PRINT-Expanding telemedicine education to increase rural access to care

More than 1.5 million rural Illinois residents face significant health care access barriers due to a lack of resources and limited infrastructure. OSF HealthCare serves many rural communities in Illinois and Michigan and leaders are looking at telehealth and digital health tools and platforms to bridge those gaps.

Part of the strategy involves collaborating with academic partners such as Illinois State University in Normal. A team made up of faculty at ISU and clinicians from OSF is working on a project to educate the future workforce on using a telehealth platform that can allow real-time assessments, consultations, diagnosis and creation of care plans, along with providing health education for people with chronic conditions in rural, medically underserved communities with aging populations.

The project called *STARTED – Simulation to Address Rural Telehealth Education Development* is funded by a joint OSF-ISU Connected Communities grant as part of an ongoing collaboration.

Assistant Professor Susie Watkins, PhD, RN, [Mennonite College of Nursing at Illinois State](#) says the platform will allow nurses to hold pop up clinics in homeless shelters or other community sites.

"This would help us provide some care in a community like that where they don't otherwise have access to health care, and that could potentially avoid them having to use the emergency room for things like ear infections and strep throat," Watkins says.

The platform also has attachments that can be used for physical exams performed by a nurse. Data and video from the exam could then be sent back to a provider at a distant hospital or clinic to review and offer a diagnosis and treatment recommendations, including prescriptions or referrals to a specialist.

Watkins holds up attachments as she explains, "It has an attachable otoscope that would record a full ear exam to determine if the ears are inflamed, and then also has an oral tongue depressor feature that one could examine the back of the throat for potential tonsillitis.

There are other devices that can connect to the platform to provide assessments on heartbeat, sounds, blood pressure and other tests such as blood glucose levels that can be sent to the off-site provider via the platform.

The Director of Interprofessional Education at [Jump Simulation](#), Ann Willemsen-Dunlap, CRNA, PhD, is co-lead on the collaboration for the first year of training 120 Bachelor of Science in Nursing (BSN) and 24 Family Nurse Practitioner (FNP) graduate students. She's supporting the development of web-based learning modules that use patient scenarios, video vignettes and telehealth simulations using standardized participants.

Trained actors will be used

Standardized participants are specially trained actors who portray patients from rural communities with various health challenges. The actors also provide an assessment with standardized metrics that measure competency in various areas including wellness screening, disease specific illness-related triage, disease self-management support using motivational interviewing and person-centered goal planning techniques. Willemsen-Dunlap says the standardized participants also give verbal feedback once the simulation is over.

"They're going to be talking with their learners about how the interaction made them, as patients, feel from a first-person perspective."

Willemsen-Dunlap says eventually community health workers, as trusted advisors, can be trained to go into homes within medically underserved communities to help patients get comfortable with the portable technology that allow for in-home exams, rather than requiring patients to travel long distances for care.

"I think that having a community health worker present in the home to facilitate the interaction and nurses who are skilled and comfortable working in the digital environment, as well as providers who had similar training is going to be the key to success," Willemsen-Dunlap stresses.

Other funding sources are being sought from governmental or non-governmental organizations to support additional work to implement a rural health mobile clinic that uses this training and technology to deliver exams and health-related care within underserved communities.

In areas of so-called connectivity deserts, where the internet is not available or is unreliable, OSF OnCall, the health system's digital care arm, could use an OSF OnCall Connect On the Go van for exams using the enhanced virtual platform and on-site connectivity.

Watkins says one-third of older adults in rural communities have two or more chronic diseases, so its important patients continue to stay on track in managing them.

"This technology would allow nurses to connect with patients on an ongoing basis between provider visits and do that condition specific assessment and also the self-care assessment and make sure that the patient is staying on target with their goals and all of the treatment recommendations made by their provider at the previous visit."

In the future, training could also involve behavioral health or dietary students who could be brought in on a telehealth visit to receive training on how to address additional concerns that are influencing a patient's overall health and wellbeing.