ASPR TRACIE Webinar Transcript

Healthcare Operations During the COVID-19 Pandemic Speaker Series- SUNY Downstate Health Sciences University/ University Hospital of Brooklyn October 2020

PowerPoint Presentation: <u>https://files.asprtracie.hhs.gov/documents/aspr-tracie-healthcare-operations-speaker-series-suny-downstate-brooklyn.pdf</u>

Recording: https://attendee.gotowebinar.com/recording/8794008758297765391

0:01

Welcome to the ASPR TRACIE Speaker series, Healthcare Operations During the COVID-19 Pandemic.

0:07

This collection of brief presentations highlights emerging practices among healthcare facilities across the country facing operational, logistical, and clinical adjustments due to the surge of COVID-19 patients.

0:20

For background on this issue, please watch the introduction to this series by Dr. John Hick, linked, along with the other speaker's presentations on the first slide of this presentation. 0:31

In this video, we will hear from Dr. Bonnie Arquilla, Dr. Pia Daniel, and Patricia Roblin, part of the Emergency Preparedness Leadership Team from SUNY Downstate Health Sciences University, and University Hospital of Brooklyn, discussing their experience, managing COVID-19. Dr. Daniel?

0:51

Thank you.

0:53

From April through June, SUNY was one of the only COVID-19 designated hospitals in Brooklyn.

1:00

And through this, we had to implement some pretty drastic changes to address the need. 1:05

Next slide.

1:10

Starting in January of 2020, SUNY Downstate started having weekly meetings with our emergency preparedness group, meeting with all departments, updating our pandemic plans and looking at our PPE supply.

1:22

Next slide.

1:25

Moving into February, as New York City got its first COVID-19 case, SUNY Downstate continued updating our pandemic plans and started to engage with our city and state partners. 1:37

Next slide.

1:40

In March, New York City became the epicenter of COVID-19 and SUNY Downstate got its first COVID case. And so we switched from our preparedness activities to response activities.

1:51

Leadership was taken over by SUNY Downstate Coronavirus Task Force.

1:56

We began twice daily huddles with our staff to update them and train them.

2:01

We began reviewing our PPE and noticed that our burn rates were going to lead to some expected shortages in the upcoming week.

2:09

We started moving our space around to make room for a more inpatient COVID unit.

2:15 Next slide.

2:18

In April, SUNY peaked at its inpatient cases.

2:20

We had 197 out of our 220 adult beds that were COVID positive.

2:27

We started to notice some significant staff shortages due to the fact that all of our units were at capacity and we had staff illness and absenteeism.

2:36

Our PPE

2:37

supplies were very short and we had strict conservation strategies. We were dependent on weekly deliveries and donations from our community, and we had to expand our ICU units twice and our morgue capacity twice. And we still had COVID patients that were boarding across the facility.

2:59

Next slide.

3:03

Then as the recovery phase, we started to reopen services that we had previously closed. And importantly, we had over 500 inpatient COVID patients.

3:14

that needed to follow up with their outpatient clinics.

3:17

And so, we created a COVID transition clinic to help safely do this.

3:22

Next slide.

3:25

This graph looks at the peak of COVID cases in New York City, which is the blue curve, compared to the peak of COVID cases in our facility, the red curve.

3:33

And we noticed that we had about a two-week delay from the rest of the city.

3:37

Next slide.

3:40

We also notice a similar delay internally when we looked at the peak of our ER COVID patients, which is the blue curve, compared to the peak of our inpatients for COVID positive, which is the orange curve.

3:53

Next slide.

3:56

We also really increased our telemedicine utilization to continue to help our patients. 4:02

4:02 Next slide.

4:04

And, finally, despite increasing our ICU capacity, which can be seen on the orange line where we increase the unit twice, we still were unable to keep up with our ventilated ICU patients, which can be seen on the blue line.

4:19

Next slide.

4:21

I'm now going to turn it over to Patricia Roblin, who's going discuss the strength of our response. $4{:}26$

Yes.

4:27

So as far as management, the thing about management was all about communication. $4{:}34$

The creation of the COVID Task Force early on, which coordinated a response to all staff members was very, very important. It was also important for us to have relationships with our outside partners, both city and state, and to create situational awareness, bidirectionally. And also, the establishment, again, with communication with our staff COVID Call Center and our Family Call Center, which was a source of reliable information for both families and for our staff falling into those numbers. And we had our emergency operations plans that were easily accessible, and we reviewed them and updated them as needed.

5:21

Next slide, please.

5:25

Staffing. Our staff were under immense pressure at this time and we created critical care teams and even expanded our housekeeping teams for patient turnover time. 5:41

Next slide, please.

5:45

The major strengths for our staff were really the redeployment of our staff and those staff taking alternate care roles. We posted our medical students in non-clinical areas that helped immensely. Also, a restructuring of our residents.

6:04

Specifically, this highlights our surgical team. Our surgical teams were routinely brought to the floors to do proning of patients and also as IV teams, and also were sent to the ED and other medical care floors to help with critical care patients. Next slide, please.

Space is always a premium at surge events, and this was absolutely a surge event. And we needed to increase our ICU care areas, and we did this stepwise and that was very, very important and I think that worked well.

6:50

We also repurposed our clinics, which was adjacent to the ED that allowed our ED to function much more efficiently taking care of critical care patients versus our fast track area managed by other physicians that could fast track these patients and get them out of the hospital. 7:13

Next slide please.

7:17

And as far as PPE and supplies, we never really ran out of PPE

7:22

because we had a really good repurposing of these PPE.

7:32

And also, we established with our Emergency Preparedness Liaison, a communication method with the stockpiles, both the city and the state,

7:46

and also with SUNY Central.

7:48

We also received a tremendous amount of outside donations that helped us.

7:54

And we disseminated that to all staff.

7:58

Next slide please, and I'm going to turn it over to Dr. Arquilla for the next frame for any pertinent information. Thank you.

8:04

So, it was not all butterflies and tulips. There were a lot of issues that as we did an interim report and an interim action,

8:15

we were looking at areas of improvement. And this is always in the webinars, one of the areas that I'm most interested in. So, next slide please.

8:24

We talked about the fact that we were very happy with our communications and we feel that their strength, there was also at the same time a weakness, and we really need to work more on improving that. Establishing a pandemic communications program, pre-approved messaging and scripts for various stakeholders, make sure that not only did we get that to staff and patients, but to supply chain and vendors. And also making sure that New York State Department of Health messages and New York City Department of Health messages gets to our end user. Next slide. 8:58

We need a dashboard. We need to get this information out in real time. 9:04

We're giving reports still to this day to as many as seven different governmental institutions, and there are all in different forms. They have to be done, they're taking a tremendous amount of time and energy, and we really need a COVID dashboard. Things like admissions, length of stay, discharges, mortality outcomes. Something that can be pushed out immediately to our stakeholders, our community, and to our governmental organizations. 9:32

The measures of throughput is also what happens with our volume and how we can make that move forward. And then also ICU measures for utilization as well. Next slide. 9:46

Increasing our supplies of PPE is a key aspect of moving forward. We need to have these prepurchased. We need to establish contracts well in advance, and we need to get off of procurement where other people in other parts of the country decide how much equipment we get and not how much we need.

10:04

We need to establish a uniform mask policy, and make sure that all the different kinds of masks that we have are well tested so we can make sure that our staff is safe.

10:13

Governor Cuomo's order to have a 90-day supply in house by September, we didn't meet that with a great deal of energy, but it was, I believe, a really excellent way to go. And it's also a really good thing for people like us who are in the hospital. If we get these Executive Orders, then we can go to our administration and say, "Here it is, an Executive Order." Not just, "Here it is, a really good idea because I've been doing disaster management since the 1993 World Trade Center bombing and you should really listen." But this is an area that I really think is an area for improvement that we could use some help with.

10:48

Next slide.

10:52

HR is probably, if there was any area that I'd say, "OK, what's the biggest link?" Our HR was our biggest link.

11:00

Both their policies, identifying what is a critical staff and what does that mean, monitoring absenteeism and finding out what the absenteeism is about. Is this due to the fact that the schools are closed? Is this due to the fact that you're sick? Is this due to the fact that you're doing elder care? Or is this due to the fact that you just don't want to come in or your overworked? 11:20

Really important things that HR needs to track. Staff redeployment, organizing so that we have enough IDs and credentialing is a turnkey kind of event.

Also, really important. Expediting the onboard of volunteers. We are a big medical center, we are a big hospital, it has been around for a long time. And we have lots of ex-residents who are now physicians all over the country who were calling wanting to volunteer, but we had a very difficult time getting them expedited to onboard. And then recruitment of staff shortages in key areas like respiratory therapy.

11:55

Next slide.

11:59

Also, cross training, and this is another aspect of HR. Are there people that although their job title at Downstate is a nurse, but they are also a respiratory therapist, do we need to cross train people? One of the areas that worked really well, was that we made sure that our house staff, our graduate medical education, with the help of our DIO, our Designated Institutional Officer, was that although the their vacations where canceled, their electives were canceled, they still maintained their residency and doing things that were appropriate for the residency because we've looked at this cross training. So that worked well, but we need to do more, and we need to improve on that.

12:38

We also need to make better communications with employees, so they understand that travel to high-risk regions, what it means to them coming back. They don't just get to come right back into the institution. They need to be tested, they need to be quarantined, and various areas like that. This is all HR policies that we really need to address moving forward. Next slide. 13:02

So, staff training and education, here's another area. Now, this was an incredibly unique virus, it changed very quickly. What we thought about the virus in February was very different than when

we thought about the virus in May. And we really needed to look at interdisciplinary training and leadership in this and making sure that we have people up to date very quickly. We knew that proning really worked, and we needed to get a proning team working quickly, and we need to have training with that. Also, the expansion of a team dedicated to training and really looking at them as well. Next.

13:38

Our morgue worked really well, but there's many areas of improvement for this. 13:44

First off, the trailers need to be mapped out and identified more efficiently. Lifting the bodies was an issue. But we work in a poor area and some families had a very difficult time picking up their decedents. They were either essential workers and couldn't leave their job or they simply didn't have the capacity to have the funeral home pick them up.

14:06

At the same time, in Brooklyn, for about 15 days, the funeral homes were completely full. They were not taking new bodies in to prepare for burial. And so that was an area that we really need to look at for improvement. Also, pre-identified staff expanded to do death certificates. The COVID death certificate in New York State is pretty complicated, and we really need to have people who are very good at filling those out so we can handle them. We are moving forward to identify some additional space to do some cooling devices and things like that, but unfortunately, we had a very high death rate. And so, as a result of that, we really needed to handle this. It's also psychodynamically really important for our community, and for our staff to know that our decedents are well cared for with humanity and dignity, and so we really need to have a more unified morgue implementation. Next. 15:06

ICU and Ventilation Surge. We did surge up. We went from about 26 beds to over 40 and we need to really look at our respiratory surge. We are an old building, and we need to have better high flow capabilities. And we need to know where we can expand well, but we need to be able to stretch out and then compress very easily.

15:29

Next slide.

15:32

With that, I want to turn it over to our moderator for any additional questions. I thank you for this invitation.

15:41

Thank you so much. I do have just a couple of follow up questions. You talked about redeploying medical students and residents to help augment care, but can you discuss how you managed resident redeployment to avoid loss of resident training time to allow for on time graduation?

15:59

Yes.

16:01

Our DIO, Dr. Smith, worked very hard. She contacted GME, she rewrote their elective or rewrote their work, she had it approved from GME, and the excellent example of this is anesthesia.

16:16

So, the anesthesia department was only doing emergent cases so their caseload was drastically reduced and we took the first year anesthesia residents and moved them into the respiratory therapy and they were integrated into the respiratory therapy department. They learned about

ventilator management, they learned about uses of ventilators, everything about that, and made them much more prepared, and they really didn't lose any time. 16:42

The second years and third years within that division went into the intensive care units, so the same sort of work they did, that was their critical care time. Another service with a good example, which was really affected was surgery. So surgery, they were only doing absolutely emergent cases as well, but we developed a surgical procedures team that went all over the institution doing all the necessary procedures that need to happen that many times an intensivist would do,

17:13

but at this point, we left it to that team. So, they put in Shiley catheters for dialysis, they did tracheotomies in the bedside in the emergency department and in the intensive care units, they handled all kinds of procedures.

17:28

The other silver lining on this that I didn't know what's going to happen when we did this 17:33

was it decreased PPE use because they were doing invasive procedures, and so there was a team that did that.

17:41

The anesthesia group also did a proning team and in fact published a paper on the effectiveness of that. So those are a few examples of making sure that our residents, although they were doing service and it is a disaster, that they were also having their educational activities protected. 18:01

Excellent, thank you. Can you also elaborate on how you fostered a team response from employees at all levels? I know you talked about communication and wanting to improve communication but how did you foster that that team?

18:14

I'm going to turn it over to Pia here.

18:17

Yeah, so, I think that one of the most, the biggest success it's for us in communication with staff at all levels is establishing a sort of a transparent communication, and understanding that really, all departments, the clinical and non-clinical departments, they needed to be involved. 18:35

We did daily huddles once in the morning, once in the afternoon. And we were very transparent about the cases, about our staff to patient ratios, about our PPE supply, burn rates, our days left, and about the different changes that we're making, and processes and policies, how housekeeping was turning over rooms. And the idea that, by being transparent with this, we were really engaging staff at all levels. Not just the physicians, not just the administrators, but at all levels in every department so they understand that when we come out with a new policy, this is the data behind that policy, and this is how we can engage staff at every level to want to follow them. 19:14

Great, thank you.

19:16

And finally, can you address how you managed, and you discussed, the reporting requirements. Can you address how you manage the challenge of reporting? 19:27 Yes. Hi, it's Pat. 19:28

6

So, as far as reporting, this was a challenge, especially during COVID, during the height of the response, and still continues to be problematic.

19:41

At one point, we were reporting into seven different systems, and none of these systems actually spoke to one another. And, again, what Dr. Arquilla 19:50

alluded to, having a dashboard that would receive all of this information,

19:56

and into systems that actually would accept those type of answers that they were requiring every day, which were bed numbers and testing numbers, medication numbers, would be very, very good moving forward.

20:13

Again, it still remains problematic. We are asked on a daily basis to report into the city, the state, and federal systems, And, again, they don't speak to one another. 20:28

Thank you for that. And really, thank you all very much for speaking with us today. That concludes this presentation. Feel free to reach out to ASPR TRACIE with any questions for any of our speakers in this series.