Embedding Telehealth Curriculum in PA Education

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Abstract

As the healthcare landscape continues to evolve, the integration of telehealth into curricula has become imperative to prepare future healthcare providers for clinical practice. Telehealth includes remote patient consultations, virtual visits, and remote monitoring, and has gained significant momentum in healthcare practice. Acknowledging the immediate need for telehealth education, the University of Pittsburgh Physician Assistant Hybrid Program included a telehealth program in its original course development. To achieve these goals, the PA Hybrid program collaborated with national experts to develop a telehealth curriculum and embedded this within the History and Physical Examination I & II courses using a flipped classroom model.

Purpose:

To highlight the importance of integrating telehealth curriculum into medical education and explore the benefits, challenges, and strategies for successful implementation.

Background

As telehealth becomes the norm in healthcare practice, the faculty focused their efforts on helping students develop critical thinking skills specific to the telehealth environment and patient concerns, serve as a platform to discuss healthcare disparities, and the role that telehealth can play in overcoming these disparities.

- The Hybrid program matriculates 100 students in January for a 24-month program
- The program partnered with a national organization, PAVMT, to deliver the most current and comprehensive curriculum
- The curriculum includes assessments, checklists, and discussions
- The curriculum is designed to be “plug and play” into any program to provide the most flexibility for integration

"The telehealth modules in each section and the guest speaker were incredible!"

"Really appreciate that you teach us telehealth. I plan to work in telehealth at least part time in the future."

"Even though a lot of people are hesitant about technological changes, you approach it with an open mind."

Figure 1. Direct quotes from students on end of course survey.

Description of Innovation:

Incorporation by the University of Pittsburgh: The Physician Assistant (PA) Hybrid Program at the University of Pittsburgh was a forerunner in acknowledging the need for telehealth education. The program included telehealth in its original course development.

Implementation Method: The PA Hybrid program, in collaboration with national telehealth experts, embedded the telehealth curriculum within the History and Physical Examination I & II courses alongside content teaching in person physical exam techniques. This strategic placement ensures that students encounter telehealth considerations early and often in their education and reinforces knowledge of traditional physical examination concepts.

Teaching Model: A flipped classroom model was utilized, where students engaged with pre-recorded telehealth lectures for each body system asynchronously. Students then had the opportunity to practice their skills and engage in case-based discussions during class sessions. This model promotes deeper understanding and application of telehealth principles in real-world scenarios.

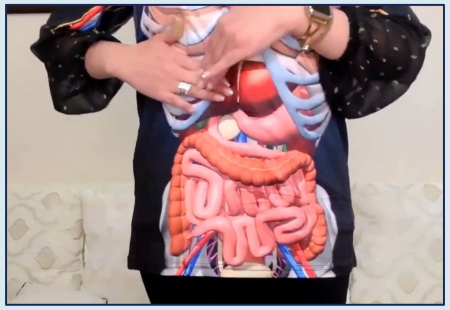

Figure 2: Still image of virtual physical exam demonstration.

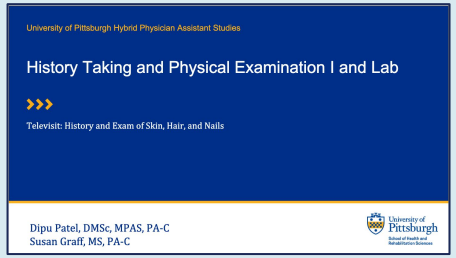

Figure 3: Example recorded lecture.

Discussion

Integrating the telehealth curriculum into the History and Physical Examination I & II Courses was simple and did not require significant time from primary instructional faculty. Student feedback from the first semester was mostly positive citing the relevance of the telehealth curriculum in their future clinical practice (fig 1). Additionally, students did not voice concerns over the additional time required to complete the telehealth curriculum. Teaching methods for obtaining a relevant history and physical exam both in person and virtually together encourages students to go beyond memorizing scripts and techniques to critically assess the indication and purpose of each maneuver.

Additional benefits of integrating telehealth curriculum:

Faculty:

- Update clinical skills with telehealth advancements.
- Diversify student engagement tools.
- Provide interdisciplinary collaboration opportunities.

Students:

- Acquire practical clinically oriented digital skills
- Prepare for modern clinical practice demands.
- Incorporate setting into clinical decision making beyond outpatient clinic versus hospital.
- Consider opportunities and challenges in using technology to mitigate healthcare disparities

Future Directions

Refining Curriculum:

- Integrating telehealth specific assessments such as Objective Structured Long Examination Record (OSLER) exams.
- Developing dedicated telehealth elective clinical rotations

Expanding Scope: Collaborating with other programs, institutions, and organizations to adopt and adapt the curriculum to fit their needs.

Studying Impact: Gathering data from students on the curriculum’s effect on the cognitive, psychomotor, and affective domains of learning.

Figure 4: PAs for Virtual Medicine and Telehealth

Acknowledgements

We are grateful for the help and involvement of PAVMT as well as the students, faculty, and staff who actively engaged in these department activities.

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