

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

## WHAT WE LEARNED

A novel, student-created hybrid curriculum is well received by students who find it to be generally "very useful" or "essential".

### BACKGROUND

- Clinical clerkships for CU SOM students were suspended in March 2020 due to the COVID-19 pandemic.
- Students were given the chance to engage in curriculum development for each block, including Hospitalized Adult Care (HAC).
- Most clerkships were shortened by ½ their typical duration, and students added virtual components for ½ the duration of the eliminated time.

### OBJECTIVES

- To design a student-created hybrid curriculum for the third-year HAC clerkship.
- To evaluate the learner perceived effectiveness, utility, and balance of the various components.

### METHODS

- Five students who had already completed the HAC clerkship were selected to develop two weeks of virtual content to accompany a 4 week clinical rotation.
- Students met with course directors to determine priorities and adopted case-based resources (such as Online MedEd's (OME) 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 for shelf-exam practice to prepare them for their clinical rotation.
- Courses were evaluated by students participating in the virtual clerkship at the end of the entire rotation (virtual and clinical components).

**Table 1. Comparison of Student Feedback**

	HAC	All Others
# of students	18	127
How useful were the...	% very useful/essential	
online modules?	72.2%	42.5%
Online MedEd cases?	77.8%	66.8%
lecture-based Zoom sessions?	61.1%	37.9%
interactive Zoom sessions?	77.8%	66.1%
Balance of independent learning and scheduled Zoom sessions?	% balance just right	
	66.7%	65.4%
Online coursework was an appropriate response to the situation.	% agree/strongly agree	
	94.4%	81.1%
What was the overall quality of teaching in the online content?	% very good/excellent	
	100.0%	61.4%

### RESULTS

- 18 students completed the course evaluation (100% response rate).
- 77.8% of students agreed that the OME cases and the interactive Zoom sessions were "very useful" or "essential".
- Online modules were rated more favorably ("very useful"/"essential") than lecture-based Zoom sessions (72.2 vs. 61.1% respectively).
- 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".

### LIMITATIONS

- Objective data about impact on student performance would help to quantify the quality of this curriculum.

### CONCLUSIONS

- 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."
- Creating a virtual/clinical hybrid curriculum is a well received adaptation for students impacted by unpredictable factors affecting the clinical learning environment.
- The HAC clerkship continues to utilize these virtual materials as supplementary instruction for students even with students having returned to the clinical learning environment.

**Figure 1. Time Allocation of Sessions (hours)**

