

Speaker 1:

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Dr. Comilla Sasson:

Thank you so much again for joining me, Dr. Rea and Dr. Sayre. Just to start, can you guys remind us of what your roles are both in King County and Seattle?

Dr. Thomas Rea:

So I'll start. I'm the medical program director for a King County EMS agencies.

Dr. Michael Sayre:

And hi, it's Michael Sayre, and I'm the EMS medical doctor for the city of Seattle.

Dr. Comilla Sasson:

Excellent. Well thank you guys again so much for joining us. I know we were so interested to hear about what was going on in Washington State. Can you tell us a little bit about how things have evolved in the last week?

Dr. Michael Sayre:

I think like many parts of the United States, people here are continuing their preparations for what we anticipate to be a surge of cases. On the EMS part of it, we have continued to build our policies and procedures to keep the workforce safe and try our best to avoid exposures when taking care of patients. However, one thing that's starting to occur is our workers are getting exposed off duty or potentially on duty maybe to some of their co-workers. So there's these other means of spread that could impact our workforce and its ability to serve that need. So that's a challenge and I think we're continuing to work through that and we're expanding our first responder testing sites. So Tom knows exactly for sure, but I think tomorrow possibly, or today, our second first responder COVID-19 testing site will go live in a sort of pilot phase.

Dr. Thomas Rea:

Yeah, I agree Michael. So, iterative approach in which we try to understand all the circumstances and expand programs and policy to make sure we can manage those different circumstances that come every day. And I agree, one of the important approaches or strategies is to make sure you have a healthy workforce. And so this idea that first responders, and I use that term in a large way, police law enforcement, first response, fire, EMS, even dispatch, all these folks need to be healthy when they come to work. And so part of that is to understand when they're sick, whether they have a COVID infection or whether they have some other infection. So Seattle fire department certainly took the lead and developed this first response drive in testing facility, prioritized health care workers and specifically first responders. And so King County's following suit in standing up another site today. And the goal is when someone doesn't feel well, we want to have more information about that so that they can personally be protected, understand how they need to relate to their family and also understand when and how they can come back to work. And so I think that is a great service that they'd be able to test folks in relatively

rapid fashion, give them that information and let them then be able to manage that illness in a way that's best for them and best for their families as well as best for the EMS, or the first response group.

Dr. Comilla Sasson:

And so how quickly are you able to provide that very important information back to your first responders?

Dr. Michael Sayre:

So, we get the information very fast now. So these samples all go to the University of Washington virology lab. They're typically resulting in 12 to 18 hours now.

Dr. Comilla Sasson:

So that means that if somebody has a, let's say tests negative for coronavirus, then they can be allowed back to working? Is that right?

Dr. Michael Sayre:

Well that's kind of the idea, as long as their illness is better. So we certainly don't want to infect the workforce with other viruses either, because we'd just end up testing more people unnecessarily, but totally provides the information to allow them to come back to work much more quickly instead of having to stay off for 72 hours because maybe they have COVID disease and we don't know. Now they're able to come back after 24 hours of getting better.

Dr. Comilla Sasson:

And you guys have also made some changes in the way in which both you're doing dispatch as well as how you're responding to calls also, right?

Dr. Michael Sayre:

We have, and that also is, as Tom Rea likes to say, been an iterative approach. So we've gone through, I've lost track of how many changes, four-ish, I think, versions of our dispatch algorithms. And currently what's happening is if a caller has a complaint related to an infectious type disease, so they're complaining of fever or cough, those cases all get flagged as ones that we want our responders to wear personal protective equipment, and a message is sent with the dispatch as in our system, we call this PPE advised. But then if a caller calls and says they're 65 and they're having crushing substernal chest pain, we obviously want to get a response going quickly. So we go ahead and send the response case it's straight forward ST-Elevation MI type patient, but then keep the caller on the phone to ask additional screening questions about the possibility that they may be having COVID-like illness. So they get subsequent questions about fever, cough and so on. And then if those are positive, then a message is added later, presumably while the crew is already en-route to tell them that this also may be a case of PPE advised. Because we've had cases, the chief complaint was chest pain, and it turned out to be viral pneumonia causing the chest pain.

Dr. Comilla Sasson:

And you guys also started a COVID program as well to help both with exposure risk to your first responders, then also to help with the PPE shortage as well?

Dr. Thomas Rea:

Comilla, I'll start and Michael can finish. First, just to follow about the dispatch. Michael's absolutely correct and I think a couple of his comments are quite telling, which is in the EMS pre-hospital world, callers do not always note that they have fever or shortness of breath or quite frankly, COVID does not present classically as the conventional textbook would define it. And so I think this additional line of questioning from dispatch has been quite helpful. I think the other thing that sort of the bigger discussion item here is you really need to work with your dispatch centers. They're critical here and they're super important partners. And so opening that line of communication is really, really useful.

Dr. Thomas Rea:

On the second item about how EMS engages with these, we indeed have tried to refine our approach and use this idea of a Scout EMT or a Scout paramedic or potentially paramedics that would go in one or two, instead of the team of three to seven, and with their PPE to understand whether this really represents a risk positive patient or whether it's a risk negative patient, so that subsequent folks can be informed about the need for PPE when caring for the patient. And so, it really has been a way to spare PPE when the whole crew arrives and we have to be smart about it. We need to think about the time sensitivity of a call, how stable the patient is, make this operationally useful and when we have to just don PPE as a collective and go and treat the patient, I.e a cardiac arrest patient. Michael, you have something to add to that, you think?

Dr. Michael Sayre:

Idea of the Scout is that we're minimizing PPE consumption. Simple solution, if PPE was unlimited as everybody just wears full PPE on every call. Unfortunately PPE is limited and we're trying to be judicious in the use. If we only have one or two of our responding crew members don PPE, the rest of the team can stay well away and not have to take any precautions and also not run the risk of getting any exposure. So, we're hopefully minimizing the risk to the team at the same time reducing our PPE consumption.

Dr. Comilla Sasson:

And have you had to do any, or seen any changes in your transport as patients as well to the hospital?

Dr. Michael Sayre:

So Michael here. At present, I have not really changed transport to hospital. Currently hospitals all have capacity although we are worried that that won't be true next week. So for now, it's essentially business as usual that we did because this is a new diagnosis, had a new phone number for our first responder BLS crews to call and talk to a physician. One of us takes those calls and there aren't very many a day, a handful, and help the crew decide is this someone they could safely leave at home, does this person need to go to the hospital? Our system has always allowed the BLS crews to decide that they don't have to take the patient to the hospital, engage in shared decision making with the patient around that. So this is not a completely new idea, but decision making around this particular disease is new. Tom may have more to add about it.

Dr. Thomas Rea:

Michael, you stated it succinctly and accurately. I have nothing to add.

Dr. Comilla Sasson:

You know, for those crews that are maybe new or are now finally starting to think about shared decision making and possibly non-transportive patients, do you have any tips for them if they're getting this program started right now?

Dr. Thomas Rea:

I think it's important that you give your crews objective guidelines for how to inform their decision, their input into the decision. So, things like vital signs and age and comorbidity, that type of information really does affect the course for a patient and whether that person will need higher levels of care. And so we've, as Michael says, specifically addressed this circumstance and provided additional guidelines with these explicit type of objective measures, then understand who can stay home safely and who needs to go seek additional evaluation and care at the hospital.

Dr. Comilla Sasson:

And are those resources available on EMS online as well if folks are interested in seeing how you all are doing it?

Dr. Thomas Rea:

Sure. I think that algorithm for transport decisions is posted both the EMS online and also to the King County Fire Chiefs website. So the King County Fire Chiefs have a website for which they're posting this information and there is actually, in that algorithm, there's a box that really does spell out these criteria for who can safely stay at home and who might need additional evaluation and if they have questions, how to get those questions answered in a timely way.

Dr. Michael Sayre:

Another resource, Comilla, is a nice algorithm that one of our EMS fellows developed, Dr. Betty Yang, along with a lot of other stakeholders on when it's okay to return to work. And this went through quite a bit of editing and others may find that helpful as well. It tries to cover the variety of different potential exposure circumstances. I'm sure there's some that we didn't think about, but for the vast majority of the potential exposures, I think we have a pretty robust return to work algorithm that other agencies might find useful.

Dr. Thomas Rea:

And just so people have context, Comilla, that algorithm again, the Yang was the the author, but it really did involve the fire chiefs infectious disease experts from the region in EMS leadership, and that the fire unions were involved in reviewing this and understanding. And so, it really was a collective process.

Dr. Comilla Sasson:

And it sounds like conservation of PPE, making sure that you can get your workforce both healthy and back to work, had been probably the biggest challenges this week. Any other lessons that you've learned over this last, very long the week, I'm sure, for all of you guys?

Dr. Michael Sayre:

So I'd say the next challenge is, so the increasing number of positive tests results that then have to be screened to see if they match any EMS records. And think automated some of that workflow, but it's still got a fair amount of manual effort that has to go into reviewing the particular narratives and deciding if

someone was actually exposed potentially to COVID-19 or they're very low risk for exposure. So, we're continuing to work through that problem and I hope other agencies have also fostered this good connection with their public health so they are getting notified of cases that are positive so they can take a look and see if any of their workforce may have been exposed.

Dr. Thomas Rea:

Flip side of that, it's incredibly important that EMS document their PPE use so that they will inevitably encounter [inaudible 00:12:51] have COVID infection and PPE is protective and just like it's designed to be, when used appropriately. And so it's important to understand if they do have this encounter, was PPE in place? And so to the extent that can be documented, it really does help the process and makes everyone more efficient about how they move forward when there has been one of these encounters.

Dr. Comilla Sasson:

What are your perspectives for the next week in some of the things that you are anticipating, will be your next challenges?

Dr. Thomas Rea:

I think, a couple of things. One thing I'll say is that every day I'm humbled by the curve ball that is, and we have to be nimble about how we move and respond. We want to have access and encourage testing in our workforce so that we can be efficient and safe. I think both of those are important concepts and so I think we want to, again, stand this up, what we're trying to do in King County, and to encourage folks who feel unwell to get tested so that we understand what the next steps are for them. So, I think keeping the workforce healthy and well by advocating best practices in terms of social distancing and hand hygiene and all those things, but also testing. I think that's an important activity in the next week to come. Michael.

Dr. Michael Sayre:

I agree, and I think from a planning point of view we're continuing to work on increasing our surge capacity as a system and getting better tools to understand which hospitals and EMS are under stress. So, hopefully some of those will become more visible and more real over the next week, while at the same time thinking about what could happen if it continues to get worse than we expected to. So, having some advanced planning for crisis standards of care so that we know, should we actually have to enter that realm and I sure hope we don't, that we've thought about it ahead of time.

Dr. Thomas Rea:

And again, Comilla, all of this is dependent on good links and communication with your public health department, with the hospital systems, individual hospitals with public, with law enforcement and EMS. You really need to develop a forum and appoint people who can be the connecting points for these different groups. Because there a lot of things moving in parallel and ideally they've helped one another and don't oppose one another. And so it's really important to have channels of communication up and running and I would really encourage other systems to make sure they've reached out to their politicians, their public health, their hospitals, and have that network in place as they move forward.

Dr. Comilla Sasson:

Well, thank you both so very much for joining us today and just providing these important lessons learned as well as your perspectives on what things are going to be coming in the next week or few

weeks. You guys are doing amazing work and again, we appreciate all of the time and effort that you're putting into helping to prepare the rest of the country as well, based on some of the hard lessons that you guys have learned. So thank you very much.

Dr. Michael Sayre:

Comilla, thank you for giving this forum and for the outreach you're doing and the American Heart Association's efforts are also quite appreciated.

Dr. Thomas Rea:

Indeed, thank you Comilla.

Speaker 1:

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