Q&A: ICU doctor’s mission to transform health care with tech

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During her pulmonary and critical care fellowship, AMA member Tina Shah, MD, MPH, dealt with burnout. When she began to just want to “get through the day,” she knew something was wrong. But having that recognition, which never happens early enough, allowed Dr. Shah to switch gears.

“While I couldn’t fix everything in my day-to-day life, at least I could start working on it on a policy and national level through the AMA,” Dr. Shah explained, adding that she started her personal work to “return to being that fully engaged doctor in love with medicine.”

“Because the pace of training for pulmonary and critical care is extremely intense, what I realized was that I needed to find meaning paired with that day-to-day work of providing critical care,” she said. “I couldn’t fix the problems in my institution upfront right away. But I got to a place by running for chair—and then being elected as chair—in the AMA Resident and Fellow Section where I could push the needle elsewhere.”

“It turned out that putting myself in a space where I could start fixing some of the health care system problems actually gave me that meaning,” said Dr. Shah, the CEO and founder of TNT Health Enterprises, a company that helps health systems improve their operations by implementing evidence-based strategies in well-being and digital transformation. She was also the 2018 winner of the Dr. Edmond and Rima Cabbabe Dedication to the Profession Award from the AMA Foundation. In this article, Dr. Shah explained why medical societies are in a unique position to address burnout.

During a recent interview, Dr. Shah discussed life as a critical care doctor during the pandemic, her work to address physician burnout, implement process improvements and shepherd digital transformation.

**AMA:** What’s been your personal experience been throughout the COVID-19 public health emergency?

**Dr. Shah:** I’ve had the most highs and the most lows so far in my career with the pandemic. The
highs: I have never done more meaningful work. My mission is to empower others to do the job they know how to do because I do believe every doctor, nurse and health care professional is an elite athlete. When COVID happened—because of where I was positioned and my interest—I was able to do that by giving them the tools they needed to provide care virtually. So that work was incredibly meaningful.

And then the lowest of the lows: I've never experienced moral distress to that degree working in the ICU. There's something about watching someone else suffer and hearing the last goodbyes over the telephone because a loved one is not allowed to come in to the hospital in this critical juncture that will never leave me. I feel it's imprinted on my soul, and while I will continue to need support to deal with that trauma, it also is a positive light that will compel me to drive change at a faster pace because we never want to be in this situation again.

AMA: You also helped spearhead the COVID-19 telehealth plan at Wellstar Health System as medical director of virtual health. Tell our readers more about that.

Dr. Shah: We really went from zero to 50,000 visits in six weeks. The secret sauce was being a humble doctor, because the most important aspect to hitting that incredible goal was helping my colleagues get rid of their pain points. Most people realized that they were going to have to try virtual health because of all the concerns about the contagion of COVID-19. But I tried to approach it with humility and think about the exact need.

Within a 24-hour period, I worked with revenue cycle and with coding and compliance to put out what physicians needed to know so doctors can just do their job. We came up with this three-by-three table of what's the type of visit—video, telephone or asynchronous—as well as the three things you have to document in your note.

We also simplified it to where physicians didn't need to know which insurance and CPT code, but they just had one billing code to drop. We automated the billing processes outside of the physicians’ purview so that we could bill directly, and it was remarkable.

AMA: Did that help relieve some of the added physician stress and worry?

Dr. Shah: When I wasn't providing patient care, I would jump on every possible physician call I could because at that time, every specialty was having their morning huddle or their evening huddle several times a week.
I would try and jump on to explain the latest virtual care update. Or if I heard something was a major pain point, I’d share what we did to fix it. And also: What else do we need to fix? That constant back and forth helped my colleagues feel heard and get the tools they needed as we uncovered more issues with trying to do virtual care.

AMA: Earlier in your career, you served as a White House fellow and worked in the U.S. Department of Veterans Affairs (VA) as the first Director of Clinician Well-being. What were you able to accomplish in that role?

Dr. Shah: The VA is such a research powerhouse that they had uncovered a major distress point for primary care physicians was all these low-value messages they were getting in their EHR inboxes. And then, further, they figured out and had developed a checklist to get rid of some of those messages in a way that would increase patient safety. So, I was fortunate to take that and help make it a reality. It was a lot of growth and learning—how do you partner quickly with senior leaders across the country to get them to help implement this? It's about empowering the people you get to work with amidst all the other priorities they have going on. So, it started with conversations and pulling together a group and making that compelling argument of the why. And then, on the backend, setting up the research so that we could prove that it wasn't just, “Oh, we think we did this.” We showed with scientific rigor that we really did save an hour and a half of primary care physician time a week, which led to the ability to see 18,000 additional vets in our system a week. These seemingly unsexy things of fixing and making something more efficient lets clinicians be clinicians.

AMA: What are you working on now?

Dr. Shah: Technology is the key to unlocking many of our problems in health care. It will help us defragment health care, increase access and address clinician well-being. I'm on this journey right now to figure out how to use technology to transform how we deliver care. I've actually spent the last few months working and serving as a medical director of an initiative in Indian Health Service.

As a contractor, I am leading this program called the Critical Care Response Team Initiative where we actually deploy multidisciplinary teams to hospitals in Indian Health Service. These are generally in pretty rural areas and within two weeks we do process improvement and training to get these hospitals able to keep people alive—it’s like a crash course in quality improvement in critical care. For example, bedside training for nurses on how to evaluate low oxygen and treat deteriorating patients with new supplemental oxygen devices as well as assessment and treatment of top critical care conditions for physicians. We also are running mock code drills to increase team effectiveness in keeping patients alive.

This kind of work is invaluable—it’s that direct ability to serve in a capacity beyond just being a doctor...
to the patient. It magnifies your impact. Although I do get to still be a doctor and I do ICU shifts, the bigger thing is how do you level up in the time of crisis? It is through tech. And my goal now is finding that golden opportunity—via the tech and startup world—to translate the problems we have as patients and doctors, and solve them rapidly in the private sector in tech.

AMA: What does the next year look like for you?

Dr. Shah: I started off the first half of the year wanting to serve in rural communities most distressed by the pandemic and landed on this unique opportunity to leverage being a critical care doctor and being an implementer to get these health systems to work at the top of their level in a crisis situation.

Now I'm exploring opportunities to accelerate digital transformation—and I'm not talking about doing one more video visit in our clinic. I'm talking about realizing the dreams that we have as physicians of how we think we should be able to help others.

For example, using remote patient monitoring to catch early when patients with COPD are getting sick so we can intervene and prevent hospital admissions, or blurring the lines with care location so that whenever I as a doctor have free time between patients, I can do a consult with a video assisted exam and my patient may be at home or sitting in a hospital bed. It's pretty broad, but that's what it takes. I want to make health care better by working outside of the box.