patience to contend with the unknown. DeLorenzo said Watt and the Sullivan Center team have played a vital role in helping to write the "how-to manual" on acquiring the type of funding that will serve to expand access to health care for underserved rural populations throughout the state and across the nation. Considering the future benefits, Watt is happy to be the model for something new. "*Clemson and many other mobile clinics will see the benefits of this funding at every stop we make across the state*," Watt said. "*We're going to bring an even better experience to more of the patients who need us most*."

This project has been made possible by support and contribution from many partners. Our special thanks to Anita Chambers at **Odulair** for collaborating with Clemson University and Mobile Connectivity Solutions. Odulair built Clemson's newest all-solar powered mobile medical clinic. "*We recognized that MCS was uniquely qualified to assist Clemson in applying for the required level of USAC funding in order to realize the full potential of this project and we were glad to contribute by bringing their services to the attention of Clemson*," said Chambers.

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