

Title: Boom or Bust? Did Virtual Attendance Promote Increased Continuing Medical Education Utilization During the COVID-19 Pandemic?

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Background: As medical education was severely constrained by social distancing during the COVID-19 pandemic, many academic programs transitioned their medical education activities from in-person attendance to virtual attendance via video conferencing. Our institution forbid in-person educational activities for a 6-month period during the pandemic

Objective: We wished to examine whether shifting from in-person Grand Rounds to virtual Grand Rounds during the pandemic and post-pandemic changes in Grand Rounds formatting affected the rate of CME registration for Grand Rounds educational activities.

Method: Retrospective study of average CME registrations at regularly scheduled academic activities during three time periods were compared. These time periods were: 1/1/2019-12/31/2019 (in-person baseline, hereafter Group 1), 4/1/2020-9/30/2020 (institution-mandated videoconference only, hereafter Group 2) and 7/1/2022-3/30/2023 (post-pandemic format by departmental choice, hereafter group3).

Results: 56 regularly scheduled academic activities granting CME were identified. 36 activities did not meet criteria for Grand Rounds. 2 Grand Rounds activities were excluded from analysis, 1 for decertification in the post-COVID time frame, 1 for non-standard usage of the CME registration system in the COVID and post-COVID time frames. This left 18 Grand Rounds activities to examine. 727 in-person activities were compared to 371 virtual activities and 509 post-COVID activities. Over the entire study

period (pre-COVID through post-COVID) mean registrations increased 37.7% from 17.5 to 24.1 registrations. During the COVID period mean registrations increased 15.1% from 17.5 to 20.1 registrations. After the end of the COVID period, mean registrations increased 19.7% from 20.1 to 24.1 registrations. Statistical analysis using the Kruskal Wallis test indicated a significant difference in CME registration among the groups with a p-value of < 0.001 . Post Hoc testing using the Mann Whitney test showed that the differences between all groups were significant, with a p-values of <0.001 for groups 1 versus group 2, a p-value of 0.026 for group 2 versus group 3, and a p-value of <0.001 for group 1 versus group 3. In the post-COVID period, 14 academic departments elected to keep their Grand Rounds hybrids, with both in-person and videoconferencing attendance, 2 departmental Grand Rounds remained videoconferencing only, and 2 departmental Grand Rounds returned to exclusively in-person. We then used chi square testing to evaluate the effect of post-COVID attendance format on CME registration. Those departments that chose a “hybrid” Grand Rounds attendance format had a greater number of CME registrations in the post-COVID period than those that chose a single mode of attendance, with a p-value of < 0.001 . When examining those departments which allow virtual attendance versus those that require in-person attendance, the virtual attendance group had a greater number of CME registrations in the post-COVID period, with a p-value of < 0.001 .

Conclusions: The data suggest that initiation of virtual attendance for Grand Rounds during the COVID-19 pandemic led to an increased utilization of these activities for CME. This may have been due to the paucity of CME activities available during the

pandemic rather than the convenience afforded by virtual attendance, but the increases in CME registrations post-pandemic by those departments that continued virtual attendance options would suggest that a videoconferencing option is at least partly responsible.