How the pandemic is changing medical education with Catherine Lucey, MD

AMA’s Moving Medicine video series amplifies physician voices and highlights developments and achievements throughout medicine.

Featured topic and speakers

In today’s episode of Moving Medicine, AMA Chief Experience Officer Todd Unger talks with Catherine Lucey, MD, vice dean for education at the University of California San Francisco Medical School, about how the pandemic is changing the type of physicians we need, and how it may permanently transform medical training for years to come.

Speaker

Catherine Lucey, MD, vice dean for education, University of California San Francisco Medical School

Transcript

**Unger:** Hello, this is the American Medical Association's Moving Medicine video and podcast. Today we're talking with Dr. Catherine Lucey, vice dean for education at the University of California San Francisco Medical School, about how the pandemic is changing the way that future physicians are trained. I'm Todd Unger, AMA's chief experience officer in Chicago. Thanks so much for joining us, Dr. Lucey, it's been quite a two years. We're hearing from a lot of medical students about their experience during the pandemic. It's changed medical education so much, some by necessity that are short-term things and others, just like return to office. It will never quite be the same. Why don't we just start talking about how the pandemic accelerated things that were really necessary in terms of medical education and really given you the freedom to explore new ways of teaching?

**Dr. Lucey:** Well, thanks for this opportunity and yes, I can't ever have imagined what we went through in the last two years. In many ways, it was great because it allowed us to sort of really challenge our legacy practices that we thought had to endure and found that much of what we wanted
to do in terms of experiment with both the way we assess students, the way we teach students, was not only possible but perhaps in the long run, more desirable then what we have been doing in the past.

**Unger:** How have medical students reacted to this kind of change and experimentation?

**Dr. Lucey:** Yeah, it's been tough on medical students, as it's been tough on everybody in the health care environment. First, the amazing emotional distress of a wide pandemic with very easy transmission and concerns about your own morbidity and mortality. It's particularly challenging for young people just entering the medical field. We want to really recognize how very distressing this was for them as well as for their communities. Our students were really good. They worked with us and they realized we have to make sure that they keep progressing to graduation, that we have to make sure that they meet the same competencies and we had to do things differently. They worked with us, although I think most of them really would've preferred not to go to medical schools during a pandemic.

**Unger:** Well, I think a lot of our content and distribution, and they're very different kinds of things in the digital publishing world. The kind of same thing applies for medical schools in some way, because in terms of the content—

**Dr. Lucey:** Yes.

**Unger:** ... people are going to enter a workforce and a situation that didn't exist before, it really has to change. While your instructional methods also had to change, we think about training these physicians of the future. How did you have to adapt the training itself?

**Dr. Lucey:** Yes. I think everyone, when they think about the pandemic think, "Oh, is this cool? It's all technology-enabled learning," but for us, that wasn't the most important lessons that we learned. What we learned from the pandemic is the holes or the gaps that exist in current curricula and in current delivery of the curricula, particularly the content areas that prepare everyone in medical school, not just those who come from historically excluded backgrounds but every single doctor is prepared to manage the complexities of what we call, syndemic conditions. Those are the interface between lots of chronic or acute medical illnesses and very dysfunctional social policies that leave entire communities in the lurch. Impoverished, low education, bad air, quality, you name it.

I think what we've tried to do throughout the pandemic, is not only prepare our students for the next pandemic, and I've been in medicine now since 1982. I think this is my third pandemic or so, so there's going to be another pandemic. That's just the way it works. We have to prepare them for the next pandemic and you can talk about public health and crisis management, but more importantly, we have to actually help them tackle the pervasive problems of chronic disease and health care disparities, and to tackle issues of race and racism that exist in medicine as well as society today.
Those are the content areas that we feel we need the most attention to in medical education.

**Unger:** You just mentioned kind of three huge content areas, right?

**Dr. Lucey:** Yeah.

**Unger:** Health equity for one, public health and crisis management. Is there enough time in medical school for all of this to be taught.

**Dr. Lucey:** Everyone asked that question as well. There's also a great affinity for legacy contents, right? People are like, "Well, I was a medical student and when I was a medical student, I did 12 weeks of anatomy, nothing but anatomy." The fact of the matter is, when people went to medical school, their medical school was designed for the environment that they lived in at the time. I was there in the late seventies, early eighties but we're in the 21st century now. We have to redesign the content in medical schools so that our graduates are capable of addressing the problems we know we expect them to solve during the course of their next 40 years in their career.

This means not layering things on top, like take the existing curriculum, cram in a few more lectures on public health, or have a couple of guest visitors on health equity or racism in medicine in society. Instead, it means redesigning the entire curriculum to have everything closely integrated and to show our learners how mastering all of this content will make them more effective doctors in the clinic or in the lab or in the community environment. It's a total redesign, it isn't tweaking at the edges. It's really a revolutionary change in the way we think about the content needed to be a doctor.

**Unger:** That's so interesting. I mean, do you feel like that's a kind of a shared sense across the spectrum of medical schools right now, this whole kind of rebuild versus tweak?

**Dr. Lucey:** I do think so. The pandemic occurred 20 years after a lot of evolutionary and revolutionary ideas were put forth and medical education, like for example, competency-based training. Why does it take every doctor the same number of weeks to master content? We know it doesn't. Why do we sort of force everyone into the, "You have to have eight weeks of this course or six weeks of this course?" I think what happened in the pandemic is all of those pedagogical ideas that people have been floating out, which is changing content, change in how we assess students, give grades, transition them between medical school and residency, all of those opportunities are now back on the table.

Because we had in the past, we didn't have a sense of urgency. We had just this kind of desire to do something new. It was easy to block that from people who just sort of said, "Nah, not yet," but the pandemic sort of showed us, our communities are suffering. Our health systems are under siege. The well-being of our physicians and our learners is at risk. Now we have this in front of us. It's a challenge that we have to, I think, embrace. I'd love to see us do a really comprehensive 10-year plan to redesign medical education on behalf of our communities, and on behalf of our learners and our


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Unger: Well, speaking of additional layers, things to train folks about, I mean, one new challenge that all physicians are encountering is, increasingly we'll call them skeptical set of patients out there. During the pandemic, patients have been bombarded really with misinformation and we've seen kind of a huge anti-science aggression—

Dr. Lucey: Yeah.

Unger: ... as Dr. Hotez articulates, involves not only resistance, but also sometimes attacks on physicians and scientists. I'm curious, what kind of training do you put in place to prepare this next generation—

Dr. Lucey: Yeah.

Unger: ... for that environment?

Dr. Lucey: I think it's a complex issue. A couple of things that I'll throw out, I think are important in terms of training. The first is, we have to actually train doctors to become trustworthy. In the old days, in the 20th century, back when I was a medical student, there was really this mantra people put forth, "Trust me, I'm a doctor," right? I don't think that's expected anymore. I think actually we have to train people what it means to be trustworthy. It means first and foremost, you have to be competent, but even more important than that, in the eyes of people who you want to trust us, is you have to care about them. Trusting people to not only rely on their competency but to actually exhibit caring behaviors and to do so in a way that meets every patient in every community where they are, is a really critical element of how we will begin to get past the scientific denial.

The second thing is I think we have to train people for a broader set of communication skills. The ACGME core competencies have interpersonal communication skills as a strategy that all people need to manage. We sort of have assumed that means one on one, patient to patient, or one on one to another health care provider. I think all physicians are going to have to learn to communicate in the public, to be able to write op-eds, to be able to talk to legislators, to be able to address communities and meet them where they are. Not just communicate with them but truly engage and partner with them, which means careful listening, tailoring your message, understanding what's important to people.

Then the third thing I think we have to really think about, a past sort of tacit belief of physicians that you have to be kind of neutral, disimpassioned, just very clinical and not put yourself out there into the environment. I think that time for that type of physician in environment today has passed. I think we need to train people to be the type of citizen advocates so that they're making a difference, not only in the exam room but at the ballot box and in conversations with legislatures and school boards and
things like that. I think we need to kind of rethink that professionalism means advocacy as much as it means altruism, respect, social justice and things like that.

**Unger:** That's a lot when you think about the experience of a day to day physician, what they're going through, and then this kind of advocacy for patients outside of the office is a lot of responsibility. Social media skills and the ability to speak to patients across lots of platforms, that's again, not something traditionally taught in medical school.

**Dr. Lucey:** Yes. As we've thought about these and your earlier question was, "How do you fit this all in medical school?" I think there are core competencies in all of these areas, whether it's trustworthiness, social media communication, advocacy, anti-racism where every doctor has to have sort of foundational competencies and a willingness to continue to learn in those areas. I also think we're going to see going forward are more translational roles where people take extra time or take sort of extra opportunities to become experts in those areas, whether it's physician community health or physician public health, just like we have translational scientists. I think we're going to have other translational roles. Those are the people who are going to primarily be the leaders of these, supported by their peers who have the foundational competencies and understanding of why it's so important to do this work.

**Unger:** Of course, advocacy a huge part of what we do here at the AMA and that ability to speak with a unified voice for physicians and patients is so important right now. We also know, just kind of speaking of that, that the pandemic exposed gaps in health care, in the workforce itself that need to be addressed, including access to care. You've said that the pandemic would've played out much differently if Americans had access to a physician that they trusted. Tell me, how are leaders in medical education thinking about out this issue?

**Dr. Lucey:** Yeah, I think that this is a really critical issue and it's not only that they had access to a physician they trusted but there are some communities that had no physicians. They had some communities with no intensive care units and some communities where they had one or two doctors who were simply heroic in serving the needs of their communities and were really not supported by the type of teamwork that we would've expected in, for example, a major city like San Francisco or Chicago. I think what's really lacking in our environment is a national vision of what a successful workforce looks like. We don't have it. We rely on 150 plus medical schools and several thousand residency programs but they tend to be sort of parochial in their view. They still kind of focus on helping every one of their students become what that student wants.

I think what we really need to do is to band together as a group of medical schools and residency programs, and say, "Let's put together a 10 or a 15-year initiative, where we work to make sure every single community has the type of doctors that we'd choose if someone in that community were someone that we loved." That might mean different loan repayment issues for people who go back to rural communities or go to rural communities without doctors. It might mean creating regional
campuses in all of the big medical schools. It might mean a more strategic way to look at pipeline programs rather than just ones that are developed and launched by an individual faculty member and might just focus on one or two high schools. I think there’s a lot of low hanging fruit that we could work on to better address the physician workforce needs that the nation has but it is going to require collaborative efforts and really strategic work.

**Unger:** A lot of work to do.

**Dr. Lucey:** Yes.

**Unger:** Last question really is we’ve got a new class about to graduate in May, with students who really spent their medical education during the pandemic, which has got to be a pretty intense and different experience than prior classes. How do these students differ from students in other kind of non-pandemic period? How are they feeling about getting to practice right now?

**Dr. Lucey:** They’re sort of battle tested already, to use a military metaphor. I myself was a resident right at the very beginning of the HIV pandemic. Although I didn’t realize it at the time, it really impacted the way I look at the field of medicine, the commitment we make to communities, the incredible honor to work with vulnerable populations, many of whom have been marginalized by society or by their own families at times. Also, an incredible appreciation of what cross-disciplinary interprofessional work could do to solve a pandemic. It really did affect the way I looked at my career for the rest of the time I’ve been a doctor. I imagine the same will be true with these students. They are very well trained.

People have talked about before, "Is this kind of the less well-prepared student class?" No, they're superb students. They’ve actually endured and adapted despite some really challenging times. I predict that we’re going to see really great things from the students who went to medical school and the residents who did their residency during this pandemic. They're going to be the future leaders because they’ve seen what it means to deal with a serious crisis and how mobilization of their colleagues made a huge difference to the communities in which we work.

**Unger:** Well, a huge shout up to those students and to folks like you, Dr. Lucey, who have guided them through what has just been an incredibly challenging, turbulent time to be in medical school. Thanks so much for joining us. That's it for today's video and podcast. We'll be back with more. In the meantime, don’t forget to click subscribe and don't miss any more episodes of Moving Medicine. You can find all our videos and podcast at ama-assn.org/podcasts. Thanks for joining us. Please take care.

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