Bobby Mukkamala, MD, and Sarp Aksel, MD, on helping to solve local PPE shortages

Watch the AMA's daily COVID-19 update, with insights from AMA leaders and experts about the pandemic.

Featured topic and speakers

AMA Chief Experience Officer Todd Unger speaks with AMA Board of Trustees Secretary Bobby Mukkamala, MD, and obstetrician/gynecologist Sarp Aksel, MD, on updates regarding COVID-19 including the challenges posed by the lack of personal protective equipment (PPE) during the COVID-19 pandemic, and shares stories of the two physicians who took matters into their own hands.

Learn more at the AMA COVID-19 resource center.

Transcript

Unger: Hello. This is the American Medical Associations, COVID-19 update. I'm Todd Unger, AMA's chief experience officer in Chicago. A lack of PPE has been an ongoing challenge throughout the pandemic and today we'll share the stories of two physicians who took matters into their own hands to solve shortages that their fellow physicians and communities were facing.

First, we'll talk to doctor Dr. Sarp Aksel an OBGYN physician in New York City. Dr Aksel is PPE still a problem?

Dr. Aksel: Todd, first off, thank you so much for having me. Your daily updates have really been a pleasure to follow along with, so it's an honor to be on your updates. The situation in New York—it's still very much a hotspot. We now have over 140,000 confirmed cases of COVID with over 10,000 deaths confirmed just in New York City. Hospitals are saying that they’re stocked enough. the government is saying that they have enough, and they’re supplying enough. But the story’s really different on the front lines.
I have colleagues, I have nurses that are reusing supplies in ways that would have been unconscionable just six months ago. We’re reusing masks. we’re using surgical masks to cover up other masks. Our respirators, we’re being told how to dry them out in brown bags.

We’re in pretty dire situations, and that’s just at a large health care system with plenty of resources. You go into the community hospitals, and you’re seeing a far worse situation where physicians are given one mask for weeks on end. And it’s the personal protective equipment that we’ve been trained to use in an effort to minimize contact with infectious agents, both for ourselves but also for our patients and to protect them. This is not how it was supposed to be.

Unger: Well, you’ve responded by putting together what you called a ragtag team of volunteers and turn them into a more well-oiled PPE delivering machine. I want you to tell us how did you do that?

Dr. Aksel: Well, first off it, as is everything in medicine it was 100% not my doing alone. It was 100% a team effort. I got pulled into this mid to late March by some contacts I had from my high school days. They were in touch with suppliers and manufacturers and entrepreneurs in the tech field. And it was that group of maybe 12 to 15 folks that came together, and they saw the need in their communities. they saw their neighbors going to work here, heard the stories that the news was telling them. And they're the ones who really took matters into their own hands. And that's the story of where Last Mile originated. It's really a human infrastructure project that came out from civilian concerns for what's going on with the crumbling health care system that we're witnessing right now when we're challenged by a pandemic.

And so I say ragtag because I've never actually met any of these people. Now, they're good friends. And I've talked to them probably more than I've talked to my family over the last two weeks. And we now have processes that I never would have dreamed of. I'm utilizing web-based tools and crowdsourcing. How to put together a distribution team, how to verify supplies in China—there are things that I'm a part of that I never would have imagined doing. And my role is really just making sure that the voice of the physician on the ground who's actually working with the personal protective equipment and has the stories of his colleagues. We’re able to apply that human perspective and insight to the way that we deliver supplies to where they're needed most. And that's on the front lines.

Unger: How do you figure out who needs it the most, and how do you get it there?

Dr. Aksel: That's a good question. So as we start to grow—we started off in New York City; we now have local chapters in New Orleans, where there’s been a huge, huge need, Los Angeles, Chicago, San Francisco, Boston, but New York is really where the team has sort of coalesced and formed the model that we’re hoping other communities will be inspired by and tweak for their own individual needs. And two of the processes that we’re really proud of, one is the verification. Making sure that it's a verification process where we take in requests and then we have a very dedicated and highly trained team of volunteers that call each request that's made, each requester, and verifies who they
are, where they work, what sort of procedures that they're being exposed to, what hospital they're at, do they travel between various hospitals.

So we really put a lot of effort into making sure that the supplies that we have, that our donors have donated to us, are really being placed exactly where they're needed the most, in the hands of providers. So we've prioritized subspecialties like anesthesia, ICU, critical care physicians, who are at the most risk. Emergency room physicians who are doing intubation sometimes four or five times in an hour. Their exposure to aerosolized generating procedures is really what we're looking at and then we're also looking at the health care system that they exist in.

So we know, any physician who's been working clinically knows that there are certain hospital systems that are just, they have more resources, they're more creative about where they get their fundraising, and there are some hospitals, typically in the community, that do not have those resources of a well-oiled health care system. And so we're developing a scorecard that will make it easier for other cities, our sister cities, to also replicate at least the core of what is important to us. What is the COVID prevalence? How big is the hospital? What is the operating budget per capita employee? How many beds does a hospital institution have? What are the demographics of the patient population served? These are really some of the things that are going into our thoughtful approach for distributing some of the supplies that we get.

**Unger:** Do you have any sense of how much PPE Last Mile has been able to distribute?

**Dr. Aksel:** We have two branches. We have micro distribution, which is really masks on the order of 10, 20, 30 masks being delivered to individuals. And then we have macro distribution, which I'm spearheading, which is more on the order of hundreds to thousands of masks. To date, we've delivered over 41,000 respirator masks within the last two weeks to over 400 frontline providers in over two-thirds of the hospitals in New York City, in the five boroughs. And that's just our city. That's just in New York.

**Unger:** Well, Dr. Aksel, I can't thank you enough for spending time with us and telling us about what you're able to do for your fellow physicians. That's amazing work. Now we're going to take you far away from New York City to another hotspot in the Midwest in Flint, Michigan where Dr. Bobby Mukkamala, one of AMA’s trustees, is partnering with local industry to address the shortage of PPE in his community.

**Dr. Mukkamala:** My name is Dr. Bobby Mukkamala. I'm an otolaryngologist in Flint, Michigan. Flint is about an hour north of Detroit. It's definitely been one of the hotspots, and that's been known now for the better part of the month. We were not sheltered from COVID-19 like a lot of places in the country were and because of that, we've been in the thick of it for a while. Very much like the other hotspots in the country in trying to take care of patients with COVID-19, all of the resources that were available, those limited resources of N95 masks and face shields, were dedicated to the inpatient care. But what that left for the rest of the community is that there just wasn't enough to go around and hence sort of
the development of alternative sources of protective equipment, of PPE, like the stuff that we're working on.

My sophomore in college son was online one day and happened to come across a site called Hack the Pandemic, and he said, "Dad, look at these guys, they're printing 3D printed masks."

We started doing that. We had a couple of 3D printers at home and started printing out masks that we downloaded from the internet, and once word got out that we were printing masks that were more protective than just the simple paper surgical masks, then everybody and their brothers sort of found us to help supply them—from nursing homes to long-term care facilities to outpatient clinics—to fill that gap.

This is a community of makers. Flint, Michigan was the birthplace of General Motors, and so we have a maker space here called Factory Two. And so I enlisted their help to continue to make the masks and distribute the masks from their facility. So now there's an online order form available and pick up opportunities every day for people that need them.

The makers were here, the space was here, and so engaging the maker's space to make PPE was just one more step on a road that we were already on.

**Unger:** Dr. Mukkamala and Dr. Aksel, your efforts are so inspiring. Thank you so much for sharing your stories and thank you to all the physicians who are going the extra mile in this unprecedented time.

That's it for today's COVID-19 update. We'll be back on Tuesday with another segment.

In the meantime, for resources on COVID-19, go to the AMA's COVID-19 resource center at ama-assn.org/covid-19. Thanks for being with us.

**Disclaimer:** The viewpoints expressed in this video are those of the participants and/or do not necessarily reflect the views and policies of the AMA.