

Creation of a Hybrid Virtual and Traditional Curriculum for an Internal Medicine Rotation during the COVID-19 Pandemic

Background: Following the suspension of clinical clerkships for University of Colorado SOM (CUSOM) students in March 2020 due to the COVID-19 pandemic, students were offered the opportunity to participate in curriculum development to develop virtual materials for courses in their interest area. The Hospitalized Adult Care (HAC) clerkship is an internal medicine rotation for third year medical students that typically lasts 8 weeks. The plan across the CUSOM to address this issue while remaining compliant with Liaison Committee on Medical Education (LCME) accreditation standards was to shorten most clerkships by ½ their typical duration and to add a virtual component for ½ the duration of the eliminated time. Thus, the HAC clerkship was planned to shorten to 4 weeks of clinical time (once the clinical space again opened to learners) and to develop 2 weeks of additional virtual content for enrolled students.

Methods: Five students who had already completed the HAC clerkship were selected to develop two weeks of virtual content to accompany a shorted 4 week clinical rotation. Students met with course directors to determine priorities and opted to utilize case-based resources (such as Online MedEd's CaseX platform) to cover core clinical conditions, adapted versions of resident-led Team-Based Learning (TBL) groups to a Zoom format, and created scheduled opportunities to review a selection of shelf-exam practice to prepare them for their clinical rotation. Courses were evaluated by students participating in the virtual clerkship following their clinical time.

Results: Students who developed this course adaptation designed modules, interactive sessions to develop clinical decision-making skills, and included case-based resources to simulate what would be encountered in a clinical environment. Additionally, students were given protected blocks of time each week during the virtual portion of the curriculum that was designated for service learning, and were offered a selection of five volunteer opportunities. Eighteen students were enrolled in this hybrid HAC curriculum and were graded Pass/Fail instead of the standard clerkship grading method of Pass/Fail/High Pass/Honors. Overall, students responded positively to how virtual materials were utilized, with 77.8% of students agreeing that the Online MedEd cases and the interactive Zoom sessions were "very useful" or "essential". Online modules were rated favorably with 72.2% of students responding they were "very useful" or "essential", while only 61.1% of students responded in this fashion in regards to lecture-based Zoom sessions. Impressively, 94.4% of students agreed or strongly agreed that "The online coursework was an appropriate response to the COVID situation" and 100% of students agreed that the quality of the online content was "very good" or "excellent".

Conclusion: Although this virtual curriculum was developed under an expedited time frame, all students enrolled in the HAC hybrid course responded that the online content was "very good" or "excellent", an impressive achievement for both content developers and clerkship directors in creating a valuable adaptation for students impacted by the limitations of the pandemic. The HAC clerkship continues to utilize these virtual materials as supplementary instruction for students, despite that the course has returned to its usual in-person format.