

Pandemic education: Med schools innovate to engage students

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In terms of physical interactions with patients, medical students generally are not involved in the treatment of COVID-19 patients—due to a suspension of direct patient-facing activities that has been in place since mid-March. Still, medical schools are looking for ways to ensure that this moment in history can be a teachable one for trainees.

Across the country, institutions are adopting new methods to engage learners—largely through distance learning—and new approaches to aid in their understanding of the pandemic from a public health vantage point.

“We are trying to look for opportunities to meaningfully engage students, to continue their education and do the best we can to help keep them on track and on time as well as maintain their safety and the safety of other health care workers,” said William Burke, DO, dean of Ohio University Heritage College of Osteopathic Medicine’s (OU) Dublin campus.

OU is one of the 37 member schools of AMA’s Accelerating Change in Medical Education Consortium .

A public health perspective

When the Association of American Medical Colleges (AAMC) recommended that students refrain from direct patient contact, many trainees were in the middle of their core clinical clerkship rotations, offering their first exposure to treating patients. With those on hold, medical schools have had to find creative alternatives.

OU has implemented a COVID-19 public health rotation, a four-week course designed by the medical school in partnership with the Ohio Department of Health (ODH), as a required learning experience for third-year students. The ODH and OU have a goal to deploy students to public health entities across the state to contribute to Ohio's response to COVID-19 as part of the rotation.

“It was a way to provide them with learning opportunities to give them a better idea of the challenges our public health system is facing,” Dr. Burke said. “But it was also an opportunity for us to engage across the state with multiple entities, including the Ohio Department of Health, the Medical Reserve Corps, the Ohio National Guard as well as the Ohio Association for Community Health Centers.” Aspects of public health that the agencies and medical school believe students can aid include patient navigation, monitoring and contact tracing. Students will also complete educational modules on topics such as clinical aspects of COVID-19, treatment options, testing and screening, COVID-19 in children and in pregnancy, and blood supply safety.

“One work stream we have been focused on is the value-added role for students in the curriculum,” said

Isaac J. Kirstein, DO, a dean at OU's Cleveland campus. “We've always been thinking about that in terms of an office setting, a patient-centered medical home or a hospital floor. The idea now is that this pandemic gave us the opportunity to think about students as value-added roles in the public health setting, which has really refocused our efforts nationally about how we are thinking about this in education. Learn more about how medical students can continue learning during COVID-19.

Pandemics in history

Another innovative curricular development to augment clinical rotations is taking place at Vanderbilt University School of Medicine (VUSM), also a member of the AMA Consortium.

VUSM's Pandemic Medicine Integrated Science Course takes a comprehensive look at pandemics. Its aims are threefold:

- | Give students an understanding of pandemics by offering lessons on topics such as epidemiology and emerging therapeutics.
- | Explore leadership approaches in turbulent times.
- | Encourage students to appraise evidence, information and data and to consider decision-making during uncertainty.

“There is content in this course that is specific to coronavirus and COVID-19, but we have also taken a historical perspective to expose them to some of the other pandemics over time to help them learn

some of the core principles of how to approach a pandemic,” said Bill Cutrer, MD, VUSM’s associate dean for undergraduate medical education. “The hope is that while they are learning about COVID-19 they are also learning a framework that would be useful in their future practice for future pandemics.”

With the help of co-course director Kendra Parekh, MD, Vanderbilt created seven tracks that take a deep dive into one lens through which students can view a pandemic, led by faculty with track-specific expertise: health inequities and vulnerable populations, population health, communication and information-sharing, ethics, global health, leadership, and emerging therapeutics. In addition to the didactic training, students engage in service activities related to their track.

The distance learning aspects of the course, which conducts small group activities and lectures over video conferencing platforms, has allowed the offering to be available to a wide number of students. A typical integrated science course at VUSM would be offered to between 4-24 students. The pandemic-specific version has around 200 students enrolled, spanning three years of training.

“To be able to have no size limitations on a room and to be able to have 200-plus students together on one activity opens the doors to some of these new things,” Dr. Cutrer said. “It has been fun to try out having a lecture with 200 students and then put them into small breakout groups [on Zoom]. I hope that we will continue to think creatively, not worrying about size limitations anymore, but instead thinking about the appropriate types of content to engage with virtually. My hope is we will not automatically move back to the way we have always done it.”

The AMA has curated a selection of resources to assist residents, medical students and faculty during the COVID-19 pandemic to help manage the shifting timelines, cancellations and adjustments to testing, rotations and other events at this time.