

A Snapshot Assessment of Telehealth Competencies Across Four Years of Medical School: A Survey Study

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Background

- Telehealth services are an essential part of healthcare delivery, but only 42% of medical schools have a formal telehealth curriculum. During the SARS-CoV-2 pandemic, more medical students have been exposed to telehealth-based clinical activities at different levels of training.
- The AAMC has released a curriculum guide for telehealth-based competencies to meet these emerging demands, to continue professional development of students and practicing physicians, and to ultimately improve healthcare services.
- Upon the suspension of clinical rotations due to the COVID-19 pandemic, in adherence to the Association of American Medical Colleges' (AAMC) recommendation, Rutgers Robert Wood Johnson Medical School and New Jersey Medical School announced that all medical school education would be conducted remotely with telehealth-based clinical activities in March 2020.

Objective

- To investigate the effect of exposure to telehealth activities on medical students' telehealth-based knowledge and self-assessed proficiency in the AAMC-outlined competencies. To provide a foundation for medical schools to adapt their current curriculum to better equip students with necessary core telemedicine clinical skills.

Method

- Cross-sectional survey study: March 2021– July 2021
- Inclusion Criteria
 - Currently enrolled medical students at either Rutgers Robert Wood Johnson Medical School and Rutgers New Jersey Medical School
- Data Collected
 - frequency and quality of exposure to telehealth-based activities
 - general telehealth-based knowledge scores
 - self-assessed ratings of competencies across the different domains established by AAMC
 - Narrative opinions on the role of telehealth
- Responses were categorized by level of schooling
- SPSS was used to generate descriptive statistics

Results

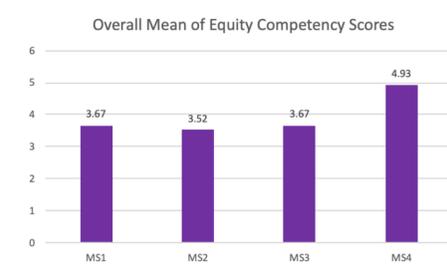
Patient Safety and Appropriate Use of Telehealth

To understand when and why to use telehealth and how to assess patient readiness, safety, practice readiness, and end-user readiness



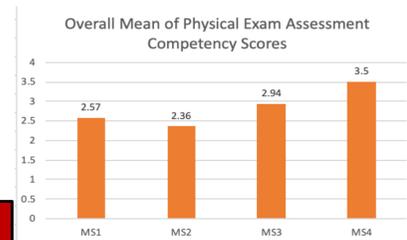
Access and Equity in Telehealth

To promote equitable access to care, address and mitigate cultural and physician biases about telehealth and account for individual and community needs and limitations

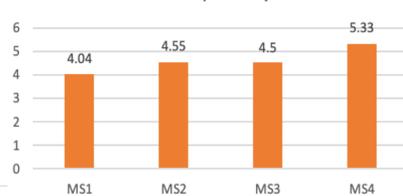


Data Collection and Assessment via Telehealth

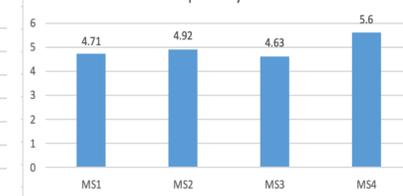
To obtain and manage clinical information via telehealth to ensure appropriate high-quality care



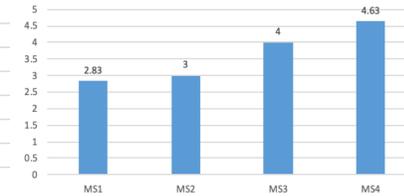
Overall Mean of Patient History Assessment Competency Scores



Overall Mean of Communication Rapport Competency Scores

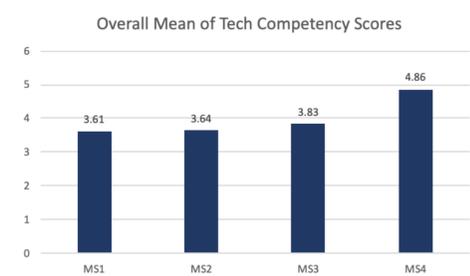


Overall Mean of Communication Care Planning Competency Scores



Technology for Telehealth

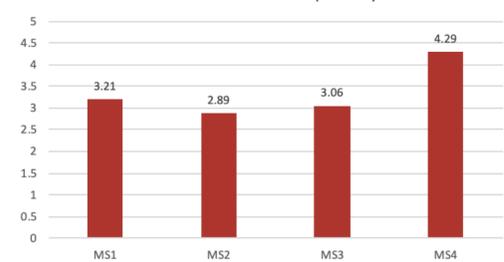
To have basic knowledge of technology needed for the delivery of high-quality telehealth services



Ethical Practices and Legal Requirements for Telehealth

To understand the federal, state, and local facility practice requirements to deliver healthcare via telehealth and to maintain patient privacy while minimizing risk to the clinician and patient

Overall Mean of Ethics Competency Scores



Results (continued)

Self-reported confidence across several telehealth competencies domains increased from first-year to fourth-year students.

63% felt telehealth increased patient satisfaction

87% of students gave feedback that more telehealth services should be provided by physicians.

Limitations

- The primary limitation is sample size and composition, with unequal distribution of responses across medical school years.
- There is a potential response bias reflecting student interest and exposure to telehealth.
- The survey captures a period of flux as schools adapted to COVID.

Conclusions

- The overall picture of this study shows that telehealth education should become integrated into the medical school curriculum in order to optimize medical students' education and training.
- Without improvement with telehealth education that further develops a students' understanding of the breadth of telehealth use in a clinical setting, it will bar them from integrating telehealth more effectively in multidisciplinary care.
- Many clinical skills are translatable, so curriculum changes do not need to be extreme. Curricula may be well-served by including a few telehealth-centered lectures that complement current clinical curriculums rather than requiring a complete overhaul.

References

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