

### Curricular Innovation

#### *'Exposing undergraduate students to medicine virtually during the COVID-19 pandemic'*

**Presenter:** Anna Rose DiPentima

**Co-authors:** Julie Pechanek, Carole Gibson, PhD; Roy Strowd, MD MEd MS

**Problem:** Traditionally, shadowing programs allow pre-medical undergraduate students to ask questions, gain insight, and be exposed to a medical specialty and for physicians to educate and advise students on what life is like as a provider. Due to the COVID-19 pandemic and suspension of in-person shadowing, a virtual shadowing program was developed and employed in the fall of 2020.

**Program Objectives:** To describe the development of a virtual shadowing program for providing undergraduate students with an insightful and beneficial experience with faculty and medical students in the medical field.

**Description of Program:** Virtual shadowing involved two to three 1-hour meetings with a faculty physician and medical student via Zoom. The medical student interviewed the faculty followed by informal Q&A. To assess the program, a survey was distributed to undergraduate participants and a separate survey to physician participants as well as asking for feedback and comments from the medical students that moderated the conversations. Descriptive statistics were performed; thematic analysis was conducted of free text responses.

**Evaluation:** From September-November 2020, 81 undergraduate students, 20 medical students, and 22 physicians participated. A total of 48 meetings occurred. Undergraduate student feedback was universally positive (response rate [RR]=100%, 81/81); 65% strongly agreed and 34% agreed that the virtual session helped them gain new insight into pursuing a career in medicine (1% disagreed). Five themes emerged from student responses to the most valuable part of the sessions including (1) having access to both a physician and medical student, (2) learning about career pathways, (3) discussing work/life balance in the medical field, (4) gaining information about specialties, and (5) learning about the daily life of a physician. Physician feedback was also positive (RR: 72.7%, 16/22); 56% strongly agreed and 44% agreed that the program provided an opportunity to connect with undergraduates in a

rewarding way; and all agreed to participate again. Suggestions for the future included involvement of medical students from earlier years and combining virtual and in-person sessions in the future.

**Conclusions:** Virtual shadowing was rapidly implemented in response to suspension of in-person shadowing and provided undergraduates with insights for pursuing the medical field and medical school. The program added value above and beyond the needs of undergraduates during COVID-19 and is planned to continue post-pandemic.