AMERICAN PUBLIC HEALTH ASSOCIATION
and
THE NATIONAL ACADEMY OF MEDICINE

RESPONDING TO COVID-19:
A SCIENCE-BASED APPROACH

WEBINAR #4: CRISIS STANDARDS OF CARE DURING COVID-19

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The webinar convened at 5 p.m. Eastern Daylight Time, Lawrence Gostin, JD, Moderator, presiding.
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Good afternoon or evening, depending on where you are. This is Dr. Nicole Lurie. I'm the former Assistant Secretary for Preparedness and Response at HHS and co-Chair of the Advisory Group for this webinar series. Alongside Dr. Carlos del Rio of Emory University. And we're both thrilled to be here.

Welcome to the 4th webinar on the COVID-19 Conversations series brought to you by the National Academy of Medicine and the American Public Health Association.

The purpose of this series is to explore the state of the science on COVID-19 and to inform policy makers, public health and health care professionals, scientists, business leaders and the public. More information on the series and recordings of past webinars are available at the covid19conversations.org website.

Today's webinar has been approved for 1.5 continuing education credits for CHES, CME
and CPH. None of the speakers has any relevant financial relationships to disclose.

Please note that if you want continuing education credit you should have registered with your first and last name. Everyone who wants credit must have their own registration.

All of the participants today will receive an email within a few days from cpd@confex.com with information about claiming those credits.

If you have questions or topics you would like to address today or on any future webinars, please enter them in a Q&A box or email us at apha@apha.org.

If you experience technical difficulties during the webinar, please enter your questions in the box. Please pay attention to the chat for announcements about how to troubleshoot. They'll probably come up early and often.

This webinar will be recorded and the
recording, transcript and slides will be available also on covid19conversations.org.

Before I introduce our moderator for today, Dr. Gostin, I thought I might just make a quick remark about how I spent my day. The day before yesterday.

In back-to-back calls, I was on a call first with all the hospitals in New York City who were talking about taking care of COVID patients in ICUs who had developed kidney failure.

And they were talking about the fact that they were out of dialysis machines, they were out of dialysis fluids and they didn't have enough nurses. And so they weren't able to offer dialysis for patients who were sick in their ICUs and who they felt were very likely to get better.

An hour later I was on a call with fellows at an Indian Reservation in South Dakota. And South Dakota, as you know, is an emerging hot spot for COVID.

These fellows were telling me that they're trying to think about how to implement
crisis standards of care but don't even have access to the basic laboratory tests to calculate any kind of scores with which to think about how to make any assessment about how one is likely to be.

And so, it is very minor for me that it's just a huge country. Crisis standards mean different things in different places. And I'm really looking forward to today's speakers to help guide us through how we might be thinking about this.

We are thrilled to have Professor Larry Gostin as our moderator. Professor Gostin is a Professor at Georgetown University and the Director of the O'Neill Institute for National and Global Health Law.

He's a member of the Advisory Group for this webinar series. And he served as chair of a major Institute of Medicine consensus report recommending the original framework for crisis standards of care.

Larry, over to you to frame today's
conversation. And thanks for all of your contributions.

MR. GOSTIN: Well, thank you, Nikki. And thank you for all of your contributions. And on behalf of the National Academy and the American Public Health Association, I'm really delighted to welcome you to today's webinar.

And our hats go off to these two leading organizations for helping to guide the country and educate the country at a moment when we're experiencing a once in a century event. A public health crisis that we know has no modern precedent.

As we speak, we understand all of us that there has been a deep concern in the United States of America about scarcity. The scarcity effects the health system and hospital functioning, which in turn places patients at risk because we don't have enough medical resources like diagnostic testing kits, ventilators and other necessary medical equipment to keep patients safe.
And of course, it's not just COVID patients because all of us may have had other health conditions. And that's being put on hold as well. And so you got an overload of the health system.

Beyond that, it turns out sadly that COVID-19 SARS-CoV-2 is highly contagious. And so health workers are at risk.

And keeping them safe with personal protective equipment is critically important. Not just to our mission but to our ethical values to be faithful to first responders.

And as you may have seen from the public discussion, the World Health Organization has been much in the spotlight and has really been thought of about how it's handled this pandemic.

But we do need the World Health Organization more than we've ever needed it in the past. And we need to come together.

Not just as a community of Americans, but it's a community of the world. Because this
is truly going to affect every community, every
country in the world. And so we need a robust
World Health Organization to lead us through it.

And if we think about what Dr. Lurie
talked about in terms of the high variability of
capacities here in the United States, think about
that high variability globally. There will be
many countries in the world that have very weak
health systems, fragile governments and
governance.

And as we speak, COVID-19 is posed to
run through some of the lower income countries at
most at-risk. In places like Sub-Saharan Africa,
the Middle East and the Indian subcontinent.

And we're going to have to make hard
choices there too about the crisis standards of
care. And we need the World Health Organization
to help set those standards, set those norms,
provide guidance, provide technical assistance.
And also, to help beef up health systems to deal
with the kinds of scarcity we see.

And so, this webinar could not be more
timely. On today's webinar we're going to examine crisis standards of care within the context of the developing and ongoing COVID-19 crisis.

We'll begin with an overview and learn about some of the real-time decision making that's being made at state health departments and hospital systems. And then we're going to delve into the complicated and very hard ethical questions of how do we act and implement crisis standards of care and what we do going forward in the United States and hopefully globally.

For this we've got really an unrivaled series of experts and they're going to help guide the discussion.

John Hick, who served with me on the Crisis Standards of Care Committee for the Institute of Medicine is currently the Deputy Chief Medical Director for Emergency Medical Services and Director for Emergency Preparedness for Hennepin Health care, which serves Minneapolis and the surrounding county.
Dr. Hick is one of the nation's leading experts on crisis standards of care. And we all turn to him when we have hard problems.

Rebekah Gee is the former Secretary of Health for the State of Louisiana. Currently the head of the Louisiana State University Health Care Services Division.

She's going to share with us her perspectives on the challenges that are faced by state health departments and hospital systems. And as know, COVID is being fought from city-to-city, county-to-county, state-to-state. And so her perspective is going to be critically important.

And then Jeff Kahn, who has been working tirelessly, both as a member of the National Academy of Medicine and as a public figure, is the director of the Johns Hopkins Berman Institute of Bioethics and sits on the hospital's decision-making committee with regard to COVID-19 care.

He's going to help walk us through the
ethics of enacting crisis standards of care.

So, I thank all of you for joining us today. I thank the National Academy and the American Public Health Association. And particularly our panelists.

And so, to get us started I'm going to turn it over to you, Dr. Hick, and we'll look forward to your giving us an overview of what crisis standards of care are and how we can implement them.

DR. HICK: Thanks so much, Larry. And just much appreciation to you and to Nicki.

Nicki had charged us at the Institute of Medicine in 2009 with coming up for a framework for how we might make difficult resource allocation decisions with the H1N1 pandemic. And we fortunately got off a little bit easy in that pandemic but not so much this time.

And so, it's a privilege to be working with you again. And unfortunate as this situation is, I think that we have some good
So, this is going to be a little bit of a book jacket version of crisis standards of care and its impact and what we can use principally to apply to the COVID-19 pandemic. But there's a lot of nuance here that I'm not going to be able to cover but that some of you are more familiar with than I am even because of your personal experiences with this disease.

Next slide please. So, I just want to draw a little bit of a distinction between crisis standards of care, which is the systems response and includes government support for the care and the changes in care that we need to provide during a disaster, and particularly in a pandemic, a long-lasting event like this where those emergency orders that official support of the disaster response efforts are so important to promote consistency, to promote fairness, to promote equity across the care system.

Crisis care is really situational.

And to Nicki's point, it is the inadequate
resources that you are faced with in front of you. And you must do the best you can to provide the best care possible in that situation. Regardless of the number of patients you have, you will do the best you can.

But the systems and the processes need to adapt to that situation. And so, there is a not a one-size fits all here.

Next please. So I think we need to be careful not to think of crisis standards of care as a light switch that we flip on and off.

Next. It's much more a set of tools. And whether that is adaptations of personal protective equipment, whether it is adaptations of a respiratory care profiles to encourage high-flow nasal cannula oxygen in patients we might normally intubate.

Whether it gets all the way to the point of having to reallocate ventilators, crisis standards of care really provides the set of tools that can be applied to the clinical situation.
And it's our job to make sure that we have processes in place, that we have clinical input into those decisions and we create processes that will be the most fair, equitable, accountable and proportional to the needs of the incident.

Next slide please. This was a framework slide that I think a lot of you are probably familiar with, but on the left-hand side is our conventional patient care status.

We use our usual spaces, our usual staff, our usual supplies. In the middle is where we really have the opportunity to prevent getting into crisis.

And I want to emphasize this because I think in some cases it becomes almost too easy to say, we're going to make triage decisions and withhold care from certain individuals or reallocate care.

And in reality we probably haven't done the best that we absolutely can to extend that contingency space, to provide the
functionally equivalent care that we can in re-
purpose areas by extending our staff, by
conserving supplies, but also by transferring
patients from an overwhelmed area to an area that
has capacity to moving when needing resources to
the patients or patients to the resources.

And making sure that within a hospital
that we're not having pockets of care that are
very, very different from an equity and from a
consistency standpoint. Of even patients in that
same facility.

So making the maximum use of these
resources, what we have. Making sure that we
thought through the adaptations before we get
into them is important. Because under stress our
brain really narrows its scope and ability to
problem solve.

And we tend to just do what's in front
of us and keep doing it over and over. And a lot
of times that's not a really good strategy, as I
often tell my 16-year-old daughter.

On the right-hand side is when we get
into crisis. And really moving from a patient focus to a population focus based on us saying, what can we do that's going to do the greatest good for the greatest number.

And in that case we really are putting the patients under a degree of risk. We may even be putting providers at a degree of risk if what we're talking about from a crisis standpoint is conversation of PPE, for example.

But it's a calculated risk and we need to make sure that we're balancing those risks against the potential benefits. So, with that in mind I'll talk through just a few of the specific applications of some of this framework to COVID-19.

Next slide please. Part of doing the greatest good is making sure that you have strong incident management and the strong search capacity plans going into an incident and during the incident.

And that you're adapting those plans and technics to the demands of the day. And
making sure that you're not siloing yourself and thinking just about one department, just about critical care but thinking about the health care system as a whole, thinking about other partners down the street, over a state line, wherever else you need to look. Under the couch cushions. You need to find the resources that you can find and apply them in a systematic way.

But you need support from your administration, from your incident command system for doing the things that you may have to do if it comes down to difficult resource choices and allocation decisions.

The farther ahead you can anticipate resource shortfalls the better position you're going to be in to compensate for that when those happen. So think ahead about what might happen and what your contingency plans are now.

And then solve the imbalance. As I mentioned, bring the resources in and know where those resources exist and how fast you can get them, transfer patients to other locations that
have capacity.

And when you have to, triage resources. But don't triage before you've done those other things.

Get help. Don't be an island in these situations.

Next slide. So the core strategies you can really use are to conserve, substitute, adapt, reuse and reallocate.

And we've seen examples of each of these in COVID-19. Whether it's conserving and putting people on ventilators on a more delayed basis or conserving in some cases medications, sedative and otherwise.

Substituting different technologies when we need to. So, meter dose inhalers for nebulizers for example.

Adapting. You know, putting two patients on one ventilator. If you carefully select them and keep them paralyzed that may be a very short-term stopgap maneuver that you can do while you look for an alternative anesthesia.
machine or something else, now that you might use
to bridge those patients.

    Reuse. Whether it's reusing ventilator circuits or other things that we
normally don't reuse but you can with high-level disinfection is extremely important.

    And at the end, if we have to, reallocating resources from one patient, one
location to another, may be the only option that we have.

    Next slide please. Some of the hospital challenges that have been faced with
COVID-19 are space, and in particular, expanding critical care.

    So looking hard at your post-anesthesia care units, procedure areas,
intermediate care units. Even ambulatory surgery centers.

    There's many locations where a fairly high-level of monitored care is provided that can
easily adapt and provide staff for ongoing critical care. And we need to make sure that
we're really emphasizing the maximization of those spaces, utilization of those spaces.

Our staff will need to step up and step over. And what I mean by that is, it doesn't make any sense to train a dermatologist to operate a ventilator. I mean, they're probably brighter than I am but it's just not a skill set that they have for the most part or are familiar with.

So, stepping up the intermediate care nurse, stepping up the hospitalists, stepping up care providers that are very close to an intensive care unit care on a daily basis, to provide them a little more orientation, a little more familiarity, a little more comfort with that level of care.

And then stepping over. Taking critical care domains such as anesthesia and some of our other colleagues that aren't used to provide ongoing critical care but are more than familiar with managing a ventilated patient, doing airway procedures, medicating and keeping
patients sedated.

Those are techniques that they can step over into critical care with very little additional training and provide a significant augmentation of staff.

On the stuff or supply side, we've seen pretty consistent shortages with sedative medications, personal protective equipment. Fortunately nowhere yet has run out of ventilators, knock on wood, but airway supplies have been critically short in some institutions.

So, thinking hard again about how we allocate, reuse. Where some alternative ventilators might be out in the community and dental practices and other places with anesthesia machines or transport ventilators, other sources of ventilators, even veterinary might be an option.

But we are seeing more and more ventilators coming into the system now and that is a good thing. But that doesn't mean by putting somebody on the ventilator you provide
effective critical care.

So there is other things like the monitors, IV pump tubing or making use of IV drips where we actually get back to counting drops again. And other ways of measuring giving IV medications.

On the special consideration side, knowing where we can cohort patients and how to preserve some of our specialty services, like trauma care and other things is important and making sure that we're able to take appropriate isolation practices with our staff is critical.

Next slide please. In general our focus, if we take the left side as a daily basis, and this is from the ACCP 2014 document on critical care expansion and the taskforce for mass critical care, which has some really good articles I think on expansion of critical care.

But this is the general framework is that as we expand critical care in the hospital during COVID-19 or other similar situations, we're forcing patients who need lower acuity care
out into the community, out into alternate care sites and other locations. And we need to be prepared for that potential flow.

These patients are very ill. They remain quite unstable at times for days and even weeks afterwards. And it's a difficult transition. But we may need some alternate care sites. Those need to be carefully thought out.

Next slide please. The usual framework for an alternate care site is a situation like this, where we have three-inch couch mattresses and maybe some, if you're lucky, some draping in a flat space area such as a gymnasium.

And these work well for certain applications. But for the type of older, weak, convalescent care individuals, this is probably not a good environment for them to be cared for. We're going to need good mattresses and locations that are close to bathrooms.

And so things like long-term care facilities that have been recently decommissioned
and hotels and other places that place the
patients in a care environment where they can be
better isolated from each other, receive better
care, better comfort and better support in their
convalescence are probably better choices than
some of these open flat spaced areas.

The other thing that should be
emphasized is that there is tremendous potential
for alternate care locations, for crisis care
locations, on hospital campuses and in owned
facilities that are already operating as health
care facilities.

Whenever possible, we should try to
keep hospital patients in hospitals and within
the health care infrastructure. Particularly
with a potential for decompensation, like we've
seen with a number of COVID-19 patients.

Next slide please. So when we have to
make difficult triage decisions there is
basically the three Cs. There needs to be the
concept of operations.

How decisions are made at the
institution, there need to be criteria for making those decisions and there needs to be coordination in that process and amongst those criteria within that regional area so there's consistency. And the patients aren't getting a different standard of care at one location than another.

Next slide please. So an example of a crisis standards of care concept of operations might be your triggers. And this is just a diagram from a Minnesota document that's available on the web.

The triggers and notifications for CSC activities, how it's integrated with incident command, who participates in a triage team and what is the process for making those decisions. Because ideally, you wouldn't like the bedside provider to be making those decisions, how those are communicated and what sort of appeals process or quality assurance is in place.

And we have to remember too that those processes need to adapt to the circumstances at
hand. That if you literally have half a dozen people at any given moment in the emergency department presenting that need intubation, it won't be possible to go through some of these frameworks in the most ideal way.

And we will have to adapt them to the circumstances at hand, just as we always do with crisis standards of care. But we need to set out the ideal first and work backwards from there.

Next slide please. As far as criteria goes, we need to remember that whatever criteria are out there, and the SOFA score gets used a lot, and I'm one of the primary sort of perpetrators of that, if you will, after publishing one of the initial articles, but let's remember that SOFA is a really lousy predictor for outcomes in these cases.

In cases of respiratory failure, SOFA does not have very good predictive value. And so it may be very attractive to compare patients in the general scheme of things, but I would really caution strongly against using SOFA as a decision
tool unless it's coupled with COVID related mortality predictors.

I would also be very careful, this is from the Minnesota Department of Health card set, I would make sure that whatever state criteria you're doing you go through that and make sure there are not exclusion criteria, particularly those that are based on, and anything to do with functional scores or anything to do with preexisting disabilities.

There's already a couple of states that are in court because of some of the existing language. And some of that language was included in some of the initial recommendations that different specialty societies had made.

But we've really appreciated over the years that we need to be very careful about sort of preexisting conclusions and exclusion criteria. We need to consider everyone that's coming in the door.

And we need to consider them in the context of whatever process they have. Whether
it's for the subdural bleed or COVID-19, we need to take the prognostic features that we know are appropriate for that condition and apply that to what we think their prognosis is.

Next slide please. So when we talk a little bit more about criteria, I just want to emphasize again the importance of including COVID-19 in specific prognostic factors.

And I will disagree with Doug White. I don't think that everyone agrees that the spectrum of age or that we should give resources to the younger population is generally accepted across cultures.

I think we have to be very careful about age discrimination when we talk about triage decisions. And yet in this case, advanced age no question confers additional mortality with COVID-19.

So, in consideration of that, consideration of increased mortality and the setting of cardiac injury of very high D-dimers, of the severity of co-morbid conditions, renal
failure, there is many prognostic factors that as we get more evidence we'll be able to hone these even more carefully to be able to predict outcome with COVID-19.

And these need to be living documents. We need to update them as better evidence becomes available so we can put the best predictive tools into the hands of clinicians that are trying to work to save these lives.

So in order to keep up with that, it's strongly recommended to have a clinical care committee or a similar body that's keeping an eye on that literature and keeping an eye on updated specialty society recommendations, such as those from the American College of Chest Physicians, available on the ChestNet website.

And these need to be specific enough so that we avoid ad hoc decision-making at the bedside. We really want to give the clinicians constructs on which to make decisions.

And ideally, have someone above them make those decisions so they can concentrate on
the care of the patient. And ideally, make that in partnership with a couple of people so there is not one individual on whose shoulders that moral injury will come to rest.

Next slide please. Coordination is the final three, third of three legs of this stool. We really need to make sure there is consistency.

So, regional coordination with the health care coalitions is so important. And communication about what level of care is being provided and a cooperative mechanism to facilitate transfers, intensive care unit transfers into a major metro area from an out of state area or within a metro area to assure that we have consistency, and again, the equity of the care provider is very important.

And also, coordination within the states and even interstate for the guidelines that we're using, the criteria for decision-making, advisory committees and then brokering of transfers across regional lines.
I think this is so important to make sure that we're providing as consistent and as fair care as we can provide given our system and given its limitations. And a lot of times we don't think about the smaller hospitals in non-metro areas and what they can contribute potentially towards these responses and how best to utilize them in the process.

So, coordination ahead of time can pay off big when COVID-19 really hits your area.

Next slide please. Now, I just want to put in a plug for ASPR TRACIE, which I'm blessed to be the editor for.

ASPR TRACIE does have some great topic collections. That we have some shrunk down topic collections specifically for COVID-19, and we also have some broader ones for crisis standards of care, for a broad range of topics that are directly applicable to some of the critical care surge capacity and other planning that you're doing. So please take advantage of those resources.
And, Larry, again, thanks to you and thanks to Nicki. Not only for having me on today but for your leadership in this topic area across the years.

MR. GOSTIN: Well, thank you, John. That was a truly splendid overview of the topic. It really laid the framework.

And what I particularly liked was your emphasis on equity and planning. And also, non-discrimination. Not using a person's status as a determining factor. Whether it's age, race, disability, gender or other kinds of status of the individual.

I think those are critically important, both legally and ethically. And I know we're going to return to that with Rebekah and Jeff.

So with that, thank you. We take our hat off to you, John, for all you do for the country. And for patients around the country.

And now it's a great pleasure to ask you, Rebekah, invite you to give your perspective
from state health departments and hospital systems. Over to you, Rebekah.

DR. GEE: All right, thanks. Thank you, Larry.

And thanks to Victor and to Nicki who have had the great pleasure of being a warrior with when we had the Baton Rouge area floods in 2016 and 100,000 structures were under water, including part of our governor's mansion. I'm really grateful to her and to the Academy for leading these discussions.

From Katrina to COVID, Louisiana has not been a stranger to tragedy. Next slide.

In the first two weeks of this epidemic, likely in part due to the Mardi Gras celebrations that had some of the largest number of people in close proximity during the time this virus was circulating, and before that was widely known, we had the largest percentage increase in the world, include at that time, compared to New York City.

Currently Louisiana has 21,000 cases
and we've lost over 1,100 of our citizens. We do however hope that the dark days are behind us.

Two weeks ago was when our ICUs had patients spilling over and one of the hospitals that our colleagues work in, at LSU, was within two beds of running out. Today we have 150 fewer patients on vents than one week ago.

Next slide. And you can see here the case numbers and death counts are going down.

The next slide. Death counts are going up but case numbers are going down.

And here you can see that we have fewer patients on vents and the hospital beds are going down.

So, we're hoping that we're starting to see some improvement here because of efforts to social distance and so on.

Next slide please. But the journey was not easy, and a lot of what John said I'm going to reiterate, and I really appreciate his leadership, but our journey was shocking.

And for me, you know, having been a
health secretary and led responses to weather events, this has been unprecedented in that this was the first time that in my career where we've had, as a nation, and many of us, to address something together. And simply we're not prepared.

And in particular, the journey to get protective equipment for our staff or PPE was shocking. And then it laid bare the lack of federal and state preparedness in coordination for this scale of an epidemic.

In fact, there was great confusion about the federal assets available, PPE supply and when that supply would come. And the federal stockpiles were not adequate.

And as a result, at LSU and at the command center at GOHSEP, we were extremely confused. And what we did get was inadequate. At one point we got N95s, a large supply from the strategic national stockpile, but they were well past their recommended shelf life.

We called other academic medical
centers in states where there were few cases and plenty of resources, but fear combined with a scarcity mentality meant that I was told that no PPE could be spared or sent from other institutions. So therefore we looked locally.

We unloaded PPE from dentist’s office and veterinary clinics. We vetted our health systems in Louisiana, sources from China. People that had been selling tchotchkes weeks before are now sourcing PPE.

And as demand increased, the prices did as well and the quality of products was unclear.

And so, given that there was no clear path to having appropriate supply and given our numbers, really indicating at that time that we were going to run out of ventilators and run out of PPE, we did extraordinary measures such as resorting to 3D printers and even commandeering a furniture store in New Orleans to print shields and to start making face masks and gowns.

Ventilators of course were another
challenge. And lack of clarity about when they would come, what kind of ventilators would come and who they would be sent to added to confusion. And health systems and states were bidding against each other, and sometimes against FEMA. Incredibly frustrating. You'd find ventilators and they would be swiped by FEMA.

We really had no surety of what would come and when. And it really felt to our faculty on the front lines that it was like we were in an auction for our lives and the lives of our patients.

And sadly, this waste in redundancy really, even more so than places like LSU and Ochsner, disproportionately impact our rural hospitals and federally qualified health centers that simply weren't going to win this eBay bidding game or the power struggles about where resources would go.

And the 25 bed hospital we run, Lallie Kemp, even today was out of gowns and we had to order some and get them there today.
There were well meaning private solutions developed such as projectn95.org for PPE and vents. But during our search there was no way to prioritize based on need, it was first come, first serve. And FEMA could take whatever they wanted before states could get it.

Really, solutions are needed. Both public and private sectors solutions that use algorithms for prioritization during times of disaster and scarcity.

There are several examples of ones that have been developed. Notably the University of Washington has some algorithms that have been helpful for planning, Johns Hopkins University and the Louisiana Department of Health have partnered.

However, they are still inadequate. They need to be invested in and matured and the ability to do predictive modeling bolstered because we overestimated the need and underestimated results of measures for distancing.
And so, clearly we're not correct at what our numbers, what the numbers we thought would be.

You know, some good news has come last night at the White House. The Dynamic Ventilator Reserve was announced. That's really a no brainer but a good thing that it's happening.

Adam Boehler and Ochsner together announced it. And this idea is that places like Ochsner right now that actually have excess ventilator use could deploy to somewhere like New York or Minnesota or wherever these ventilators are needed so that we don't oversupply and take too much for ourselves when they're not needed. I mean, a similar reserve could be set up for PPE.

And we need leadership from professional associations. Both from facilities, places that represent hospitals, like the American Hospital Association and professional societies like my society, ACOG to give us guidance on what should be done, as John
And so, for example, one hospital in New Orleans asked employees to put their N95 mask in a paper bag and reuse them and spray hydrogen peroxide on it.

Other hospitals were able to give employees new masks daily. And that inconsistency led to panic and concern. And it certainly would have been helpful to have AHA guidance or CDC protocols that are published for mask reuse.

As well as to provide selective guidance that is triggered by scarcity dynamics so that you don't have these practices that are either unproven, unwarranted or inconsistent in regions because you can't allocate PPE effectively or because of concern over scarcity or because of lack of preparation.

Also, we need recommendations on how to best sterilize the scarce PPE. People are talking, you know, we've used ozone in one setting, we're using UV radiation. What is the
right way to do it, how do you scale this and 
what is the evidence.

That's something we had to wade 
through, and still have confusion over.

And over the past few weeks as well 
we've used our pluripotential, smart people at 
LSU to redeploy, as John mentioned, to other 
fields. As one of my favorite social media posts 
said, stay at home because you don't want to be 
intubated by a gynecologist.

We have used people like surgeons and 
anesthesiologists in critical care settings to do 
lines. We have up-trained nurse practitioners 
and individuals who do primary care to work in 
intensive care units.

But we could have done a lot better 
job. If the professional societies could help 
guide us as to how do you move up the ladder and 
help train people up, this should be done prior 
to a disaster, it should be done with training 
and it should be done before those essential 
workers on the front lines get exhausted or
overwhelmed and are really unable to function optimally.

Finally, there has been a lot of confusion around workplace safety procedures in the wake of this pandemic. I think that work, essential worker protection is a health equity issue. We're treating essential workers as if they're disposable.

We've had three bus drivers die just in New Orleans because they had no protection and were getting breathed on all day by all kinds of people. Essential workers need, there need to be national guidelines.

There should be a coordinated effort by entities such as OSHA and NIOSH to address these important questions as they relate to pandemics so that folks who are particularly low-income and unempowered have somewhere to turn for protection.

Next slide. Oh, so there are a couple of more slides so I'll just keep going.

So, what actual decisions are state
health departments having to make and what information or guidance could help them better make these decisions.

So, at LSU our doctors would like to know what type of PPE, here we go, what type of PPE are needed and for what type of procedures, and when is protection needed, how is protection best utilized, sterilized and disposed of, how best to prioritize and schedule patients.

For example, should we mirror what some grocery stores are doing and set special morning hours for the most vulnerable patients after the night team has come in and cleaned and which patients are a priority, these ethical issues for urgent but non-emergent procedures. For example, should a 31-year-old mother of three with breast cancer have priority versus a 75 year old with bladder cancer and severe dementia and other chronic diseases, so who gets priority.

And also, who gets priority for testing. You know, as we move into the next stages of this, who gets the antibody test, who
gets the COVID tests.

    And right now in New Orleans, if you
don't have transportation and you haven't been
able to get to a walk-in clinic, you don't have a
test. So we need to address those issues through
mobile testing, which is what LSU aims to do by
next week.

    We need health disparities data and
ongoing measurements so that if implicit bias is
getting in the way of providers' decision-making
about these critical resources that we can
address it.

    We know right now that African-
Americans are dying at disproportional rates.
Sixty percent of the deaths in Louisiana are
African-Americans versus the 32 percent that
African-Americans make up of our population. Why
is that? We need to be able to address some of
these things in more real time.

    And finally, better evidentiary
support for severe scarcity scenarios. For
example, vent sharing guidelines.
And then support for situations where end of life care must be provided without family members. And finally, crisis counseling services should be available for care givers who are dealing with unprecedented numbers of dead.

And the next slide. And then in the face of rapidly changing protocols for clinical care, what can be done for the care of COVID-19.

So, early on in the epidemic there was very slow diffusion of information. Both to providers and the public.

And so we, I'm sorry this slide isn't available to you but there was not a good COVID screener. The COVID screener that came out from the CDC was not particularly friendly in terms of being literacy and numeracy adequate.

It asked questions that many people don't know the answers to. And in fact, some of the questions were, are you about to just stop breathing. Which you hopefully should not be filling an online questionnaire out if you're going to answer that question yes.
So really slow response. Difficult for state health departments to communicate with the public about where they should go, when they should go to emergency rooms.

And very also difficult for front line providers to cull through journal articles and do lit reviews and figure out what knowledge is happening.

And then just to underscore, it's extremely difficult when politicians make statements about certain drugs and that they should be used for COVID.

We had runs on several of these drugs in Louisiana, and in fact, our board of pharmacy had to make a statement about not being able to fill these things. So it might be anticipated that we need to have guidelines about what pharmacies are able to fill and for whom during these types of events.

Social media has been very effective for our clinicians to help them vet and curate information. And it's often reassuring for them
to know that others are also going through similar situations.

So, it would be helpful for the AHA to support hospital level decisions, such as scarcity and reuse models, as mentioned before, and specialty societies to support spread of information. And rapidly disseminate promising clinical protocols in the National Academy of Medicine or another scientific body that can curate this so that there can be public trust in this information.

And these types of vetted curated messages could help bolster local networks such as COVIDNOLA here in New Orleans that help the public understand why we have stay at home orders for as long as they are and help them understand admonitions.

And for COVID, there is an urgency of timelines obviously and needs to bolster the COVID clinical trials network. Oh, can bolster and create a COVID clinical trials network similar to what's being done for cancer and
private solutions such as the website.

   World Without COVID was launched yesterday morning with a goal of connecting patients to coronavirus clinical trials. More of that is needed.

   And finally, if a single medication back to medication scarcity is found to be effective and there are shortages, we should consider 1498 authority for the U.S. to manufacture these pharmaceuticals or a national subscription model similar to what Louisiana has implemented to try to eradicate Hepatitis B in our state.

   In conclusion, we've been reminded by this epidemic that the health of one individual can have profound impacts on the health of the community. And my hope is that our experience with COVID will bolster a national dedication to the universal coverage.

   And certainly reinvestments in public health. Because what we didn't pay for we are certainly paying for now.
On the crisis standards of care that John and Nicki and others at the National Academy of Medicine advanced and first promoted in 2009 are a good start, but there is a lot more work to do. So thank you, and sorry about this slight guffaw.

MR. GOSTIN: Well, thank you, Rebekah. You gave us a wonderful view from what it's down like in the health and hospital system. And that's crucial.

And I particularly liked the idea that you put forward, that Nicki had also mentioned, which is equity and why we're having these kind of different scenes, kind of differential impacts on certain communities like African-American communities or American Indian communities.

And not only do we need to understand it but we can't understand it unless we have more granular data that separates out diagnosis, illness, hospitalization and death with more specificity.

I also of course appreciated very much
your attention to front line workers. You know, people who are putting themselves at risk every day and our core ethical duty to keep them safe.

Because they're out there working for us every day, we need to be out there working for them every day because ethical duties are reciprocal.

And so, as we are transitioning to ethics and the ethics of crisis standards of care and scarcity, I'm really delighted to welcome Professor Jeff Kahn.

Jeff and I go way back in thinking about the hard-ethical problems that occur in relation not only to medical and health care but also public health and population-based evaluations of what works, what doesn't work, what's fair, what's not fair.

So, thank you very much, Rebekah. And thank you, Jeff, for joining us. I'm delighted to turn it over to you now.

DR. KAHN: Thanks, Larry. And let me say thank you to the APHA and the NAM for hosting
this really critical conversation.

I should say great to see you, and
great to see Nicki and John too. And it's making
me realize all roads lead through Minneapolis.
So good to see everybody, old friends and new
acquaintances alike.

So I'm going to talk without slides.
Not because I don't like slides, but because I'm
going to share some of the work that we're
engaged in at Johns Hopkins in the midst of
planning for the outbreak. And for those of you
who live in Maryland or are paying attention to
what's happening, we have not yet had an
executive order come from our Governor.

So I am hesitant to get ahead of the
release of what will be the state level guidance.
So I'm going to speak from notes rather than show
slides. I will say too, that the comments that
I'm making relate to the work that we're engaged
in as a scarce resource planning committee. It
isn't specific to ISA standards of care, but of
course, we're in a crisis and trying to establish
standards of care for this particular crisis.

So let me take the questions that were posed to us on the panel in turn, which will be the way I'll organize my comments. The first was: what ethical considerations must be taken into account when planning to enact crisis standards of care? Of course a crucial question, and both John and Rebekah have signaled to them, and Larry in his comments as well.

And John I think said: best care possible. And of course that's a critical commitment. That's not just a medical and professional commitment, but an ethics commitment.

And so just to sort of frame the conversation that we're engaged in, and I note lots of other people around the country and around the world are engaged in, we need to think about the ethics commitments and principles that are at issue and need to be attended to as we craft frameworks and plans for implementing them.

So I would list in that collection the
duty to provide care. So that's about the best care possible. And of course that's a professional commitment of our health care providers and our health care institutions.

At the same time, and this is where the tension comes in, we have a duty to steward resources. And in the context of crisis care planning, and in particular as we're talking about the COVID-19 outbreak, we are facing potential shortage of lifesaving resources.

So duty to provide care, and duty to steward resources are coming into conflict, at least in theory if not in practice. And of course we hope they never will come into conflict and practice, but we're preparing just the same.

As we think those through, and that tension of course is at the crux, we have to think about how to allocate in ways that respect distributive and procedural justice in ways that are equitable. So this goes to Larry's points about equity and consideration of people where their needs are, rather than what they look like
or where they come from.

So equitable approaches to distributing scarce resources in ways that are standardized and clear, so they can be followed by the providers. And I'll talk more about that in a moment.

And done so transparently. So I think that's a really critical point, that transparency as a sort of ethics commitment. So that not only the providers understand, but the public who will be affected, understand the way that these decisions will be made.

And in particular, attending to vulnerable parts of our communities and peoples who have been historically marginalized and therefore may be distrustful of the health system.

So we I think have real concerns to face about saying, well we're not going to treat certain people in certain ways in the context of people mistrusting health systems and not feeling like they would be fully treated under the best
of circumstances. So we need to be really careful as we face down these difficult conversations related to crisis standards of care.

So those are the high level principles, with a primary goal, which I don't know I need to articulate, but I'll do it anyway, of maximizing the benefit of treatment, and enhancing survival for as many patients as possible. That's what we want to do.

And of course then it's sort of all, the devil's in the details. So let me move to the second question, which was: what sort of ethics framework or decision making assistance to government leaders, hospital and health system administrators, clinicians, et cetera, need to plan and prepare to enact for crisis standards of care?

And so I will say that the committee that I'm part of, and as I mentioned, we're not calling it a crisis standard of care committee, we're calling it an allocation of scarce
resources committee. But it's performing that function in the context of the COVID outbreak.

We have been meeting, this is the fifth week we've been on remote work, and we started the Monday of our first week. So now into the fifth week, we're meeting every single day, twice a day for an hour each time, seven days a week.

And that's a group of 20 people from across the Johns Hopkins Health System, who are working hard to craft not just sort of high level guidance, which is sort of the kind of principles that I mentioned a few moments ago. But really clear frameworks and guidance documents and implementation plans not just in general for what we face when there's a shortage, but with specific flow diagrams.

Triggers for when we would invoke making triage decisions. The steps that would be involved. The individuals who would be involved in making triage decisions. The roles that those people would play. The time frames for those
decisions. So how quickly they would need to be made, and each for specific resources that may be scarce.

And so I'm sure it doesn't bear repeating, but let me just make the list here, or offer the list of the things that we have been working through. And I'm sure others around the country and around the world are thinking about the same things.

Lots of attention has been paid to ICU beds and ventilators. And of course, we all hope that we won't face the situation where we have to make decisions about which patient gets the ventilator if we're down to more than one patient and fewer ventilators than patients available.

But it also turns out that there are other resources that are potential to be -- potential to be scarce or likely to be scarce. And among the things that have received less attention, and I think worth saying, is blood.

The blood supply is under a threat.

Not because of people needing to be transfused
when they're infected by COVID-19, but because people are staying home and not donating blood. And blood is, of course, a perishable commodity that relies on altruistic donors.

And people who need transfusion will need transfusion before and after and during the current pandemic. And so the blood supply is in peril, and we need to have a plan for how to allocate it.

A little bit of a quick sideline, which makes it for an interesting ethics discussion. Is that unlike ICU beds, which are one patient, one bed, or ventilators, you know, one ventilator, one patient, unless they're multiplex. A lot of it is a variably used commodity. Some people need only one or two units, and other cases require literally hundreds of units of blood.

And it's possible for these massive transfusion protocol cases to sometimes wipe out a supply of a blood bank in a single case, especially if the blood supply is already
suppressed. And so we have a difficult ethics question to answer about, at what point do you trigger restrictions on the use of blood, if doing so would eradicate the blood supply so that there was none left for other patients?

It's do we use it at all on one or two patients, or do we spread it out and use it maybe on 100 or 200 patients?

And that's a different ethics calculation than is ventilators and ICU beds. So very specific frameworks in terms of how those particular decisions would be made for the very particular resources that would be involved.

We've included -- and I'm sure this is true of other places too -- transfer policies. How do we decide when it's appropriate to have patients come to Johns Hopkins? And in what order when we have a shortage? And what order of priority would we offer access to hospital or ICU beds in our hospital?

And most recently, we've been trying to work through issues related to allocation of
convalescent plasma in the research context. But nonetheless, there are likely to be more patients eligible for receiving convalescent plasma than there are units of plasma to go around.

So very specific guidance is the answer to my question about what sort of ethics framework or decision making assistance. The more specific, the better, because these are decisions not being made in hypothetical, but in actual.

Among the things I want to say before I leave that is, it's really important and it's an ethics point I should have made earlier. That we need to protect clinicians from having to make decisions about what's good for their patients versus what's available to offer to patients.

And so that means creating triage teams with a very specific membership, to make decisions and take them out of the hands of the bedside care providers. That's a really important point as part of the planning.

And among the things that relate to
protecting clinicians, is making sure that they're protected from liability. And maybe we can talk about that during the Q&A. It's not an ethics issue per se; it's more of a legal issue. But obviously we don't want to put clinicians in the position of making decisions that will leave them in legal liability for not providing an adequate standard of care.

The third question was: who should be involved in this planning and decision making? And I made a brief reference to the fact that we've had a group of 20 that involve clinicians of all the relevant sub-specialties of medicine.

It is, in our case, chaired by the VP for Quality and Patient Safety. It includes three members who have ethics expertise. So I am on the committee. And then my two colleagues who chair the ethics committee at Johns Hopkins Hospital. So we have ethics, we have nursing, we have clinic -- medical care of various types, and we have the General Counsel for our hospital and health system.
So very interdisciplinary is the answer to the question about who should be involved. And as I said, we've been meeting very, very frequently. And I think that part of the answer is you need to talk about these things not only in prospect, but as you are living through them, because conditions change, as we heard from both John and Rebekah.

How should the resulting standards that are crafted be communicated to hospital staff, health care workers, patients and families, and the public? I will say nature and humans abhor vacuums. And it's really critical to share the information as soon as you possibly can, because people will otherwise try to figure it out for themselves, and that tends to be inaccurate.

And so we are trying to be proactive in doing things like hosting townhalls. FAQs are being created. Talking points for people when they are called by members of the media to talk about what the planning looks like. And trying
to be clear about what will and will not happen.

So just by way of example, there was a kind of rumor moving around through some of our communities that if you came into the hospital and were COVID positive, you would automatically be declared a do not resuscitate patient, which is not the case. And we've had to work hard to get ahead of that so that those sorts of rumors don't take hold among the public.

Lastly, the last question, and then I'll stop and turn it back over to Larry. In the face of rapidly changing protocols for clinical care of those with COVID-19, how should or can committees adapt to ensure their decisions are always being informed by them as up to date and appropriate ethical guidance?

So when we started the process that I have briefly described now almost five weeks ago, I think we all thought, and I think we were actually told we would be at this for just a few weeks, two or three weeks. And we would craft the framework and implementation plans, which
would then be shared with our colleague hospitals
around the state, and eventually become part of
the state level approach.

And so we would do that work. Work
very hard at it, very fast. And then turn it
over to those who would implement it. That has
not proven to be the case. And that's because as
we have been working, things have continued to
change.

And so my answer is: you need to keep
at it with a group of people who are committed to
helping think through the issues as they arise in
an ongoing way. Remarkably, lots of busy people,
20 very busy people show up every day at 1:00 and
7:00 p.m. for an hour, and we work through
whatever the issue of the day is.

I don't think anybody's missed a
single meeting. We have come to think of each
other as sort of family. We're living through a
little bit of what feels like wartime. And we're
not even the ones who are at the bedside trying
to make theses hard decisions.
So I think this is something that people need to be prepared for. It's a commitment, but we're all I think feeling like we need to step up and see this through to the end.

So that's all I think I wanted to include in my notes. I guess the last thing I will say is it's critical to share and coordinate among all of the affected parties.

In our case, it's the hospitals across our state. But like I'm sure all of those of you watching and listening, the email listservs that I'm part of just sort of exploded when we ended up starting to talk about scarce resource planning.

And the level of willingness to share what people were working through in draft form, and just sharing ideas and helping to figure out what best practice was, has been remarkable. And people have been really willing to do that in ways that I think will lead everybody to make better and more thoughtful decisions.

And so I think coordinating and
sharing is a really important takeaway from what
we have experienced so far. So with that, I will
stop.

MR. GOSTIN: Thank you, Jeff. That
was a real tour de force. And I think you've
told us that, you know, we need a good multi-
disciplinary transparent process. That once you
come up with those ethical standards, you need to
have good health communications so that people
understand and are educated.

And then you talked about medical
malpractice liability. Of course I'm a law
professor. And I think that if a health worker
is following good ethical standards, he or she
should be protected against liability. And so
ethics and law go hand in hand.

So we've got about 20 to 25 minutes
for questions and answers. I've got a lot. I'm
going to send them -- I'm going to read them.
But I would like, if we can, to have you answer
them as quickly as possible, so we can get
through as many as we can. And I've got them by
So this first one is for John or Jeff. Can you talk about the concepts of health literacy and patient-centered care in the context of COVID-19? How do we make sure patients understand their choices? How can we make sure patients have people to speak for them and support them when families can't be in the room, as we know, is all too common during COVID-19?

So who wants to take this? John or Jeff?

DR. KAHN: I think John is muted. Maybe I'll start while John unmutes.

MR. GOSTIN: Okay. Well I mean I'm hoping that just one of you will do each so that we can get through this.

DR. KAHN: Okay. Well I'll tell you want we're doing really fast.

MR. GOSTIN: Yeah.

DR. KAHN: There's been a really important point. And so we've crafted materials for patients and families that are going to be
shared with them, that are, you know, reading level appropriate, as well as scripts for clinicians to use to make the points that need to be made to families and patients.

So we're highly attuned to exactly these concerns. And there need to be materials crafted, and early on, before you need to use them obviously.

MR. GOSTIN: Thank you very much. So I've got another question. This one is for John or Rebekah.

And if we're expecting a second surge after social distancing is lifted, and many public health experts think that that's likely, are there things that we can be doing now to prepare in terms of training, equipment, guidelines?

Is there bandwidth or attention to start term preparedness right now, figuring that, you know, we're going to be in incremental stages with waves of COVID that are impacting the health system? So John, are you still muted, or are you
able to jump in here? If not, Rebekah, would you mind?

DR. GEE: Yes. So John mentioned some of these. And I would echo what he said. I also, you know, the types of research protocols, registries, health disparities data, we can start bolstering those information systems.

National guidelines, professional guidelines, workplace safety standards, these are all things that can be done, you know, working on -- we can be working on now.

Algorithms for decision making. And information for the public that is appropriate for literacy. Really focus on communities of color and other communities, Native American, Spanish speaking folks, Vietnamese community here in New Orleans, we need materials for them. We can be working on that.

And definitely telemedicine resources and support. And then certainly professional societies creating, you know, better protocols for PPE use. The sterilization protocols have
been used throughout many hospital systems. And by this point we ought to know what works best. We need to disseminate that quickly.

And professional organizations should be helping to guide hospitals, hospital administrators and systems on what types of persons are best deployed to what types of situations, and start giving guidance.

And you can start doing drills and training. If, you know, New Orleans in a week or two, if things are better, we should be training and drilling for the next one.

MR. GOSTIN: And that's --

DR. HICK: And Larry, I'll just make a quick mention here.

MR. GOSTIN: Yes. Please do.

DR. HICK: I think it's so important. You know, we haven't gone through our first major peak here. But I think it's so important to learn from the health care workers who have been through that: what do you need?

Because the mental toll, the physical
toll, but also the opportunity to improve practices in that next wave. I think learning from the front line providers is something that we have to do.

And also have to help support them. Because this is one of the most mentally, you know, taxing things, I think, that any of these providers are ever going to face in their careers.

MR. GOSTIN: It is. You know, and I would just add one other thing. Which is that, you know, by the second wave, I hope that we're going to know more about risk.

In other words, what are the procedures? And what are the infection control measures that we can do that actually -- the procedures that raise risk, the infection control standards that can reduce risk?

And also I think by that time we should have antibody tests. We should have a better idea who might be more immunologically protected from SARS-CoV-2. And so we're going to
need to be able to apply science in more sophisticated way in the service of not only treating patients, but protecting health workers.

So you know, this next question is -- was addressed to John or Jeff. But I think Rebekah could easily do it as well.

I mean one of the things, you know, we've all noticed is that, you know, probably the highest risk settings in addition to the hospitals, would be congregate settings. Places like nursing homes, prisons, jails, homeless shelters.

And so the question is: how can we apply crisis standards of care in these settings, where you've got both highly vulnerable patients, and also high at risk settings for contagion? Who would like to jump in there?

DR. HICK: I think I'll defer to Susan as the state, you know, state health director to start anyway.

MR. GOSTIN: Okay.

DR. GEE: So I'll just start. I mean
look, I think it's very challenging. We are --
we've had several clusters of nursing home cases.
A veteran's home, we lost 25 people in one
veteran's home. Just tremendous compression.
And the Governor issued a proclamation about who
could go back to nursing homes, because it's very
challenging.

We've set up a 2,000 bed location at
our convention center so that we could offload
patients who are COVID positive who are
recovering and convalescent, but don't really
need critical care.

It's difficult to use something like
that in New Orleans for a patient who is in
Minden or Bunkie. So it's a big challenge, and
certainly as you've seen in these reports. The
other question is public reporting. There's a
lot of controversy right now on: do we report
these hot spots? How do you report these hot
spots? And lots of politics and politicking on
that. So I know these are very difficult
problems.
MR. GOSTIN: Okay. Thank you.

DR. HICK: And just to emphasize.

MR. GOSTIN: Yeah.

DR. HICK: Larry, these are such vulnerable populations. And we just owe a lot of proactive defensive efforts to each of these facilities. And really thinking through what that means, and trying to get ahead of some of those outbreaks. And then, you know, isolate and quarantine, and do the best we can to protect those.

But I think too, with long term care, I think it's so important that we're thinking through end of life wishes. And the context of some of the level of critical care that's required to get people through these illnesses.

And just making sure that we're being consistent with people's wishes. It's so important to have that outlined ahead of time to reduce the moral distress for families as well as for caregivers.

MR. GOSTIN: Yes, indeed. And we have
to also remember that in this environment there, these are not just vulnerable, but they're isolated. And they're removed from their family and their loved ones that can provide the kind of support that they need.

The next question is actually near and dear to my heart, because we spent most of our time talking about the hospital system and the health care system. But remember, we have a health system, which includes a public health workforce and community health workforce.

So how in these more population-based workforce environments, public health or community health workers, how does a crisis standards of care apply? And how can we best equip and inform the public health workforce? And I think that can, you know, it was addressed to John. But frankly, all three of you know this stuff really well. So any of you, please jump in.

DR. HICK: Yeah again, I think I'll defer that one back to Susan, as you know, as
being in charge of state public health. I think you're probably in the better position to start with that than I am.

DR. GEE: So it's Rebekah. So I think that number one --

DR. HICK: Rebekah.

DR. GEE: With some of these community health workers and public health professionals, one thing we're looking at is similar to what New York City has done, is to use a platform like Unite Us.

We have to recognize that although people are dying of COVID, and of course, you missed my last three slides. One of them was of Ellis Marsalis, who is a jazz great, a phenomenal teacher, father to some incredible jazz musicians, who has died.

And so we can't lose sight of that. But there are also people who are going to die of hunger, of neglect, of abuse, of violence. That the social needs that we are encountering in Louisiana and that will be encountered elsewhere
as this epidemic advances, are tremendous and unprecedented.

And so using something like community health workers in partnership with Unite Us, we created a volunteer registry of 3,000 students, nurses, doctors, dentists, social workers who have volunteered to help to use phone banks to get people the resources they need.

And I think we really have to think about that. And our Office of Public Health, we're fortunate that we have 64 parish or county health units. And those individuals right now are not doing the normal vaccine and family planning type of work they do. They actually are staffing the command center and helping to deploy resources throughout the state.

And so I think this is a real wake up call for states that don't have that type of public health resource. That local public health is extremely important. And when you don't have that local trust in public health leaders, the doctors, the nurses, the social workers, on the
ground, in communities that are vulnerable, you really lose out.

And we had lost a lot in the general administration. In fact, 500 nurses were let go. But fortunately, we have what we have.

And it's been a game changer here.

MR. GOSTIN: Yeah. Thank you, Rebekah. That's -- and you made some important points. And we've talked about how we apply these ethical and legal standards in hospitals, and we've also looked at congregate settings like prisons or nursing homes.

But we have to remember the vast bulk of people are sheltering in place. They're on stay at home orders. Many of them are vulnerable. Many of them need care.

And we need to think about how we can triage care for them. And not just physical care for their health conditions, but also mental health and emotional health. I think these are really critical.

So the next --
DR. KAHN: Larry?

MR. GOSTIN: Yes, please. Just jump in.

DR. KAHN: Let me just, yeah, let me. One of the things you said, I think it bears emphasis, which is the health system that we have.

And you know, we all know this, but I'll say it out loud. I was on a call earlier today with a colleague in the UK, and talking about what we were facing.

And he said, you know, the NHS would just move ventilators from one place to another as they're needed, where the outbreak demands. And it, you know, makes the point that what we call a health system is quite different than what health systems are like around the rest of the world.

And it's shining a light, a very, I don't want to say harsh light, on some of the aspects of what is our fragmented health care system. And the kinds of things that we're,
Rebekah and you were talking about in terms of the fragility of this safety net for things like housing and food security, and providing health care.

So by way of an observation rather than something we ought to do, but maybe we learn from this, what we're going through, and do better going forward.

MR. GOSTIN: Yeah. You know, we've never seen anything quite like this. And you know, with the sheer scale for what we're seeing.

Not just the health consequences, but the vulnerability and the social isolation in various settings, whether it's long term care, hospital care, acute care, or in the home or homeless shelters. These are critical things.

DR. HICK: Yeah. At the same time, Larry, just a quick point. This has the potential to be transformative for American medical care. And the use of telemedicine and the leveraging of --

MR. GOSTIN: Right.
DR. HICK: Many other techniques, you know, to deliver medical care. And I'm profoundly concerned about some of the chronic illness care that's not happening. And even some of the acute illness care that isn't happening because of COVID. People not seeking care for their chest pain, for their stroke symptoms.

MR. GOSTIN: Yeah.

DR. HICK: For other things they need to be seeking care for. So we have challenge but also opportunity even, you know, to redesign things essentially for the future here.

MR. GOSTIN: Mm-hmm. Yes.

DR. GEE: So John, I just want to weigh in. In Louisiana we’ve had a 30 percent decrease in some hospitals in stroke and MI presentation, which is highly concerning. So it's reinforcing your point.

MR. GOSTIN: Yeah. I mean one of the things we know, and from epidemics from Ebola to any of the other major epidemics, is that
actually more people die of ongoing conditions than they do of the -- the focus disease itself.

And so that's a really very important reminder. And the other thing that you said was really critically important, is that we're going to have to learn from this, because one day COVID-19 will be over.

And we're going to have to restructure things. We'll have to restructure our health system, our hospital system, the way we do remote medicine, and also the kind of social and income supports that we give to our vulnerable populations.

So these are really, you know, crucial ideas. Let me -- this next one is for Rebekah to start, but anybody can jump in. Rebekah, you mentioned that training and guidelines are needed for clinicians to step into emergency roles. Can that happen in real time soon enough to make a difference?

Could you comment on medical and other health professionals, students, coming into high
intensity situations?

DR. GEE: So we've had big challenges.

And we created this volunteer network and partnership with UL, our University in Lafayette and LSU.

And 3,000 people signed up, 2,000 of them health professional students. And we're really having challenges with schools and facilities. For example, our convention center not wanting students there. Worried about PPE, worried about exposure.

So I think we need to do a better job. Certainly the accrediting body is ACGME, and AAMC can work to come up with guidelines for what is an appropriate role for a medical student, for a nursing student, or a PA.

You know, and let's get that done. There's no reason to delay that. And we have lots of folks who are sitting at home now who could be doing, you know, including our fourth year medical students, many of them.

You know, NYU graduated early. Ours
are here. We're worried about them not having enough practice and some other considerations. And so why can't they be doing some of this? Why can't individuals who are getting ready to start residencies or who are, you know, off duty right now be doing some drilling?

So I don't see any reason why this couldn't start now. And many parts of this country are not under extreme risk like we were for the past two weeks.

And we need to be prepared. And again, the one thing I've learned, and I'm sure Nicki could reinforce this, is that one of the things you see in a crisis is this false scarcity mentality.

You see -- I saw it on September 11th when we emptied the hospital. When I was doing my sub-I, thinking that you'd have tons of trauma patients coming in. They never came. And we actually put really vulnerable people in the community who didn't need to be there.

And in Baton Rouge where we had
shelters, and we were giving people medications out of whatever stock that might not have been safe, thinking oh, they won't have it. And of course, there was a Walgreens a mile and a half away. So we've got to be able to be logical when these things happen. And planful. And have these things planned ahead of time.

And it's exactly what should be happening in parts of the country now that are not yet hit. And in parts of the country that have been past their peak.

MR. GOSTIN: Thanks. We've only got a few minutes. So I'm going to summarize a few questions. And then if each of you just gives us say a 30 second take away.

You know, one is, you know, how can we embed local and cultural values into these decisions? Whether we can offer any resources for clinicians to learn about the ethics of crisis standards of care?

And then finally, and most importantly, and we've raised this before. But
as we learn from this, and we think toward the future, what is the biggest take away that you've got about what knowledge we've gained, what lessons we've learned, and what we can do in the future?

So why don't we take 30 seconds from each of you? Perhaps John, Rebekah, and then Jeff.

DR. HICK: Wow, with 30 seconds. Okay.

I think we've learned --

MR. GOSTIN: Yeah, sorry.

DR. HICK: I think we've learned that the 2012 principals that the IOM outlined, you know, fairness, transparency, proportionality, accountability, all those things are absolutely critical.

And the conversation with the community and determining their priorities, you know, now and as we go into the future, is absolutely critical. And trying to defuse the care that we provide across as much of a region as possible, and use those resources maximally
and consistently.

And having clinicians applying a uniform set of criteria and in a systems way, so that they're not burdened with that moral injury at the bedside of having to make tough choices.

I think all of those things, the strength of those principles and those practices has been emphasized throughout this. And we want to continue to emphasize our commitment to fairness and equity, and all of those values across the community as we go through this and beyond.

MR. GOSTIN: Thank you. And Rebekah, what do you think are the top lessons we've learned to make us better prepared in the future?

DR. GEE: Well I think it's -- I guess it's a shock to me, but it shouldn't be, that we were unprepared. We were grossly unprepared for this. That we did not have a supply of ventilators. We didn't have a plan for PPE. We had not done the kind of drills.

We hadn't thought about where things
were being sourced from. You know, running out of fobs because they were made in northern Italy. So now we can't test patients.

And all of these things are things that hopefully we'll learn from. Planfulness, number one. Number two is public health. Is that public health disinvestment and the lack of support for public health, we are paying the price for it.

In the CARES Act there is a tremendous, trillions of dollars will be spent on this. Many people will die. You know, if we had had better systems of surveillance and testing, some of this, much of this probably could have been avoidable. Shame on us if we don't fix it going forward.

And if we don't invest in the types of people in public health infrastructure that help us deal with these types of pandemics, because they are not ending. It's a global world. You're in Wuhan one day, in Wisconsin the next.

And then finally I think some are
surprised by, but shouldn't be, that this is really a stress test showing the disparities and the inequalities in our society. And that health care should be, in my view, and hopefully in others', a human right. But that even if you don't believe that, that the health of one person impacts the health of entire communities.

And even for that reason alone, for selfish reasons, we should want the American public to be healthy. And help support efforts that bolster health, whether through health care or efforts that promote healthy communities. So I think all that are -- all those things are important learnings.

MR. GOSTIN: Thanks Rebekah. Jeff, you are our last take away before I turn it back over to Nicki to conclude.

DR. KAHN: Great. Thanks. And I'll be quick. I want to just reiterate. Public health planning matters. We've learned that in spades. We can coordinate rapidly when we need to, which has been a really interesting lesson to
me. So things that seemed insurmountable and would take weeks or months, can happen now within hours and days when it needs to.

And then the last thing I'll say is, the idea about community priorities that John mentioned, I think is really interesting. But I think it's -- we're seeing that people think a little differently as we're living through this than they did in prospect.

So I think there will be some good work to be done in retrospect, learning from this, so that we can embed community values into the next time we need to plan for this.

MR. GOSTIN: Well that's wonderful. I just want to thank John, Rebekah, and Jeff for, you know, a wonderfully educational and vital discussion about how we get through this pandemic with an intact and functioning health system.

I also want to thank the academies and the American Public Health Association. And turn it over to Nicki with our thanks for planning and leading this. Nicki, over to you for the final
concluding remarks.

DR. LURIE: Great. Well thank you. And let me just reiterate my thanks to you, Larry, and to the panelists and all of the staff and our advisory committee who have really helped to plan this.

You know, as I have listened to this incredibly rich and robust conversation, you know, I think back to many of the things that I used to talk about when I was in government, and that I still really firmly believe.

And the first thing I would say is that good response is built on the back of strong day to day systems. You respond with the system you have in hand, not the system that you wish you had in hand.

And so as I think about this conversation, I think about: in our strong day to day system, are we always providing the best care possible? I think we probably have to say in many circumstances the answer is no.

In our strong day to day system, are
we always stewarding scarce resources? You know, I volunteer in a community clinic where resources are scarce. And I see lots of probably not very necessary tests get done all the time. So the answer there is probably we have room for improvement.

John and I have worked together on a number of shortages day to day. Not things that ever required crisis. Whether it's a shortage of blood or a shortage of normal saline, or a shortage of an anesthesia medicine, or anything else.

I think what we've seen there is that institutions that have come together and thought about how not to get into a crisis, but plan, make these contingency plans and conserve and reuse and substitute, those folks that have put those day to day systems in place seem to have a leg up in dealing with the very difficult situations that we have now.

A strong day to day system does better if you have a structure. And so we've talked
about, and John talked about working through an
ICS structure in this kind of a situation.

And one of the things that that does
a well, is it helps mitigate the panic, and I
think the rush to crisis standards of care. You
have to go, or you ought to go through the
contingency process before you get to crisis.

Strong day to day systems know their
communities in advance and incorporate their
communities into planning and execution. And
strong day to day systems do everything they can
to ensure equity.

It's not just about a ventilator here.
What we know, it's about PPE. It's about
testing. It's about people who have to stay at
work driving buses, working in grocery stores, et
cetera. And thinking about now equity, as we
think about who's going to be able to return to
work, right? And are you going to need a test?

Are you going to have to pass certain
other requirements? What's going to happen here?
There's a lot of equity considerations still
ahead of us that we need to think about.

You know, I think we all know that no plan, no matter how good it is, survives first contact with the enemy. But it sure is easier if you've thought through these circumstances before than if this is the first time you are thinking about crisis standards of care.

And then finally, while we would not have wished this disaster on anyone anywhere in the world, never let a good crisis go to waste. And so as I think we've heard, I mean, we're all impressed by the amazing creativity we've seen. The amazing state and local and institutional leadership we've seen.

And as John said, this is an opportunity for us to think about important aspects of redesign. Whether it's we're on the cusp of something that looks closer to universal coverage that we can expand access through health system reform, and through telemedicine, and through other sorts of things.

But there's tremendous opportunity
here. And it's probably a good thing for us all
to be thinking about that as well. So with that,
I will just say that this all concludes today's
webinar. Our next webinar will be next
Wednesday, April 22nd, again at 5:00.

   And we'll focus on COVID-19 and
testing. And what this next generation of
testing might look like. Everyone who registered
for the webinar will receive an invitation to the
next one. And for those of you who missed parts
of this or want to share this with friends, this
webinar has been recorded.

   And as I said in the beginning, the
recording, a transcript and slide presentations
will be made available on the website,
covid19conversations.org.

   Again, thank you so much to our
panelists, to APHA, to NAM for sponsoring this
series. And thanks for our listeners for joining
us today. Stay healthy and safe. Take care.

   (Whereupon, the above-entitled matter
went off the record at 6:32 p.m.)