Physical exam training: Improving residents clinical skills with Sanjay Desai, 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, reducing resident burnout, increasing satisfaction and improving patient outcomes through better in-person physical exam training. As a part of AMA's RecognizingResidentsWeek, Sanjay Desai, MD, AMA’s chief academic officer and group vice president of medical education, discusses research findings on the topic with AMA Chief Experience Officer Todd Unger.

Learn more about the AMA's Reimagining Residency initiative.

Speaker

- Sanjay Desai, MD, chief academic officer; group vice president, medical education, AMA

Transcript

Unger: Hello. This is the American Medical Association's Moving Medicine video and podcast. Today we're talking about how improving resident training of the physical exam can increase well-being.

This is a special episode to close out the AMA's Recognizing Residents week, a week where the AMA takes time to focus on residents and the critical role that they play in the profession. I'm joined today by Dr. Sanjay Desai, the AMA's chief academic officer and group vice president of medical education
in Chicago. I'm Todd Unger, AMA's chief experience officer also in Chicago. Well, hello, Dr. Desai. Is that your laboratory there in the background?

**Dr. Desai:** That's my pride and joy. It's our tree house I built about 10 years ago. And I want to thank you, Todd, for inviting me back and allowing us to focus on the physical exam during this week where we're recognizing residents.

**Unger:** Well, let's start with what initially drove you to look at the training and assessment of the physical exam. Prior to the AMA, you were a program director at Johns Hopkins where you regularly interacted with residents and did research on resident education and wellness. Were you starting to see a decline in the skills of your residents? Is that what is underneath this?

**Dr. Desai:** I think even more than witnessing perhaps a decline, Todd, I think it's witnessing the cultural shift away from emphasizing and prioritizing the physical exam as a essential component of the way that we care for patients. It's the reason I think that most of us actually chose the field is based on our personal experiences with physicians and the physical exam.

This is probably one of the most sacred experiences that are part of being a physician and caring for patients is that opportunity for us to be with them at the bedside and examine them, and use that information to help care for them. There are so many aspects to it that are so important. And rebuilding that emphasis was the motivation for us to think about it.

**Unger:** You mean people didn't join medicine for an endless series of questions through the EHR? Is that—

**Dr. Desai:** That came up only afterwards.

**Unger:** Is that part of what's driving us? What do you think is the—

**Dr. Desai:** I think, as I reflect back, Todd, I think that there are innumerable forces today in the clinical training environment that, unfortunately, increase the distance between clinicians and their patients. And so these include regulatory forces, they include operational forces of hospitals and clinics. They include all pervasive EMR and the documentation burden that comes with that. The way that we clinically care and the way that we clinically document our care has transformed completely in the last 20 years.

And some of it, obviously, brings good. The EMR has obviously some very important qualities that are help us. And also technology, which I think we would all argue is good for us in our ability to care for patients effectively. However, again, it creates distance between us and our patients.
Unger: Well, speaking of distance, I have to imagine that the pandemic put a lot of distance between physicians and patients over the last couple of years and did not have a positive impact on physical exams. Is that the case?

Dr. Desai: Yeah, I think the pandemic, as much injury as it's caused on so many aspects of our lives, I think it has had a highly detrimental effect on the emphasis of the physical exam and our ability to teach it moving forward. So I talked about distance that's created by all of these other forces. The pandemic was enormous force that exacerbated that distance. Now we had to wear the protective equipment, which created physical separation between us and patients.

We had to limit the number of people that went in to see a patient. We had to think about how much time, and felt constrained or even distracted, or urgency to minimize that time. I think for many, it eliminated parts of the physical exam that we found incredibly personal and valuable for both us and the patient that's just sitting there and taking our time and listening. And again, that all was done now behind a glass door, behind a plastic mask. And it made it very difficult for us to really show how much value the physical exam provides.

I would add one more thing, Todd. And that's that the forces that have been in existence for two decades to create that separation also, unfortunately, changed the culture of how we think about the physical exam and changed the capability of attending physicians to be able to perform and teach that physical exam. And that also grew and became, I think, harder to overcome during the pandemic. So many layers of this. And some of it, unfortunately, has led to durable impact on this culture and the emphasis of physical exam that's going to take more time to unravel than I think we would all hope for.

Unger: And I'm sure coming out of the pandemic where we see the use of telehealth growing pretty dramatically, obviously no—well, hard to do a physical exam through the phone.

Dr. Desai: It is. It's really—telehealth absolutely became a new skill that we all had to learn. And teaching the physical exam, which you can do over telemedicine, is different. And so both the mentors were not skilled in that capability as well as we hoped everybody is. And their ability to teach it is also very limited. And so it's a new domain because telehealth is here to stay. And this will become a new domain for all of us to gain competency in. So another example, Todd, of where there’s threatening culture to the physical examination.

Unger: And it's interesting because we did some episodes earlier in the year on how to do physical exams and just there is a certain set of equipment that's needed on the patient side to be able to do that. Now that we're hopefully kind of moving at least somewhat back to normalcy, why put this emphasis back on the physical exam? And why is it such a crucial part of patient care?

Dr. Desai: There are so many reasons. I think that there is a medical reason and then there is also a very important emotional reason that is highly meaningful for us to center on the physical examination.
Certainly medically, this is central to our care. It is crucial to develop, to determining the accuracy of a diagnosis that you have. It's crucial for us to reduce diagnostic error. It helps us reduce unnecessary testing that we may reach for because technology is easily available. However, it's expensive and we should be judicious, and use those technologies only when they're appropriate.

Beyond the findings and the clinical reasoning that is informed by the physical exam, I would add a very important layer, which is the emotional side, the opportunity for us to connect with patients, for us to develop that trust with patients. When we're with patients, it's often at moments of vulnerability. And the physical connection that you are able to nurture through the practice of a physical exam is invaluable and I think facilitates those connections that are so important to healing.

**Unger:** Well, I know that you and your team spend a lot of time thinking about re-inventing medical education and training. When you think about the physical exam, where's the training and the assessment for this particular area typically done? And where do you think it's falling short?

**Dr. Desai:** Yeah, so this is a big area of focus for us at the AMA to help catalyze innovation and emphasis in this. And certainly, it's a big focus for many medical schools and training programs across the country. The opportunity to really create the skills and to nurture the culture that emphasizes this physical exam has to be early. So it has to be when we are in our most formative years, where these habits are formed.

And so that's medical school when we're in our clinics and in the hospitals doing clerkships. And it's during residency when we're, again, in the clinical environment with mentors and when we're learning.

And so I think our hope is to support opportunities, initiatives, practices that very deliberately bring the trainees to the bedside under supervision. So we bring them to the bedside but not—bring them out unsupervised and they are not learning the habits that you want them to learn, nor will they learn the skills that are important to use that information in the most meaningful way.

And so to bring them there to show that this is a core part of the care for every patient every day and then to model how you do this as a practicing physician, and then to give them—to assess their skill set and give them opportunities for growth and help develop that growth so that they can, again, use the physical exam, perform it adequately, effectively, in a nurturing way, in a healing way, and then use that information to provide the best possible care.

But it really has to be early on, Todd, so those habits are formed. They're durable. And they can be passed on to the next generation of physicians that they then train.

**Unger:** Well, we've seen some programs, including John—Johns Hopkins make positive changes in this arena. What do you think when you look at that have you seen that's really working?
**Dr. Desai:** Yeah. So for us, we decided, again, early on that this will be a focus of our residency program at Hopkins. And it is at other places as well. And so it became highly structured, highly reliable and highly deliberate that we make bedside care the centerpiece of our training model.

And so to do that, I think it requires structural interventions. So that rounds happen at the bedside. We know more and more, again, because of all the forces we've already talked about, rounds too often are relegated to a team room where there's a multitude of computers where they can actually do so much of the clinical care. So re-emphasizing—introducing, really, the notion that care has to begin at the bedside. And so that's structural. That's making sure that rounds, led by the mentor, led by the faculty member, led by the senior-most residents, are performed at the bedside.

And then to study it. And this is, again, where the AMA has really left an impact is to support research in how we're performing the physical exam, how effectively we're actually using the information from that physical exam. And then ultimately, Todd, I think what we all want to do is tie everything to what matters most.

And that's the outcomes of our patients. So the work that's being done now supported by the AMA and the Reimagining Residency Initiative is with Johns Hopkins, with Stanford, and with the University of Alabama at Birmingham, where we are assessing the skills of physical exam, how much time we're spending at the bedside and then correlating that to outcomes that we think are meaningful in terms of our skills.

And then ultimately, hopefully, we can get to the point where we're assessing these against outcomes for patients, which is really the ultimate goal and the reason that we're learning these skills in the first place.

**Unger:** Well, you mentioned Stanford. And just that I'm curious too about the amount of time. Talk to us a little bit about something called the five minute moment.

**Dr. Desai:** Right. So the five minute moment. So we—again, this is an opportunity for us to realize and to create models for effectively teaching evidence based practices in physical exam in short periods of time. Because we know, again, because of all the forces that we've talked about, that we don't have a lot of time. An abundance of time is not the opportunity that we have to use. And so how do we do that? And then so Stanford had created these five minute bedside moments.

They've been taken up by the Society of Bedside Medicine and scaled their even further. And they choose one physical exam intervention, they teach you how to do it properly, and what information you can yield from that to better care for your patient. And there's a series of these now. And so these are meant to be bite-sized moments that can be scaled across any institution really in the world who choose to look at it and teach it. And hopefully, as you do this more and more, those students that then learn it can teach it on to the next generation.
And again, the idea is to pass and scale as much evidence based physical examination skills and lessons as we possibly can. And this is a very effective way for us to have done that.

**Unger:** Well, it's not exactly intuitive, the connection between this particular skill and increasing professional satisfaction, reducing burnout in residents, which we know has just been historically a huge problem. Tell us more about that connection.

**Dr. Desai:** Yeah, I think that that work that's been done by those three institutions is built upon the hypothesis that one of the drivers of burnout is our separation from patients. And again, if you go back to when people apply into medical school, they, I am confident, do not apply to become a physician because they'll be able to sit in a team room and work on a computer. They, I am confident, imagine themselves with patients.

And so it would be frustrating, it would be emotionally exhausting to work as hard as physicians will and to care as deeply as they do for their patients and then not be able to spend that time with them. So the hypothesis is that if we're able to spend more time with patients, then our skills would not only improve but our—the meaning, the meaningfulness of our day would improve. And that would then turn into a greater amount of well-being and reduced burnout.

So that's the cycle or the loop, that we hypothesize and this research team is exploring very carefully. And the way they're doing, Todd, because you mentioned time, is measuring time. So we actually track residents wherever they are in the hospital and are able to track how much time they spend physically with patients. And then you can associate that time with a whole host of different outcomes, including well-being, which is a very important one for us to track.

**Unger:** And I know from previous research with physicians that the time spent with patients is greatly outweighed by time spent behind a computer screen. You're dealing with some real structural changes in the training environment that have to take place. I have to believe that's pretty significant.

**Dr. Desai:** No, it really is. It's about 13% of the time is spent in direct patient care, which is—we don't know what the right amount of time is but I think that there is largely consensus and concern that that is inadequate amount of time. And so how do we—the first step in improving that is to measure it. And so once we're able to measure it, we can both look at the amount of time but also look at the quality of that time, and then, again, correlate it to outcomes, which will be the most important part.

**Unger:** Well, where does the work currently stand? And I think I know part of the answer. What do you hope comes out of it?

**Dr. Desai:** Yeah, I think that—well, the work is ongoing. We just published, the research team, just published the first manuscript from this research that actually shows the amount of time and where interns spend time in the hospital, as well as shows that variability between different interns. And

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there's actually quite a bit of variability between interns at 9% of variability, showing that there is opportunity. Some people spend more time than others. Again, we don't know what the right amount of time is. But it shows that there's an opportunity there.

And it also varies dramatically based on the unit that you're in, whether you're in oncology, or in an ICU, or on the general wards. Again, showing opportunities. And so that was just shared and disseminated. And now the team is using those data and making those associations with the outcomes that we had discussed before, including clinical skill and well-being. And so more to come. And hopefully, we'll learn as other institutions start to participate in similar research, learn what we think is most important.

That's really the goal, Todd, in the end is to learn a—what interventions, practices, processes will allow us to cultivate the skills that we think are most important to learn in physical examination? And then bring that evidence to demonstrate that, in fact, these skills improve the clinical care a physician can provide, improve the well-being a physician can provide and then ultimately improve patient outcomes.

There's so much resource that's being invested in this space that we think it's urgent for us to identify what is effective, using a data-driven method, so that that investment is directed in the best possible way to get the best outcomes for clinicians and for our patients.

Unger: Well, there's so much effort going on here at the AMA to do exactly what you're talking about, get more time for physicians to spend with their patients. And I love the connection that you've made between that important skill of the physical exam and physician well-being. And we'll look forward to hearing more about your research as that develops. Dr. Desai, thanks so much for being here today. And a big shout out to you and your team for all the work that you're doing to support residents nationwide.

We'll be back soon with another Moving Medicine video and podcast. You can catch all our episodes at ama-assn.org/podcasts. Thanks for joining us today. Please take care.

Dr. Desai: Thank you.

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