Dr. Mandrola: A few years ago, my wife suggested that I read *Cutting for Stone*. I was really moved by it. It got me excited again about being a doctor. About using my stethoscope—really using it. Listening. Similarly, in your Simon Dack lecture, you raised the notion of two hearts: The real heart is the spiritual heart, and then there is the companion heart, the ejection-fraction heart for which we have all kinds of data. Can you explain what you mean?

Dr. Verghese: It strikes me that we have the somewhat paternalistic assumption that the heart we're dealing with is the real one because we can see it and measure it, but who is to say? I think that they're all metaphors. Even ejection fraction is a metaphor. It's clear that the prevailing heart out there isn't the one that you and I deal with. The prevailing heart is very much the way patients express their deepest feelings. It's where they think their beliefs and their love reside. I always had the sense that we're dealing with two hearts. To focus on one without paying attention to the other is to miss something.

Dr. Mandrola: I was at a recent conference where a specialist in cardiac neurology was talking about the heart's intrinsic nervous system. The heart can actually feel things through chemoreceptors—which is nifty. I have come to believe, especially in heart rhythm care, that we humans are all connected. Would you agree with that?

Dr. Verghese: I would agree with that. We may get to a point where our knowledge will finally show us that it really is one heart, but certainly the way we approach it professionally is that there are two hearts. There's a mechanical heart that we fool with, and then there's the way the patients use the word "heart," which we raise our eyebrows at. But maybe research will show that they're really one and the same thing and that emotions deeply affect the heart in more ways than just rhythm. Maybe the heart truly is registering some of our deepest beliefs.

Dr. Mandrola: We'll see. I want to ask you about teaching young people the physical exam and history taking in particular. How are we going to accomplish this, when, as you mentioned in your lecture, medical students spend almost half of their time on the computer?

Dr. Verghese: It's a real struggle. It's a source of great frustration for them and for the teachers. What's even scarier is that we are now evolving a generation of attendings who were never taught at the bedside, so how can we expect them to then teach at the bedside? In fact, the most common form of an attending is a hospitalist. They are not people who necessarily trained to attend on the wards. They are the best people to get people in and out of the hospital who secondarily wind up being the teachers. Interestingly, many of them are coming to us asking to learn these skills. We're actually putting on a big symposium in September to address this need, which is wonderful to see.

Many young teachers recognize that they can do chalk talks, they can manage patients, and they're knowledgeable about disease, but they don't feel comfortable taking people to the bedside because they don't feel that they have any more to offer than what the senior resident already knows. At Stanford 25,
we're trying to teach them pedagogical methods to improve their repertoire at the bedside. We encourage them to find one thing and make it theirs, whether it’s neck veins or pulsus paradoxus, and then build on that. It's a challenge, but I think it’s very satisfying when people go to the bedside and pick up something and recognize how that changes treatment.

The Stanford 25 website is our way of trying to re-teach physical diagnosis to the advanced trainee. However, it’s just a website that's meant to be a representation of what we need to do at the bedside because you can't teach this online. You can only teach this one on one, which is why it's so hard. Our first sentence on the website is, "This site is NOT the Stanford Medicine 25; it is only a map to a territory." In other words, this website is not the same as going and examining the patient. We get 4000-5000 hits a day, which speaks to this need. People want to learn this stuff, and they are stymied because there aren't people teaching it, and they're chained to the computer.

I should also add that we don't dwell as much on the history-taking, not because it’s not important. I think it’s terribly important. But it's a skill that people get better at as the years go on. With experience, they learn that there's much more to the story. But with physical diagnosis, those skills freeze at exactly the point where you last left them in your training. They don't necessarily get better over time.

Dr. Mandrola: Regarding the physical exam, one of the things that I've been drawn to in years of doing this is the patient's general appearance. I had an old teacher who used to say, "John, paint a picture so that another reader can have a picture of this patient." Do you think that's important?

Dr. Verghese: Yes, that's terribly important. I make rounds with my medical students every Wednesday and every Friday at the VA and the Mercy Hospital. I tell them when we start off that anything we see is fair game. They think they're ready for that, but then I'll ask, "What did you notice about that visitor who just walked by?" I tell them they always have to be on. You can’t turn on your game at the finals of Wimbledon. You have to be playing well in all of your rounds to climb up the rankings. General appearance is a large part of that; we spend a lot of time on it.

Dr. Mandrola: I watched your interview with Eric Topol in which you mentioned the Vscan (GE Healthcare; Little Chalfont, United Kingdom), a hand-held ultrasound device. How do we merge technology while retaining the physical exam bedside skills?

Dr. Verghese: The key issue is bringing the technology to the bedside. When the stethoscope was invented, there was furor about it. It was seen as an invasion of something sacred: the bedside space. Clearly, that passed. There's some resistance to the idea of an echo at the bedside by people who are not formally trained, but I think anything is better than sending someone to a suite and coming back with a result. A CT scan or echo suite where you don't actually see the echo. You just get a report. I don't think that is satisfying for the patient. It's not satisfying for the practitioner. The Vscan is a very good instrument, as you know, but the more things we can bring to bear at the bedside, the more likely we'll practice a little more cost-effectively and the less likely we are to run to consultants. A lot of the inefficiencies in our healthcare have to do with the fact that people aren't sure of themselves at the bedside and are never confident of saying, "No, we don't need to do more." It's much easier to say let's get this test, let's call so and so. Of course, once you call in a consultant, then they find something that triggers something else, and rarely is any of that justified in the end.
Dr. Mandrola: One of the biggest challenges doctors face these days is shared decision-making. The whole notion of preference-sensitive decisions and decision analysis—how do we help patients in this regard?

Dr. Verghese: It's a real challenge because there's never been a more exciting time to be in cardiology or really any medical specialty. There's a great disjunction between patient satisfaction with us and our pride in what medicine can do. We have a real communication gap. To me, it lies in language. Look at all of the colorful metaphors of medicine: the strawberry tongue, the raspberry tongue, the saber shin tibia, the peau d'orange appearance of the breast. There's not one colorful metaphor that I can think of that was invented in the last 40 or 50 years. These are all metaphors of a previous era when physicians used words to communicate what something feels and looks like to each other, and also to the patient to some degree.

Dr. Verghese: They aren't happy about the amount of time being spent in front of the computer. That's not their doing. That's our doing. The Google Glass experiment, for example, came from one of our medical students. I have hopes that the next generation will change things. Dr. Pat O'Gara said something in his opening address that was quite poignant. He said, "There's nothing in the electronic medical record to capture the pearls, the wonderful tidbits that we hand down." I worry because residents are very much into bite-sized information, the Twitter feed level of discourse. They're not used to narratives and stories.

Having said that, I just did an interview with a couple of the fellows who are walking around ACC with a camera and a microphone. I told them that fellows and residents come into medicine with all the right attributes. What happens is that the process of medical education winds up beating it out of them. I talk about them going from their precynical to their cynical stage. But the good news is that most of them come back to some original version of themselves, and that is a very good version for the most part. I'm very hopeful, but I do think that the burden is on them to latch onto people who can teach them the things they need to learn at the bedside. There is too much passive learning. There's a module for everything and a sense that you can be board certified by answering these questions without having to demonstrate that you can examine a patient.

They are conscious that they don't have the skills of our generation, and they want them. We have an obligation to give them those skills, even in this very busy setting where we're discharging left and right. It's getting comical. When I arrive first thing at 9:00 in the morning, I'm supposed to do discharge planning on people who came in the night before who I haven't yet seen. If that were my mother, I would be really upset. I'd want the doctor in charge to see her before planning her discharge. That's something that I hope the younger generation can address.

Dr. Mandrola: Your advice would be for the students and residents to find someone within their institution to teach them those skills.

Dr. Verghese: Our institution is a perfect example where the hospital has its own priorities relating to reimbursement, and they want to get the patient in and out, with quick turnover. They love the hospitalists because hospitalists are great at systems-based care. They don't like people like me attending, even though I would argue that it would be a tragedy if a resident came through Stanford and wasn't able to benefit from those of us who are a repository of certain kinds of stories because of the pressure for faster patient turnover. We're wrestling with how to convey this without interfering with the efficiency of the hospital. All of this could change if reimbursement changes. We don't know what's coming.
Dr. Mandrola: That leads me into the whole business about leadership. I went to a lecture on leadership by Richard Gunderman from Indiana University, who writes for *The Atlantic*. He said that if you can tell a story, you're a leader. Do you think it's crazy to think that storytelling and narrative can help us be leaders?

Dr. Verghese: I'm a big believer in that. A novel called *The Citadel* by A.J. Cronin about mining conditions in a Welsh town led to the National Health Service in the United Kingdom because of the shame surrounding what the book revealed. *Uncle Tom's Cabin* ended slavery in this country. It wasn't a politician. It wasn't a military guy. It was one novel that captured the public's imagination. So I think it's possible, but we seem to be in a very polarized state in America. No one can come to the table for consensus. We have a lot of vested interests, and everybody is fighting for a piece of the pie. Healthcare is a big pie, $3 trillion worth, but I'm optimistic for a perverse reason. I think that our GDP on healthcare is going to cross a line where it exceeds defense spending. At that point, people will wake up and say, "We can't do it this way."

Dr. Mandrola: Do you think that physicians should write more and have more of a voice, and do you think that would make a difference in changing the perception that we are not always altruistic? If more of us said how we felt about the tools we have now, might it change things?

Dr. Verghese: It's laudable, but I'm not sure that that changes things, unless we have regulations that say that you can't own a CAT scan if you're in practice or that you can't own the cath lab to which you're sending patients. Or examples in my specialty area: You can't administer intravenous (IV) drugs for osteomyelitis, if you own the IV administration business. Would you really have picked the IV drug if you didn't own the business?

We are so full of conflicts that when we use that word "altruism," it doesn't ring true because we're compromised by many of the things that we do as a routine. That said, I don't think that the problem is drug companies. There has been too much focus on pharmaceutical companies. It's true that they have a very strong influence, but even more than that, it's us. It's our unwillingness to change a very comfortable way of being.

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Dr. Mandrola: My wife, Staci Mandrola, is a palliative care physician, and I promised her that I would ask you about the end-of-life problem that we have in the United States.

Dr. Verghese: One of the nicest things that I've seen in my career is the emergence of the palliative care movement. As you know, many palliative care physicians started off in other specialties, then gravitated towards palliative care because it comes closest to the kind of medicine that truly represents their altruism. Concierge care also comes close in a perverse way because it forces you to turn away people, but at least with the people you do take care of, you can give them the time and access you want to give them.

We have a real issue in our society with end-of-life care and the expenses around it. If you talk to our house staff, the number one complaint that they have is that they often feel co-opted into doing futile things at the end of life. They are frustrated that we, the attendings, can't stop it because it's more complicated than that.

Dr. Mandrola: It seems like we have disordered incentives. I might spend an hour doing a device procedure and get paid a thousand dollars; and Staci will spend an hour being present with a family, and she is paid a fraction of that.

Dr. Verghese: That's so unfair, but unfortunately, that's how reimbursement works.

Dr. Mandrola: Cardiologists like to say that you need this or you need that. I have a problem with the verb "need." Patients don't sometimes see that there are alternative paths. How does it work in infectious disease? Maybe that area is a little less preference-sensitive?

Dr. Verghese: It's still very preference-sensitive. For example, if you don't treat endocarditis, it will relapse, but it's not the law that the patient have this treatment. You can't assume that they want it. They very often don't because they know that they're going to go out and use drugs or whatever. With HIV or hepatitis C virus, you have a treatment and the patient may need it, but we have to accept that it's the patient's choice. One of the biggest changes in medical ethics is a true understanding of patient autonomy and patient choice.

Now, they can't make choices about their minor children that result in hurting them, but if they make a choice for themselves to turn down something that's life saving and they're competent, what can you do? I think we should give them that choice.

My father is a very intelligent man. He's in his 90s now. I cannot have any dialogue with him about healthcare. He's very suspicious about everything. He's not doing or taking the things that he should, but he would argue that he's done fine without them. I'm slowly recognizing that that's okay. For too long, we've had this paternalistic sense that we know what's best, so the patient should just do it. But they don't have to do it.
Dr. Mandrola: Finally, we hear a lot from the Medscape audience and our survey shows that physicians are burned out. What would you say to them?

Dr. Verghese: There are good data that 50% of primary care physicians are burned out. More than 50% are depressed, which makes you realize at once that it's not an individual problem. It's a systemic issue. The root of it is red tape. Our red tape equivalent is the EMR. I think organizations like the ACC should come out and say that the source of dysfunction and dysphoria among physicians, the source of frustration in the system, is that we are busy documenting something that has nothing to do with patient care. I'm not pessimistic about it; I'm a great optimist. I think that things will get better, but I think that you can't make it better until you acknowledge the problem. It's like a Dickens novel. There's a point, an epiphany, where the big lie is revealed to the person who is carrying it. Then everything sorts itself out.

Dr. Mandrola: Being distracted from what we were supposed to do is terrible for physicians. I think the employment model has made it worse because we get put on the assembly line. I hope it does change.

Dr. Verghese: There are some good models of successful practices; Christine Sinsky at the ABIM Foundation has looked at practices that have been extraordinarily successful. One of the common features is to make the physician experience much less about the red tape and much more about the patient. For example, calling the patient the day before and establishing the agenda for the visit so that they don't come in with 16 things when you think it's a follow-up for one thing; calling the patient ahead of time and reconciling medications before they arrive; or drawing labs and having the results there on the same day, rather than having them come back—these are all such simple efficiencies. Another practice had the physician, the social worker, and the physical therapist all in one common area. Instead of sending an email to somebody, you just turned around and spoke to them. You get things done much more efficiently. Having a scribe—having someone else to do the paperwork—is a really good way to make people happy about what they're doing. They are more efficient.

Dr. Mandrola: The emergency department doctors have led the way with scribes in our community. We're not there yet.

Dr. Verghese: But the sad thing is that these scribes are only there for billing. If we had a one-payer system, we wouldn't need scribes.

Dr. Mandrola: I'm with you on that. Thank you for your time.