

# Experience with converting Continuing Medical and Interprofessional Education to a virtual format during the Pandemic



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## Background

The COVID-19 pandemic shut down in-person Continuing Medical and Interprofessional Education (CMIE) at the Larner College of Medicine in March 2020. Seven large CMIE meetings were canceled, and all programming pivoted to video conferencing to continue its programming to meet the needs of practicing clinicians.

## Methods

With the inability to have in-person conferences, directors of CMIE used prerecorded or live sessions on video platforms to offer education virtually. This study compares available results for the time period March through December of 2019 (prepandemic) to March through December of 2020 (pandemic) in a quasi-experimental pretest-posttest design. We compared numbers and types of conferences, attendance, and evaluations between these two time periods. A two tailed paired sample T-test was used to assess for significant differences. In addition, a qualitative thematic analysis was done of a course director survey completed in December 2020.

## Results

Conversion to the virtual format for regular recurring series resulted in no change in number of hours of instruction presented or attendee hours (see Figure 1).

Core specialties directly treating the SARS C0V2 disease (Anesthesia, Emergency Medicine, Family Medicine, Medicine, Pediatrics, Pulmonary and Critical care, and Radiology) saw a large increase in attendance (see Figure 1).

Evaluations of conferences were not different between the time periods (Figure 2). A survey of 18 of 40 CMIE directors (response rate 45%) gave qualitative evidence for the success and future direction of virtual CMIE education and identified positive and negative aspects. (Figure 3).

Figure 1: Pre and Post Pandemic session numbers and attendees

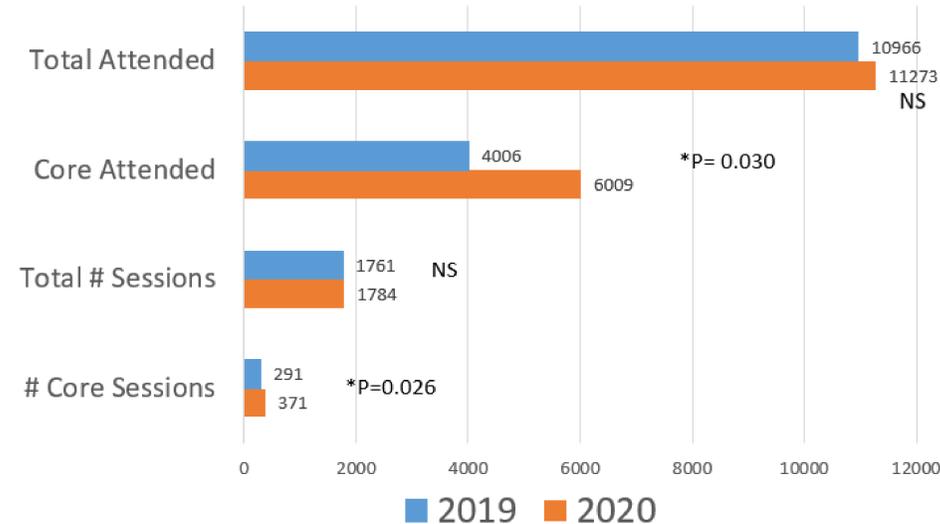


Figure 2: All Conference Evaluations

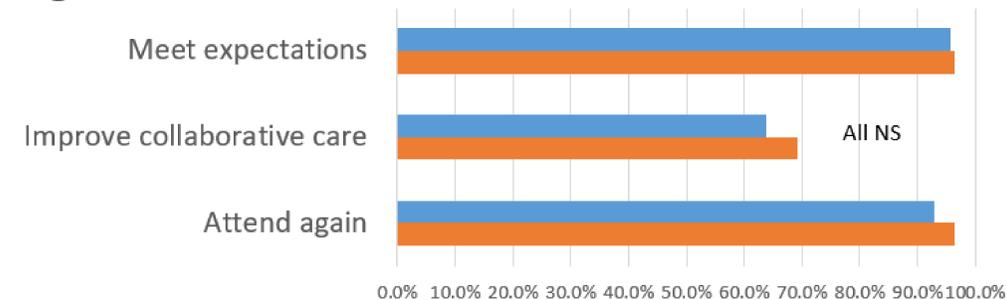


Figure 3: Thematic analysis of course directors survey

Feedback Thematic analysis	
<b>Positive themes</b>	
# responses	
6	Higher attendance due to less travel, scheduling (OR, night, off-site), home, out of town
4	Wider geography of speakers due to less travel cost and time
3	Generally has worked well
2	Good opportunity for discussion/questions
1	Questions in chat could be answered asynchronously
1	Side discussions in chat
<b>Neutral themes</b>	
2	Information convenience (slides easily visible)
1	Conferences that were already virtual not affected
1	Discussion of tough topics
1	Sufficient
<b>Negative themes</b>	
1	Audience initiated discussion more difficult
1	Can't read the room
1	Confusing topics more difficult
1	Difficult or controversial topics more difficult
1	Harder to make interactive
1	Less support staff participation
1	Level of engagement and interaction less
1	Lost camaraderie
1	Technical kinks early on
1	"Zoom" fatigue

Future Direction	
4	Stay virtual
7	Hybrid
5	Back to all in-person
3	Virtual outside speakers

## Discussion

In March 2020 the global pandemic necessitated suspension of all in-person CMIE conferences and meetings for 2020 and an increased need for continuing education directed at SARSCoV2. There were many canceled conferences and meetings. There was a rapid transition to all virtual meetings allowing for the presentation of the same number of conference hours and attendees during the pandemic as the previous year.

There was a significant 50% increase in attendance at core specialty conferences. The increased attendance can be attributed to the virtual format as shown in the thematic analysis of a survey of course directors. Another explanation for the increased attendance appeared to be content focused on the SARSCoV2 disease and social justice topics. There was a drop in attendance at some specialty conferences and meetings.

Other factors that could have affected attendance are the clinical and psychological stresses produced by the pandemic and regression to the mean since results were only compared from two time periods. The later is less likely as 2016-2018 had similar volumes as 2019.

Positive and negative themes emerged in a course director survey which may be helpful in planning for future CMIE events. Higher attendance, asynchronous questions, active discussions in the chat function, and ability to have outside speakers at a low cost were significant positives. Negatives included lack of camaraderie, some topics and discussions are more challenging virtually, and fatigue with the format.

## Conclusion

Virtual conferences can provide a valuable alternative to in-person education in CMIE with comparable learner satisfaction. CMIE learners missed in-person interactions especially for complex, challenging topics. Most course directors felt that a virtual option will remain after the pandemic. Learner comfort with virtual platforms offers an opportunity for innovative active learning and speakers from a broad range of institutions