

## **Nursing Education Research Conference 2020**

### **Who Are You Going to Call: Interdisciplinary Telemedicine in Nursing Education**

Susan K. Lee, PhD, RN, CNE

*School of Health Professions, Healthcare Disparities, Diversity, and Advocacy, The University of Texas- MD Anderson Cancer Center, Houston, TX, USA*

**Pamela Willson, PhD, APRN, FNP-BC, CNE, NE-BC, FAANP**

*St. David's School of Nursing, Texas State University, Round Rock, TX, USA*

**Purpose:** The purpose of this project was to develop didactic and clinical curriculum for nursing and interdisciplinary healthcare education programs, which included videoconferencing, recording, and interprofessional telemedicine case scenarios, to provide timely, beneficial telemedicine knowledge, skills and competencies to meet workforce needs. Telemedicine is becoming an essential component of healthcare in the U.S. as it addresses concerns of access and costs as some patients travel great distances for healthcare, especially in underserved, rural areas where access may be sporadic. Telemedicine offers remote healthcare delivery, including assessment, treatment, management, planning, monitoring, evaluation, consultation, and education. Telemedicine is continually advancing and changing, requiring highly-skilled, educated practitioners. Although today's students are "digital natives" and are adept at incorporating technology into patient care, education and training on effectively and ethically integrating these methodologies is necessary. Telemedicine simulation extends existing simulation technologies, such that graduates are able to connect to rural facilities to consult, evaluate, and instruct patients and healthcare professionals in the areas of diversities and disparities while advocating for quality healthcare.

**Methods:** Curriculum incorporated telemedicine content and simulation modules in 2 didactic and 2 practicum Psych/Mental Health courses, with identified goals and course outcomes. Information and resources regarding effective distance learning practices and course delivery was provided, and existing telemedicine departments at local facilities were contacted to establish opportunities hands-on clinical learning experiences. The courses were designed to provide didactic learning and practical experience to compare and contrast telemedicine with traditional healthcare services, identifying where it can be used, and learning best practices. Students need effective strategies to communicate with patients electronically. Content for these courses include differences between electronic and traditional encounters, such as how to conduct an encounter without the physical exam, and overviews of available health technologies. A field experience offered in the final course allowed students to apply learning to practice.

Due to the overwhelming demand for mental health care services in the U.S., assignments were targeted to simulate mental health care experiences for patients/families via telecommunications. This project was a dynamic process of curriculum revision to sustain training, allowing instruction to meet ever-evolving advances, supporting teaching and assessment of telemedicine knowledge, skills, and competencies, while providing state-of-the-art skills.

**Results:** Ongoing evaluation occurs during class activities at the Simulation Center, with instructor summative end-of-course reports. Faculty assess students using rubrics and student/faculty satisfaction include evaluations of technology interface; usability for

assessment, education, nursing care, clinical measures, and care delivered via simulation.

**Conclusion:** As telemedicine evolves, healthcare providers must interact with this system. Formal education is thought to be the best way to teach how to approach challenges and opportunities in telemedicine. Students must navigate ethical and legal issues found with telemedicine, including HIPPA, licensing law restrictions, and malpractice. Revenue from telemedicine is projected to be 20-30 billion dollars by 2020, with more than 100 million distance appointments annually. Half of the hospitals in the U.S. use telemedicine, thus warranting telemedicine courses. Even though many of the graduates are “digital natives”, the practice of telemedicine may not be intuitive. (494/500)

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**Title:**

Who Are You Going to Call: Interdisciplinary Telemedicine in Nursing Education

**Keywords:**

Interdisciplinary, Nursing Education and Telemedicine

**Abstract Summary:**

Telemedicine is an essential component of healthcare in the U.S. as it addresses concerns of access and costs as some patients travel great distances from their homes to medical centers for healthcare. Telemedicine offers remote healthcare delivery, and includes assessment, treatment, management, planning, monitoring, evaluation, consultation, and education.

**References:**

- American Telemedicine Association, (2016). Telemedicine frequently asked questions (FAQs). Retrieved from: <http://www.americantelemed.org/about-telemedicine/faqs>
- Deloitte, (2016). eVisits: The 21st century house call. Retrieved from: <http://www2.deloitte.com/qa/en/pages/technology-media-and-telecommunications/articles/2014predictions-eVisits.html>
- Di Cerbo, A., Morales-Medina, J.C., Palmieri, B., Iannitti, T., (2015) Narrative review of telemedicine consultation in medical practice. *Patient Prefer Adherence*; 9:65–75. doi: 10.2147/PPA.S61617.
- McLaughlin, D. B., (2016). Reinventing the healthcare workforce. *Healthcare Executive*, 31(6):54-55.
- Pathipati, A.S.; Azad, T.D.; & Jethwani, K. (2016). Telemedical education: Training digital natives in telemedicine monitoring. *J Med Internet Res*; 18(7): e193. doi: 10.2196/jmir.5534
- a. Centers for Medicare & Medicaid Services. (2017). Telehealth Services. Medicare Learning Network. <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsh.pdf>
- b. What is Telepsychiatry? <https://www.psychiatry.org/patients-families/what-is-telepsychiatry>

- c. The Role of Telemedicine in Mental Health  
<https://www.healthitoutcomes.com/doc/the-role-of-telemedicine-in-mental-health-0001>

First Secondary Presenting Author

***Corresponding Secondary Presenting Author***

Susan K. Lee, PhD, RN, CNE

The University of Texas- MD Anderson Cancer Center

School of Health Professions, Healthcare Disparities, Diversity, and Advocacy

Associate Program Director, Assistant Professor

Houston TX

USA

**Author Summary:** Dr. Lee has presented nationally and internationally at peer reviewed conferences to positive reviews. As an Associate Program Director for the Healthcare Disparities, Diversity, and Advocacy program at The University of Texas- MD Anderson Cancer Center, Dr. Lee's strengths include curriculum and program development and educational strategies, with a focus on advocating for diverse and disparate marginalized populations.

Second Primary Presenting Author

***Primary Presenting Author***

Pamela Willson, PhD, APRN, FNP-BC, CNE, NE-BC, FAANP

Texas State University

St. David's School of Nursing

Director of Graduate Programs

Round Rock TX

USA

**Author Summary:** Dr. Willson is a Sigma Theta Tau, International Virginia Henderson Fellow. She has taught graduate level nursing for 32 years. A focus of her research agenda has been standardized testing, concept-based curriculum in nursing education, self-management, and access to care for multicultural populations.