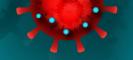


The Adaptability of CME/CE During the COVID-19 Pandemic

The **COVID-19 Pandemic** turned 2020 into a year of unprecedented loss and sorrow, with many of our learners suddenly finding themselves on the frontline, striving to save lives, realigning their practices to treat urgent needs in a safe manner, and delaying non-urgent yet important procedures due to necessary risk management. The pandemic forced CME/CE providers, like most industries, to shift course and find innovative ways to educate, since continuously emerging medical data still require timely communication. The creative solutions have been inspiring. It has also given us an opportunity to use our collective strengths to contribute to important information-sharing on the pandemic from trusted resources around the world, such as the **FRONTLINE initiative (https://covid-frontline.com)** which launched in mid-May.

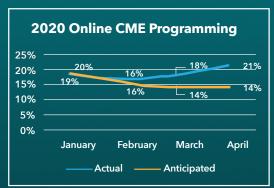
Given the unprecedented situation, we have been asking ourselves a couple questions related to CME/CE's value during this time. Are HCPs turning to CME/CE more or less often or at similar rates as pre-pandemic? Are different virtual formats working better to share important expert recommendations and clinical data during social distancing? And how would HCPs rate the virtual learning they are experiencing? To answer these questions, Med Learning Group (MLG) first analyzed the total completers of our virtual live programming conducted in March and April of 2020 compared with our predicted totals for the live setting. Second, we compared the monthly completion rates of online activities that launched in January/February 2020 with our anticipated monthly completions. Third, we surveyed learners who participated in the programming that transitioned from live to virtual live programming to assess their satisfaction with the programming.



And finally, we compared knowledge and competence gains in 3 of our virtual live series compared with results from 2019 programming with similar audiences and learning objectives. Based on our findings, CME/CE has retained, if not strengthened, its role as a key platform for enhancing clinicians' abilities to deliver care based on the latest guidelines and clinical data. Learners are pleased with the CE industry's adaptability and are turning to it even more than anticipated. Of course this can be attributable to a number of factors, including the fact that HCPs can join across regions, and many HCPs, particularly those limiting their available procedures and visits, have time to focus on CME/CE. Data about the essential role of CME/CE in information-sharing at a time when many of the educational platforms suddenly became inoperable are compelling.

HERE IS WHAT WE LEARNED

1) MLG's CME/CE platforms have not only maintained but have increased their reach during the pandemic, for both online as well as virtually live programming. With an online



program, we typically see about 20% of our learners in the first month. Rates then subsequently decrease, except for some "bumps" throughout the year due to our ongoing promotional efforts. We have recently noticed that programs that launched in January/early February of this year have not seen that decreasing rate in their third month. For example, across 8 online programs in a variety of therapeutic areas that launched in this time frame, we had anticipated 18,000 completers. In the first month of these programs, there were 3478

completers, 19.3% of our anticipated total. As previously mentioned, we, we would normally see a month-to-month decrease after the first month, but this year, in spite of the COVID-19 pandemic, this has not been the case. From March 16 to April 16, for example, these programs reached 3866 completers, 21.4% of originally anticipated completers. The even more telling story is the attendance to our virtual live programs. We have pivoted our live summits and grand rounds scheduled for this spring to virtual live meetings and attendance has surpassed our expectations for the live meetings across the board. Here are some examples of what we found.

- EMPOWER Breast Cancer Series: 443 completers at 3 April VR summits; originally anticipated 100 per live summit (supported by a grant from Lilly)
- Axial Spondyloarthritis (AS) RELIEF Summit Series: 250 completers at 2 April VR summits;
 originally anticipated 80 per summit. Over 1500 at a virtual live NACE symposium; originally anticipated 250 per session (supported by an educational grant from Lilly)
- IC-ONC immunotherapy grand rounds: 524 completers at 13 March-May grand rounds (average 40 per session); originally anticipated 35 per session (supported by educational grants from Bristol-Myers Squibb and Merck & Co., Inc.)
- HCC TAILOR grand rounds: 263 completers at six April-May grand rounds (ave. 44 per session); originally anticipated 35 per meeting (supported by an educational grant from Lilly)
- cSCC Virtual Reality Educational Booth: 362 completers in first 2 weeks of virtual VR Booth, which MLG offered online after ACMS Conference canceled in April; originally anticipated 250 live (supported by an educational grant from Regeneron Pharmaceuticals, Inc and Sanofi Genzyme)
- AD Thrive symposia at AAAAI and AAD: 1107 completers at two virtual live symposia, which MLG offered in May after the live conferences were canceled in March; originally anticipated 500 at each live meeting with national simulcast. (supported by an educational grant from Sanofi Genzyme and Regeneron Pharmaceuticals)



- MS symposium at CMSC: 852 completers at virtual live symposium, which MLG offered in May after the live conference was canceled; originally anticipated 600 at live meeting with national simulcast. (supported by educational grants from Biogen, Genentech, a member of the Roche Group, and Sanofi Genzyme)
- NMOSD symposium at CMSC: 913 completers at virtual live symposium, which MLG offered in May after the live conference was canceled; originally anticipated 600 at live meeting with national simulcast. (supported by an educational grant from Genentech)

MLG is transitioning 90+ summits and grand rounds to a virtual format through June. We will continue to conduct this analysis to show how learners are turning to CME/CE during these times, as it speaks to the ability of CE to continue to share important information in unprecedented circumstances.

- 2) Learners appreciate the adaptability and accessibility of our CE programming during this time. MLG recently conducted a survey of learners who participated in our virtual live meetings that have taken place so far during the COVID-19 pandemic (March May 2020). Among the respondents (N = 186), 84% reported the pandemic changed the way they seek CME as they shift to online options. When asked how frequently they are participating in CME/CE during the COVID-19 pandemic, 55% replied "more frequently than expected", while 27% reported "just as frequently as expected." Overall, 87% reported that virtual CME was meeting or surpassing their expectations. Also of note, in a survey by CE Outcomes among 292 physician specialists conducted in March 2020, 69% reported they did not feel that the COVID-19 pandemic would prevent them from learning the latest clinical updates in their field (CE Outcomes 2020).
- 3) Knowledge and competence gains at virtual live meetings remain at similar levels to live programming. One thing we feared in transitioning to virtual live meetings was the extent to which we could maintain the engagement and interactivity of a live session that contributes to overall gains in knowledge and competence. Fortunately, after beta testing a variety of platforms and providing media kits and training to faculty, we were able to develop a platform where all the features designed for our live meetings were applicable to the virtual live meetings. 2D, 3D, VR, and whiteboard animations were easily accessed, chat features allowed for active Q&A during and after lectures, and pre/posttests and evaluation materials were provided in an efficient and user-friendly manner. Due to this adaptability, we were able to maintain learning gains seen before social distancing required meetings to go virtual. For example, at the 6 live summits for the AS RELIEF initiative that took place between January and March of 2020, rheumatologists averaged a 26% knowledge gain and 30% competence gain on pre/posttests (N=262). At the 2 virtual summits that took place in April, rheumatologists averaged a 27% knowledge gain and 29% competence gain. Similarly, learners in the 12 IC-ONC grand rounds on irAEs and biomarkers for immunotherapy in April-May achieved an average 30% knowledge gain and 29% competence gain (N=404) compared with the 28% knowledge gain and 29% competence gain achieved at the 22 live grand rounds that took place before social distancing required the transition to virtual (N=662). The similarity between gains at live programs and virtual live programs speaks to the ability of CME/CE to be flexible and continue to meet its educational goals.

While this analysis has focused on MLG's programs - given our access to the data - the experiences we have had with our partners and the overall solidarity we have witnessed across the CME/CE industry have been heartening. While all industries are working to navigate the extraordinary new circumstances, this analysis has further emboldened our view of CME/CE as an effective platform for sharing medical updates and information with HCPs that are critical to ultimately enhance practice behavior and improve patient outcomes. We as an industry must challenge ourselves to grow more and more innovative and agile to meet the educational needs of HCPs while the world continues to endure this pandemic as well as when we transition back to live programming.

