Preparing Health Professions Students to Serve Southern Rural Communities in the Time of COVID-19 and Beyond: A Model for Interprofessional Online Telehealth Education

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The coronavirus disease 2019 (COVID-19) pandemic has had a significant impact on southern rural communities¹⁻⁴ and requires an interdisciplinary workforce prepared to address the unique and holistic needs of people in these communities. Telehealth, long used to improve services for people living in rural areas, 5,6 has rapidly and significantly expanded because of COVID-19.7-10 There is an urgent need to train health professions students in telehealth skills to prepare them to deliver virtual care, especially in rural communities. 11-13 As universities quickly moved to online instruction in 2020, student telehealth training models were needed that can be delivered virtually. Ideally, this training should be interprofessional, with two or more health science disciplines learning about, from, and with one another.¹⁴ An interprofessional education (IPE) approach best meets the multifaceted biopsychosocial needs of southern rural communities and is now an accreditation requirement for most health professions programs.¹⁴

We piloted a model for online telehealth IPE in southeastern rural communities. Our lessons learned are a springboard for other universities to fulfill their obligations to meet the demands of healthcare systems and virtually prepare an interdisciplinary workforce to be proficient in telehealth and help southern rural communities during COVID-19 and beyond.

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Overview of Online IPE Telehealth Training Model

We created an online, semester-long telehealth class to train psychiatric nurse practitioner, pharmacy, and social work students to deliver video telehealth in rural communities in South Carolina. Four full-time faculty from these three disciplines (two from nursing, one each from social work and pharmacy) served as the core faculty for this course, supervising 8 clinical faculty from nursing (n = 5) and social work (n = 3) who facilitated the telehealth sessions with students. All faculty had clinical practice experience, and all core faculty had been involved in the delivery of telehealth education. There were 10 pharmacy students, 14 social work students, and 19 nurse practitioner students in the class, as well as 1 public health student. These 44 students were assigned to 11 teams. Each team had 4 students on it from different disciplines, and there were no students who dropped out of the course (we do not have institutional metrics for student dropout rates). Course evaluations were overall extremely positive.

The first portion of the curriculum included didactic learning content on rural behavioral health, telehealth, and interprofessional practice. Using Polycom technology, student teams then conducted two virtual patient simulations and three virtual encounters with actual patients from two rural health centers.

Key Lessons Learned

Train Students in Fundamentals First

Before practicing telehealth skills, students completed didactic training on telehealth fundamentals and content related to rural and behavioral health, and interprofessional collaboration.

Create Effective Staffing and Planning

Executing an online IPE telehealth course with multiple student teams requires logistical support and supervision. Our project manager coordinated all of the implementation details and support for students, faculty, and clinics. Core faculty and the project manager collaborated on course planning. Other universities can support their existing IPE programs, staff, and faculty to add training on telehealth for health professions students.

Faculty Supervisors Are Essential but Resource Intensive

Each of our student teams required a faculty leader. To fulfill these roles, we recruited and hired clinical social workers and nurse practitioners on a contractual, temporary basis. An alternative plan could include recruiting full-time faculty to oversee team activities. University administrators need to support and allow time for faculty involvement in these efforts so that their graduates have the telehealth skills needed for future practice in rural communities.

Train Faculty on Debriefing

Debriefing after a clinical simulation or patient encounter is critical.¹⁵ We created and delivered a 3-hour faculty training in *Debriefing with Good Judgment*, a method that creates a psychologically safe environment and encourages student reflection and nonjudgmental instructor feedback.¹⁵

Streamline Technology Protocols

A common barrier to telehealth adoption is concern about technology. A Simplifying technology protocols helps to alleviate these concerns when working with healthcare partners. We used Polycom RealPresence Utility Carts set in kiosk mode at our partner clinics so that they could join a new telehealth session each time with the click of a button. Access to technology may present difficulty for some students and providers, especially those who live in rural areas. Although we used video telehealth technology, programs could use telehealth by telephone as an alternative training method.

Practice Technology Early

Students, faculty, and partner clinicians worried about technology failures. Introductory training about technology gave course leaders and participants more time to troubleshoot problems that may arise. We conducted practice sessions and training modules for the technology used in our course to address this issue.

Create Contingency Plans

IPE involves many moving parts, and complexity further increases when educational initiatives include synchronous meetings with standardized or actual patients. It is essential to have contingency plans in place in the event of faculty or student illness, patient "no-shows," technology failures, or other emergencies. Course organizers should have several simulation scripts prepared and a pool of volunteers or standardized patients that can be called on to play the role of the patient, and ensure that student learning and schedules stay on track. We also scheduled backup faculty for each scheduled telehealth encounter. Most important, students, clinics, and patients should be informed that technology sometimes fails, and alternate plans for communicating with the patient, either by telephone or by a secure video connection, should be in place. University and clinic partners also should mutually create emergency contingency plans before any patient encounters. In our case, we created contingency plans with the clinic practitioners in case a patient verbalized suicidal ideation or otherwise needed an immediate health intervention.

Ensure Program Is Health Insurance Portability and Accountability Act (HIPAA) Compliant

Programs must adhere to HIPAA regulations before, during, and after telehealth encounters if working with actual patients. It is helpful to consult with the university's institutional review

board and HIPAA compliance officer during the planning stage to ensure that information transmission and telehealth encounters meet HIPAA standards.

Weigh the Benefits of Elective or Required Curriculum

Our course modules were embedded in an existing required class for nurse practitioner students and offered as a stand-alone elective for social work and pharmacy students. A significant advantage of the required offering was the ease of scheduling. Course organizers knew which nursing students would be taking the course as part of their required sequence and worked with them before the start of the semester to block off time for telehealth experiences. Scheduling for elective students was more challenging. It also may take (sometimes significant) time in universities to launch a new course. Universities looking to implement online IPE telehealth quickly can identify content within their health professions students' existing curricula that could be replaced or augmented by telehealth training. Also, although our model was a semester-long class working with rural patients, other programs could provide IPE telehealth training as a shorter intensive experience (several days or weeks) using simulations if necessary.

Moving Forward

Our model can be adapted and used by universities to provide health professions students the urgently needed skills to use telehealth to help southern rural communities. As Lindsay and colleagues⁸ state, telehealth "will become part of the new normal" as health systems go forward to meet the needs of rural patients. Our model and lessons learned can be used by universities and rural health partners to train interprofessional students to lead this "new normal."

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