

CONVERSATIONS WITH MIKE MILKEN



John Mazziotta

Vice Chancellor, UCLA Health Sciences;
CEO, UCLA Health

May 20, 2020

Mike Milken: John, thank you for joining me.

John Mazziotta: My pleasure.

My family and our foundations have been involved with the UCLA healthcare system and research for almost 50 years. I'm not sure our listeners around the world are as familiar. John, could you give us an overview of the system?

Happy to do that. UCLA Health and the David Geffen School of Medicine are part of the UCLA campus, which is in northwestern Los Angeles. There are four health science schools on the campus: schools of medicine, nursing, dentistry and public health. And then a health system which includes four hospitals: the Ronald Reagan UCLA Medical Center, the Resnick Neuropsychiatric Hospital, the Mattel Children's Hospital, and the UCLA Santa Monica Hospital at a separate campus. And then we have just under 200 ambulatory clinics and imaging and surgery centers throughout Southern California. There's about 3,300 faculty physicians, 20,000 staff, and a large number of graduate students, medical students, and residents that work in the program.

John, tell us what role UCLA has played in the COVID response.

We prepare and train for a wide variety of situations, from natural disasters like earthquakes and fires to plane crashes and epidemics or even pandemics. We also, in those exercises, develop systems that allow for surges – a sudden influx of large numbers of patients. Typical of these kinds of plans are the fact that they are mass-casualty events.

They're maximum at the beginning and then they taper off. This is the reverse. So this is like a mass casualty event that evolves in slow motion in the other direction and keeps getting worse until it peaks, and it was harder to plan for. Nevertheless, when we

got the mandate to reduce the census in the hospitals and stop doing everything but emergent procedures, we did that. And we started to plan to add beds and add ICU beds. The Ronald Reagan UCLA Medical Center opened in 2008 and it was designed so that every room in the hospital could be converted to an ICU room. So that provides us with a kind of flexibility that most large hospitals don't necessarily have.

“One day, for the first time in my 39 years, there were no patients in the emergency department. It was a Sunday morning. Never seen that in my life. And it's because the patients are afraid to come in.”

As you've pointed out, at the Ronald Reagan hospital not only can every room be converted into an ICU, but to my knowledge you can take up to two patients in that. So your capacity for patients was significant. Let's talk a little bit about what we're seeing around the country and what we might call “collateral damage.” In discussions with Steve Rosenberg – head of surgery at the NCI for the last 45 years and our very first Milken Family young investigator a long time ago – he pointed out that only 10% to 15% of the NCI hospital, which usually takes care of end-stage cancer patients, was occupied. Their research laboratories closed down. In talking to Nobel Prize winner, Jim Alison, the same thing was occurring at MD Anderson. We know, John, and we've heard from others that opioid issuance has increased as elective surgery – for shoulders, knees, hips – was delayed and doctors issued more pain medicine for them while they delay those surgeries. And lastly, we know more than a \$100 billion was lost collectively by the hospital and medical systems in the country where there was not a surge similar to New York or New Jersey or Detroit. Since you are responsible for research, the medical school, and coordination of the health sciences group, what do you see as the collateral damage, and is it reversible?

On the patient care front, there's no doubt our hospitals, all of them were at or above a hundred percent every day before anyone had ever even heard of COVID-19. Those people were there getting essential care, and that need didn't go away with the mandate to empty the hospital out and stop doing procedures. My estimate is that we are

currently about 6,300 procedures behind. So that's an enormous backlog. The faculty and the other members of the leadership have made a commitment to catch up by working long days, weekends – every moment possible – to try to help as many of those people as we can. So that's the clinical piece.

We also saw that the census in the emergency departments dropped. One day, for the first time in my 39 years, there were no patients in the emergency department. It was a Sunday morning. Never seen that in my life. And it's because the patients are afraid to come in. And so heart attacks, strokes, mental illness – these people were not coming in. And typically we know the numbers and we know the incidents of these different illnesses and what proportion of them we see. But during these last two months we didn't see any of them. So all of that illness is out there in the community.

I think there are a lot of deaths that are indirectly going to be associated with COVID-19 even though the patients never had the infection. It's because they were afraid to come in.

“In January of this year, we provided 958 telemedicine visits. ... We went to 80,000 telemedicine visits in April.”

Let me turn to research. We have shut down almost all of our research activities at the beginning of March. We've come back to do essential research activities, particularly longitudinal clinical trials and other things where an interruption would basically invalidate the process that had been initiated.

I would then turn to education. We've quickly converted to remote education across the four health science schools for the didactic years, if you will, the first couple of years where training does not involve being in a clinical setting. But we have had a big impact on the clinical training because it's a team sport. Everything is done as a team, at least as a partnership. And that's exactly the opposite of what's required in a pandemic, to have social distancing and separation. We're having to sort through and figure out how do we still have teams but do it in a way where people are not sitting shoulder-to-shoulder or rounding in large groups in hospitals. We haven't figured that out yet.

The final topic that you mentioned was the financial one. In most academic medical centers in the United States, it's the patients who have commercial health insurance that bring in the revenue that cover all the losses from other categories of patients. So much of that comes from procedure-based operations, and when you stop doing that, the revenue drops precipitously but the expenses continue. Our estimate in the month of April is a loss of probably just under \$200 million between revenue to the hospitals and clinics as well as lost revenue to the faculty physicians who would bill patients and receive reimbursement for their care. This produces a very financially unstable situation. So that's the collateral damage.

Your comment about emergency rooms – as unfortunately being a parent and a grandparent of kids with seizures – it's just hard to even imagine an emergency room that isn't crowded. It is very reflective of where the world is. You discussed tele-education. What has happened in telemedicine visits?

In January of this year, we provided 958 telemedicine visits. Not a lot, considering we see 2.5 million individual patient visits a year. However, we went to 80,000 telemedicine visits in April. The other thing that's worth noting is that the in-person no-show rate is just under 8%. The telehealth no-show rate is 0.4%. So people want to have their care – they show up for their telehealth visit – as long as they don't have to physically come into the medical environment where they're afraid they will be infected. I can tell you, just talking to individual patients who have had trauma or other things and didn't come in where I had to actually convince them that it was safe to come in, they tolerated a lot of suffering and disability at home rather than come in and have what would be relatively simple care. It's quite profound the fear and the psychological components of this pandemic.

We have really focused in our Center for Public Health on the potential mental health problems to come. I know this is a very large area for UCLA, and we've seen in some places around the country as much as 80% of mental health visits canceled. As a leader in this area at UCLA, what are you seeing?

I'm quite concerned about this – not only today, but what will come in the future. As I mentioned earlier, we saw that our busy emergency departments, which typically had from three to as many as 10 mental health boarders waiting for beds at either our hospitals or other hospitals in the city, that those patients simply disappeared and we know their illnesses didn't disappear. We've also seen a drop in inpatient psychiatry because patients simply wouldn't come in. That produces a whole another situation which is what do you do when you have a patient with a behavioral illness who also has COVID-19?

We have a sister medical school in China just outside of Shanghai. And I asked them specifically about psychiatric care and they said what they did in Wuhan was to take one psychiatric hospital and make it a COVID-19 psychiatric hospital and to test every patient before they were admitted to any psychiatric hospital and sort them so that the infected patients went to this designated hospital and the others went to the remaining psychiatric hospitals in the region. In the U.S., and I assume in general, but certainly in Los Angeles, it would be very difficult to do that. There simply are not enough psychiatry beds. So this produces another very complicated set of problems to manage with regards to the mental illness.

John, because of your partnerships with leading medical care providers, institutional research, academic research centers around the world – and as you've pointed out, you have a sister academic medical center in China – did you compare treatment of patients? Was it helpful? Was that knowledge passed on? Is there an interaction continuing?

That's an excellent question. And we initially reached out to this sister medical school in Zhejiang, China – outside of Shanghai – because my thinking was why don't we learn from those who've been through it and understand what procedures they use to protect their health care workers, to better treat patients, et cetera. I think the most striking difference was their approach to quarantine and testing. They tested every person who came into a health setting. If someone tested positive, they were put on quarantine. But it wasn't an honor system quarantine like we have in this country. They were put in a government facility. It might've been a hotel that was commandeered by the government, but they were put in a government facility that was patrolled by guards. People stayed in their rooms, food was delivered, and it was absolute.

They also tested their healthcare workers rigorously and would not allow them back into the workforce until they had three consecutive days of negative PCR testing for virus and had completed a 14-day quarantine. They monitored everybody coming in and out of the buildings, and they set up these separate hospitals for infected patients versus non-infected. We also learned about their experience with certain drugs like remdesivir, which they felt was helpful; convalescent serum, which they felt was helpful. Of course, all of these were anecdotal comments, and so we took them at the value that we could and understood what they tried and how it worked.

The Chinese were very critical of what was going on in Europe. I asked them about that. They said that public awareness was not at the degree it was in Asia, and that meetings were not canceled quickly enough, people weren't wearing masks, and that they didn't feel that the healthcare workers were following rules similar to the ones that I described for the Chinese outbreak. We didn't have the opportunity to do that with European colleagues because it was almost synchronous outbreaks in Asia and the United States. But certainly the Italian experience was ominous.

“I think there are a lot of deaths that are indirectly going to be associated with COVID-19 even though the patients never had the infection. It's because they were afraid to come in”

So John, UCLA is one of the major bioscience research centers in the world. My first visits to UCLA and focus in the early '70s were first centered on cancer and cancer research. I remember sitting in the waiting room with my father in the early part of the '70s, in Don Morton's waiting room, and interacting with those melanoma patients. And

then the growth in our active involvement in building the pediatric neurology efforts in breakthrough neurosurgery where you could do surgery for children who were having uncontrollable seizures early in life and they might lead normal lives later. This eventually – this appreciation for the community – led us to what was then called CAP Cure (which later turned into the Prostate Cancer Foundation and FasterCures) to have a session – maybe one of the most noteworthy sessions I've ever been in – where we reached out to UCLA and asked them to identify the 10 leading bioscience experts. They didn't even have to be working in cancer at the time. We would hold our board meeting at UCLA, and we wanted to understand creative, innovative approaches. This meeting brought Charles Sawyers, Owen Witte, Matt Reddick, Arie Beldegrun, and many others, which really changed the direction of some of our health foundations but also changed the direction of science, with many of the breakthrough therapies coming out of the UCLA complex. I know the philanthropic and corporate partners that you've had extend to a wide group. How did you turn to them during this crisis and how are you continuing to turn to them? Were they helpful? What were the key elements you were looking for from them?

Having been here at UCLA for 39 years, one builds up quite a bit of social capital in terms of relationships. Certainly that's how you and I met and it's been a wonderful partnership both in terms of knowledge exchange but also the support of you and your wife and family and your foundations for important research and care delivery. In a time

“We went from using – on a typical day – about 4,000 surgical or procedural masks to 36,000, so you don't really prepare for something of that level. I had to call upon philanthropic relationships of individuals who had businesses that functioned in Asia and who could actually vet some of these manufacturers and vendors”

of a crisis, it's very important to have people that you can call upon to help. Early on in this pandemic, I heard spontaneously from philanthropists that had been associated with us for years or decades – and just open-ended, how can we help?

There were quite a few things where I specifically reached out to individuals because I needed help. We went from using – on a typical day – about 4,000 surgical or procedural masks to 36,000, so you don't really prepare for something of that level. I had to call upon philanthropic relationships of individuals who had businesses that functioned in Asia and

who could actually vet some of these manufacturers and vendors. And I also will say that many of the corporate CEOs spontaneously called up and said, how can we help? We have PPE, we use it in manufacturing, we can send it to you. And they did over and over again. There was no one who wasn't willing to talk and help.

I want to discuss something that UCLA is about to launch that might change the course of history in this crisis, and that is this partnership that we had set up between the Prostate Cancer Foundation, UCLA and the Westwood VA. As you know, one of our young scientists in Italy did a study showing that (1) men have a substantially higher death rate than women from this virus in Italy and (2) that men who had been treated for prostate cancer had an 80%-plus lower death rate from drugs that have been used historically and one that I have been on for 27 years to reduce testosterone. And it's quite possible that one of the proteins created, looks like it needs access to testosterone in men to enter the lung cell. And the very first clinical trials being launched at the Westwood VA in Los Angeles and managed by Matt Rettig and UCLA. And as we think about your experience in COVID-19 and your interaction over the months here, do you see it fundamentally changing the way you conduct medical research, education, patient care, in the future, John?

I'm actually extremely optimistic about how we come out of this for exactly the reasons you mentioned. These networks of individuals, whether they're research or patient care delivery or education, have only gotten stronger because of this event. Our collaborations with our competitors in this city have gotten better as a result of this event. We worked together to prepare for a surge. We work together to share PPE. And we're all going to have to work together to find our way out of the financial crisis that this will leave. And so I think that devastating as this has been and the unbelievable toll of human lives and suffering for families, we'll come out of this different, very different. I don't think there's anything in medicine that will look the same after the pandemic as it did before. Everything from how things are financed, how we deliver care, to how we do research. Your example of the hormonal effect of the viral penetration in men – those are the kinds of observations that everybody needs to be paying attention to right now. Where is there an aberrant? Where is there an outlier? And why? Is there any commonality to that? Is that a clue? Something that can be used as an intervention? Those are the observations that should come from the data. The data needs to all be pooled. Everyone needs to have access to it so that bright people can pull out these observations and see if there's some basis for them and capitalize on that.

“Typical of [our disaster preparedness] plans are the fact that they are mass-casualty events. They're maximum at the beginning and then they taper off. ... This is like a mass casualty event that evolves in slow motion in the other direction and keeps getting worse until it peaks, and it was harder to plan for.”

But I think we come out of this different, completely different. I think that in the United States, the American public will see that healthcare is a very fragmented activity. It's

highly competitive. It isn't sewn together in a network that can flex and adjust and that we're going to need the kind of governmental input at every level – from the federal to the state to the county to the very local – in order to have an integrated system that reacts appropriately and solves problems like supply chain and managing surges and all the things that people have come to understand as a result of this pandemic. But tomorrow will be different from anything we knew before. I've told that to the faculty, I've told that to the staff, and we have to figure out a way to do the new world of medicine more efficiently, more effectively and have the end result be better for patients, trainees and scientists.

John, I want to thank you for the leadership you've provided in this area, not just to UCLA and its systems and its students and its patients and its faculty and its researchers, but to others around the world. We look forward under your leadership to UCLA being an important part of the bioscience community for many years to come. Thank you for joining me today.

Thank you, Mike. It's been my pleasure. And thank you for your leadership in all aspects of science and medicine, including your response to the COVID-19 pandemic.
