

#### IDEA

- The Brody School of Medicine currently lacks curricular components dedicated to training preclinical medical students in telemedicine and related eHealth methods
- The first- and second-year Foundations of Doctoring courses familiarize students with clinical reasoning, physical exam skills, and population health topics.
- Incorporating telemedicine content into second-year Foundations of Doctoring curricula is a promising innovation that can enhance students' comfort and competence in telehealth prior to entering clinical clerkships.

#### **NEED/RATIONALE**

- ✤ Telemedicine, the use of telecommunications technology to deliver medical care remotely to patients, has become an increasingly important form of healthcare provision.
- The COVID-19 pandemic and related disease-prevention and social-distancing protocols have given telemedicine greater relevance to medical education.
- Many American medical schools have not yet developed substantive curricula to train undergraduate medical students on the effective use of telemedicine and, even if they do, such courses are usually limited to the clinical years.<sup>4</sup>
- Eastern North Carolina (ENC) is a largely rural area served by Brody SOM; training Brody students in telemedicine would facilitate technology-based healthcare provision to remote and mobility-impaired patients across the region.



# eENC: Telemedicine & Doctoring at Brody

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### **PROPOSED CURRICULAR INTERVENTIONS**

- There is currently no consensus on the ideal framework to teach telemedicine. Past studies have suggested a mix of modalities, including didactic and practical educational modules, may facilitate more complete learning.<sup>3,4</sup>
- Curricular components to be introduced in the proposed telemedicine modules may include:
  - Lectures given by faculty experienced in delivering telemedical care
  - □ Virtually-conducted standardized patient (SP) interviews
  - □ Asynchronous online modules and/or discussion forums
  - □ Objective structured clinical examinations (OSCEs)<sup>1,2</sup>
  - Small-group discussions
- The timing and specific clinical context of the intervention(s) will be intentionally selected to integrate with and strengthen existing Foundations of Doctoring curriculum while minimizing redundancy with existing training in third- and fourthyear clerkships.



#### **EVALUATION PLAN**

- The telemedical curricular interventions will be assessed in four main categories:
- □ Students' perceived confidence in utilizing video-conferencing technologies
- □ Students' expressed comfort with interviewing and examining patients virtually
- □ Students' opinions on the relevance of telemedical education
- □ Students' assessment of the most efficacious curricular format(s)
- Data from quantitative surveys consisting of several five-point Likert-scale questions will be obtained from consenting student participants before and after experiencing a given module or simulation.
- Qualitative free-response areas will conclude each survey
- Consenting students will be randomly sampled to participate in structured interviews that will yield more directed feedback.
- Based on survey and interview responses, the curriculum will be adapted for subsequent cohorts to better address educational objectives and student preferences.



#### **POTENTIAL IMPACT**



#### REFERENCES

- 1. Hannan, T. A., Umar, S. Y., Rob, Z., & Choudhury, R. R.
- *MedEdPORTAL*, *16*, 11047.

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Introducing telemedical curricula in the preclinical years has the potential to enhance medical students' comfort and competence with interacting with patients virtually and to optimize students' learning on clinical rotations involving virtual patient encounters.

This study seeks to add to the limited yet growing scholarship on telemedical education that has developed in the wake of the COVID-19 pandemic and can potentially inform curriculum innovations occurring at medical schools nationwide.

The project ultimately intends to benefit the patients of ENC through developing physicians capable of conducting effective virtual medical encounters.

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4. Waseh, S., & Dicker, A. P. (2019). Telemedicine Training in Undergraduate Medical Education: Mixed-Methods Review. *JMIR Med Educ*, *5*(1), e12515. <u>https://doi.org/10.2196/12515</u>