Hugh:
We will begin in about one minute.

It is 5:30 let's get started.

Good evening, everybody. Thank you for participating in this evening’s webinar on the COVID-19. This evening you will hear from DHHS leaders who will provide timely information on the state’s approach to COVID-19 testing. My name is Hugh Tilson, I’ll be moderating today's form along with Bob Seligson, the executive vice president of the North Carolina Medical Society, and Tom Roth the president of Community Care North Carolina.

Before I turn it over to Tom and Bob, I would like to take a brief moment for thanking everybody for taking time in your busy schedules to participate in today’s webinar. We hope the information provided tonight will help you in your important work to help navigating these trying times a little easier.

Next slide.

After you hear from our presenters, we will turn your questions. All participants are muted during webinar. If you are participating on webinar, please submit questions using the Q&A function on the black bar on the bottom of the screen. The Q&A function on the black bar at the bottom of the screen. If you’re on the phone, you cannot do that. We like to get your questions, so please send us an email at questionsCOVID19webinar@gmail.com. That is questionsCOVID19webinar@gmail.com. We will record this webinar and make that recording, a written transcript of is, and these slides available on the NC AHEC website as early as tomorrow.

Tom, let me turn it over to you.

Tom:
Great, thank you and I would like to thank our partners at North Carolina AHEC and the North Carolina Medical Society for sponsoring tonight's webinar. Tonight, we will have several leaders and subject matter experts from the Department of Health and Human Services discussing new COVID-19 testing recommendations, reviewing testing modalities - certainly looking forward to that - and how the department is working with community partners to reach high-priority populations. I want to thank DHHS leadership for spending this time with us during this important period in our response to the COVID-19 pandemic. I especially want to thank all of you for what you're doing to help North Carolina reopen and take care of our patients. Especially those that are most vulnerable. With that, I'd like to turn it over to the CEO of the North Carolina Medical Society, Bob.

Bob:
Thank you. It is my privilege and honor to present to the group tonight Dr. Mandy Cohen who is secretary of the Department of Health and Human Services. She is an internal medicine physician by training. She has a vast background in the area of Medicaid and moving the value and dealing with social terms of healthcare, but more importantly she has been out rock star in helping lead our state through this very turbulent time and has shown incredible leadership and knowledge and stamina that I think she and that of her staff have continued to show the state of North Carolina, for which the physicians of the state are very grateful, so with no further ado I will give you Dr. Mandy Cohen.

Mandy:
Thanks, and that was a very kind introduction, Bob, and thank you Tom and Hugh, this is a true partnership when we are in this kind of crisis that we are seeing here in our state, our country, our world. It is more important than ever to pull together as one team and trying to respond, and I'm so proud of North Carolina's response to date and I know that it will take a sustained effort to continue our response, and I think tonight is another down payment on us all working together as a team and how we are responding to COVID-19.

I will go to a couple of slides here, and then I will turn it over to my way, way talented team. I particularly I want to thank Scott Shone, who runs the state public health lab, for his leadership. He's going to go through - just in reading his slides I learned a lot so I know you will learn a lot - and then Dr. Shannon Dowler, who has been terrific working on how we are going to operationalize a lot of the testing and Dr. Carter Burns and others in terms of our linking to lots of different folks.

Before I dive in, I also want to thank CCNC and AHEC for being the companion to the testing, which is the tracing effort. When someone is positive, we want to make sure we are getting in touch with all of their contacts so we can test those and go from there, and I think that is what is going to help us contain this virus and allow us to return to this new normal while this virus is with us.

So, I’m on the first slide here about the status of our response. I think that, as I said, we have made incredible progress and I’m very proud of North Carolina with the early aggressive action that we have taken. We never saw a surge or spike here. We have flattened the curb and slowed the spread, and now we are in a phase where we are starting to ease restrictions and return to look at the metrics as well as
making sure we have the underlying capability to be able to handle our response. I think we are in way better position that we were back in March. Our testing capacity is up, our PPE availability is up, our ability to track and understand all the data pieces is better. Now, I don't want to say everything is perfect. We have challenges and we're going to talk about how we will address those around supplies and logistics, but I think we continue to improve day after day after day, and that's what makes me feel confident that, as I look at our numbers which are overall stable - they're not perfect but stable - that we have been able to ease restrictions in a responsible way in a modest way. We are still having a lot of new cases day after day in North Carolina. Today was another high day for us around 730, 740 new cases. Highest day over day new cases in the last week, so we know we have a lot of virus here in the community so we really need to take a modest step forward as we do this reopening. We need to protect our patients, particularly those who have chronic diseases or are over 65 and we know that half of adults in North Carolina fall into that category. There are many of us here on this phone and many of the patients that we take care of, so we have a big job ahead of us. We are going to continue to look at our data to understand what is going to lead us forward into the future, but let's use tonight to focus particularly on the capacity around testing. I think testing we have known it's important from the beginning and we've needed to evolve our testing availability and strategy as we have been in different phases, and we are turning the page to the next phase and I think there will be another page yet that we will write after this, because, as Dr. Shone will go through, there is more modalities of testing coming on the market and there will be different ways of approaching things, so we will continue to evolve, but let's go through her we are at the moment.

On the next slide, we have updated COVID-19 testing guidance. At the end of last week, we released some new guidance to update recommendations for our clinicians, physician, nurse practitioners, and others about arranging for diagnostic testing. We want to make sure that that is going to be available for any patient in whom COVID-19 is suspected, and I will go into what that means. We do note that we want folks to be considering sample collection strategies that preserve PPE if possible, which makes us start to think about more sites that have dedicated teams or centers that are going to do the sample collections. So, it may mean a slightly different process for your office in terms of logistics, in terms of sending someone for a test. Some offices and practices may be big enough that they want to do the testing on their own, have relationships with the lab that they have, and others may want to use some of these larger high collection sites and do things that way. We would like you to think about options that preserve PPE as much as possible. Even though we are better, I think we're out of the woods, we are not perfect yet. I think we still need to have our eye on the conservation as we go. That is why we want everyone to have access to a test and we want to do it in a way that efficiently uses our PPE and when you have some of those high through put sites burn through your PPE as much.

So, moving to the next slide, this is an update on our COVID-19 testing guidance a little bit more as we move forward into the next phase we want to be sure that anyone who needs a test falls into a few categories. First, anyone with symptoms suggestive of COVID-19. We know the classic symptoms, fever, cough, but also change in smell taste, and there's also some nonspecific symptoms like rigors, headache, muscle
pain, and others so we want to have a high level of suspicion for COVID-19 and anyone with suspecting symptoms, so if their telling you about their symptoms over the phone, this is not about needing an in-person exam before they need to get tested. Anyone with symptoms suggests a COVID-19 test, and then, as I was talking about the tracing efforts, anyone with known contacts of a positive case regardless of symptoms. So, we want folks to get tested if they have been exposed. Now, our contact tracers are going to do work to help understand if someone had a high risk of that exposure and are they actually a close contact or are they a more distant contact, because there will be different recommendations based on that, but for all close contacts we want folks to get a test regardless of symptoms. That is a change in guidance. Before, we were at symptom only and now we want to do symptomatic and asymptomatic contacts. That is really important.

As I go to the next slide, in addition to - that's the core, if you have a symptom of COVID-19 and if you have an exposure to COVID-19, test, test, test. Then you're going to have patients who are in front of you that may have nonspecific symptoms of COVID-19, I'm sure all of us see patients have headaches, have some muscle pain, maybe does not have classic symptoms of COVID-19, we want you to know that some of these high-risk groups really have a high suspicion for COVID-19. So, if you have somebody in front of you who is in regular contact with high-risk settings like they work in a long-term care setting or they work in a homeless shelter or reside in a homeless shelter or are part of the migrant farm camp, again, someone who falls in that high-risk severity of illness category or they come from historically marginalized populations like our African-American community, our Latino community, we want you to make sure you have a very high level of suspicion of COVID-19 and, regardless of symptoms, anyone at high risk of exposure or high-risk of these severe illnesses we want you to be leaning in on saying yes, let's get a test. Because again, COVID-19 is so tricky. We know that so many folks do potentially have it and have zero symptoms, so that's making our job so challenging here.

That's why we want you to lean in and say, particularly for these folks that have high risk of exposure or severe symptoms, let's lean in and test. So, that is a high-level overview of where our guidance is, and I'm sure we're going to get more into the details and get to your questions, but hear my voice. I want you to lean in on testing, I say that to my team and we know we need to get the logistics right and we know we need to get testing in communities across North Carolina particularly we need to get it to make sure that our trusted partners in our communities are linked into this effort so that you are referring patients either to your office to do testing or to a trusted site, so we want to make sure that happens and congrats to our team for now we have an interactive map of testing sites on our website, and we hope that that will be helpful for patients as well as you.

With that I will turn it over to Dr. Scott Shone who will go into the various types of testing and catch us up on the science of where are we with testing overall and how do we interpret tests, what is specimen collection and all that. It’s a great talk, so, Dr. Shone, can I turn it over to you?

Scott:
Thank you, Secretary Cohen.

We can go to the next slide.
So, as Secretary Cohen said, I'm going to spend my time talking about the different types of tests for SARS-CoV-2, the virus that causes COVID-19, and will talk about the collection the collection sites and sample types and then end with interpreting results and what they mean and actually more importantly what they might not mean.

So, there's two primary types of tests for SARS-CoV-2 and related illness and that is the diagnostic test or the virus test, which looks for the virus shows active infection. That is broken down into two different types of test, a molecular test which is commonly done within a primary laboratory like a state laboratory of public health, and molecular test we are looking for the virus genetic material RNA. And, more recently to market is the first antigen test does become available and that is looking for specific proteins on the surface of the virus like the rapid flu test that most people are familiar with. And, I will talk in a little more detail about these types of tests in a later slide.

We are also seeing prevalence of antibody testing, which are looking for antibodies that are made during an immune response to the virus, and those antibodies can take several days or even weeks to develop during and after infection. Currently, CDC guidance is that antibody test should not be used to diagnose an active coronavirus infection. They are not diagnostic tests as I described above, and more importantly we still don't know how an antibody response correlates to immunity. Just because an individual may have antibodies to SARS-CoV-2 does not mean they are immune to reinfection at the moment, or we don't know that yet, so there are several studies underway to understand immunogenicity if there neutralizing or not, as well as focusing on more prevalence studies, so there're some antibody assays that I will talk about that are useful in accurately assessing an immune response and prevalence of the virus in our communities. So, the FDA recently announced some guidance on testing and I will mention that again later in my antibody specific slide.

When it comes to testing, like everything else with clinical diagnostics, we have two main revelatory bodies - the US Food and Drug Administration the FDA - and they have oversight over the test themselves and in the instance of a public health emergency we’re talking about emergency use authorization for tests. These are not FDA approved tests or FDA cleared tests, so if you've had manufacturers coming to you saying this is approved by the FDA that is not accurate. The FDA is not approving tests. That is a much longer regulatory process and in a public health emergency there are relaxations of those rules that allow for emergency use authorization were a vendor or manufacturers provides limited data to the FDA that shows efficacy of the test and they will authorize it’s use. And then the clinical laboratory improvement amendments that regulates laboratories, and those clinical laboratories are ranked in terms of high complexity, moderate complexity, or waived, and most physicians’ offices have certificates of waiver to perform a variety of tests. The state level of public health as well as most system laboratories or high complex the labs and most of the molecular diagnostic test I mentioned earlier fall under high complexity.

Next slide, please.
This is a great graphic that I borrowed from the FDA website. If you want later you can go back to the FDA website and find this and it's a breakdown of the tests I just mentioned. I want to particularly draw your attention to the sample types, so for the molecular test and the antigen test they are nasal and throat swabs which I will talk about on the next slide, where the antibody test is either a finger stick or a blood draw. Recently, the FDA did authorize a saliva test for my undergraduate alma mater, Rutgers University in New Jersey, and the saliva test is still only authorized in the Rutgers lab. It's still undergoing I think more robust testing. I think it's mostly widely used around the tristate area of New Jersey, New York, Pennsylvania, but I do think that's an interesting development and we are also seeing some studies using cheek swabs. So, what Secretary Cohen said, as we look for specimen collection methods that will reduce PPE, clearly self-correct saliva or cheek swab will dramatically reduce the impact on PPE.

And, then, I want to draw your attention to the bottom of these charts, which is what does the test show versus what it does not show. I think that is critically important with any diagnostic test to understand that, and, as I said earlier, the molecular test of the antigen test shows active coronavirus infection. The individual actually has the virus present, were as the antibody test will show if they have been exposed or infected in the past, but, like I said, in terms of what it does not show the molecular test only shows if you currently have the virus and it is not show if you were infected in the past. In addition, the antigen test is designed to specifically identify the virus, but it is more likely to miss active infection, because it is skewed towards not finding active infection and I will talk about that in my next slide. In this case, a negative antigen test is actually presumptive and if someone has symptoms you want to order the more accurate and sensitive molecular test. And, finally, the antibody test, again, will show that you had coronavirus in the past but does not diagnose active infection at the time.

So, next slide, I'll dive deeper into swab types.

There's four main swap times that we know of and are being part of SARS-CoV-2 detection. We have the nasopharyngeal, or NP swab, the pharyngeal, OP, and nasal. And, the NP swabs started out as being an ideal sample. You get right back into that upper respiratory, it is very sensitive in terms of diagnostic assay, but it does require a special swab which are in very, very limited supply. They were in limited supply before the pandemic, and are in increasing limited supply, although, as Secretary Cohen said, the supply chain is slowly catching back up as manufactures have ramped up production and it's looking positive as we go into the summer that those supplies will increase. The drawback to the NP swap, while it is this ideal for testing, it must be collected by healthcare provider and requires the most PPE. As we go down towards the right, I will just end on the nasal swabs, which are highly abundant. They are either foam swabs, special larger flock swab, or a polyester sponge swab, and highly abundant. It is easy to use either collected by the individual and there are many on the market now that are just self-collected or healthcare observed self-collected or provider-collected, but requires substantial less PPE especially when self-collected. They tend - so CDC's initial guidance was only to recommended nasal swabs for asymptomatic, and that has since changed, but it's important that that specimen be collected well.
We can have the most accurate diagnostic test in the world and it is reliant on a well-collected specimen, so I would assure, especially with the self-collected swabs, I do encourage either showing initially or actually helping the patient do that collection. The good news around swabs is that the department has been allocated a supply of collection devices, both the swab and the transport medium, from FEMA, and we have also through our procurement team been able to identify swabs and media on our own that can be used at a multitude of laboratories across the country as well as our laboratory here at the state level of public health. And, I put up a screenshot of the state labs website. If you look at the departments COVID-19 website and go to the information for healthcare provider, you will see a tab that says “request collection supplies.” Prior to this influx of additional supplies, our collection supplies were largely limited to local health departments who were submitting back to the state laboratory of public health, but with the same increase inventory we have opened up availability of the supplies to encourage collection for those populations that Secretary Cohan mentioned earlier and there's a link on the website to request those supplies. It is critical to ensure that the laboratory to which you're going to submit will accept the swap type and media that we are providing you. FEMA has provided us with a diversity of supplies, basically whatever was on the market and they could acquire they sent to us, so we have everything ranging from nasopharyngeal to nasal swabs and saline to traditional viral transport medium, so it's important to pay attention to what your laboratory can test.

Next slide, please.

This is a breakdown of the diagnostic tests available and I showed the molecular test versus the antigen test here. Again, they both begin with that nasal or NP swab, the molecular test is put in transport media and transported to a laboratory, through amplification and then we identify results. These tests are highly sensitive and most of these tests can detect in a single or double digit viral particles on a well-collected NP swab. They're very specific for SARS-CoV-2, they're not going to identify the other coronavirus's that are commonly circulating. I will not say it's a drawback, but the characteristics of this is they do take a couple of hours to run once a they get into the laboratory so most laboratories that have that turnaround time of 24 to 48 hours are running this mechanism, and they're high throughput. So, we can run anywhere from 26 to 384 specimens on a plate depending upon what platforms are in a laboratory.

Another type of molecular test that's run is near patient or point of care there's two approved currently, I mean authorized, by FDA that is the Abbott ID Now instrument as well as the Cepheid Xpert Xpress. The expert expresses is having some supply chain challenges, Cepheid Xpert Xpress is ramping up production, but I do know that this is a very commonly used instrument around the state, and the Abbott ID now was procured largely by federal HHS and distributed, though some of the facilities do have these for strep testing and testing and these devices tend to be less sensitive, you sacrifice sensitivity for speed so these instruments can produce a result anywhere between 15 and 45 minutes, but again they are less sensitive to these should really only be used for someone who is symptomatic at the time of specimen collection, but they are specific for SARS-CoV-2 but they have low
throughput the average runs one of the time and the Cepheid can run between four and 16 depending on the version you have.

I think the development of the antigen test is very exciting and will allow us to get testing much more rapidly close to patients, get results faster, and they’re also faster to produce. The challenge with these point-of-care test of and antigen test which is similar to the current flu test is that they are substantially less sensitive. The one on the market now is only 80% sensitive so there is a risk of 20% false negatives. But they are highly specific for the SARS virus. So, they take minutes, they’re low throughput, but remember if you get a negative result and the patient is symptomatic they should absolutely should be reflexed to the more sensitive molecular test above.

Next slide.

With the antibody tests, there has been significant regulatory concerns around these point-of-care near patient tests. The FDA initially substantially relaxed their rules and about a week and a half ago sort of there was a massive influx of tests that had low performance specifications so we were getting a lot of false positives, a lot of false negatives on these rapid antibody tests and they were picking up other circulating coronavirus, so someone may think that they had been exposed to SARS-CoV-2, but in fact it was another endemic coronavirus or they were in fact exposed and were getting a false negative result. So, the FDA has since clamped down. There was a press release today that they removed - I don’t remember the exact number - but dozens of rapid antibody tests from their website. None of these rapid antibody tests, I guess there's four now, but the majority of them do not have an EUA, so in that case, any test that has not been reviewed by the FDA must be run in a high complexity laboratory. So, if you have a physician office and have a certificate of waiver you cannot, by regulatory requirements, run these rapid antibody test. If you are high complexity lab, you absolutely can. So, it’s critical to review the kit insert if you come across any of these rapid antibody tests to know where you are in the registry spectrum. I think what has been great news this month, earlier this month there has been several authorized laboratory-based serology tests on the ORTHO instrument, Abbott instrument, DiaSorin instrument, and many others and these antibody tests are much more sensitive, highly specific for SARS-CoV-2, they do take a little bit longer to get results but they're much higher throughput, so as we begin to look at the zero prevalence and begin to learn more about the link between antibodies and immunity these are the platforms that are in hospital labs - we are bringing these on at the state-level public health as well - that will provide some guidance in terms of antibody levels within our population.

Next slide, please.

So, I will just end a great graphic that came out of HHS. This is an interpreting matrix of COVID-19 test results and it lists both the viral testing I mentioned earlier, the antibody test, and if you run both and it gives you a nice - I'm not going to go into detail you can search this on the White House website, but HHS developed this - and I think it is a great guide of how you interpret different testing in light of what I described earlier
So, my contact information is on the next slide as I'm wrapping up my 15 minutes, and so if there's any questions related to testing whether it's the state laboratory of public health or in general I’m happy to answer them. And I'm privileged to be followed by Dr. Shannon Dowler our chief medical officer for the Medicaid program and a YouTube star in her own right. I love watching her videos on STIs, so Shannon, over to you.

Shannon:
Thanks very much Scott. That was a terrific overview and I really appreciated it.

So, Dr. Cohen mentioned in earlier remarks that our testing guidance has shifted fairly significantly in the last week, but especially as it relates to testing high risk populations regardless of the presence of symptoms. Over the last two months, we have observed two significant things both in North Carolina and around the country. One is that we are seeing outbreaks that are disproportionately affecting workers who are in crowded workspaces and places that are often staffed by low-income refugee and historically marginalized populations and two, there has been persistent disparities, so risk of serious illness, hospitalization, and death in the African American population is significantly elevated. To that end, we’ve invested a significant amount of time and energy in responding to the pandemic with a health equity lens in the department.

Next slide.

Nationally a lauded STD rap doctor once said – this was me, I wrote this this week, "The history books will tell the stories of the states who use this crisis as a springboard to advance health equity light years ahead. North Carolina plans to be one of them." And I really believe this. We are in a crisis and I tend to be sort of an anguished optimist, and I feel that this is one of those times where we are in a crisis, but we can use this as an advantage for our state. And, as I have occasionally been accused of hyperbole before, this is not one of those times. We are really all in right now. We are investing time, energy, and resources in an effort to turn the tide of health disparities and propel North Carolina forward.

Next slide.

So, in early April, we stood up a team in the department to begin work on this for a variety of angles, and since we’re talk about testing today I wanted to share some of the work that we have done in the testing area related to the populations that are historically marginalized. We have a guiding principle that achieving health equity in our testing strategies requires investing and directing a disproportionate amount of resources to historically marginalized populations. So, we spent the last six weeks not only with folks at the DHHS but a lot of you around the state that have leaned in and joined the team identifying best practices and guidance for the most successful testing strategies to reach out to those historically marginalized populations. There is a belief that interventions really have to be provided with cultural competency and ideally provided with staffing and support of people of similar backgrounds. A great example of how this is important to us is in the CCNC contact tracing effort. There is going to be a significant amount of hiring to reflect the
population that is being served. Our interventions have to create a
linkage to identify and address unmet health care needs, and they also
have to be provided in geographically accessible and trusted locations
and also along with trusted partners.

Next slide.

From a strategy standpoint, we have been partnering with many of you in
the state to identify where we have the most vulnerable communities.
This is a great inequity mapper that drills down the ZIP code and was
developed by Dr. Khairat at UNC and he was kind enough to share this
with me. This is exactly the kind of data we are using to match our
community and state resources to make sure that we are getting into
every nook and cranny of the state to reach our historically
marginalized populations.

Next slide.

So, if your organization would like to jump off the springboard with
us, know that we are ready and available to help create linkages to
resources, offer what we have learned about best practices, or even
show up at a mass testing event. I enjoyed a couple of days in Chatham
County out in the rain and the wind and then the blistering sun and
really enjoyed partnering with Piedmont for a testing event. Next week,
we have a couple folks joining an event in Chatham County.

Our work group has identified some key features that really lean
towards a successful testing event for priority populations, and so I
just want to go over those. We really encourage you as much is possible
to go to the people, so actually go to the communities to offer
testing. An example of this is a partnership that is underway in
Buncombe County up in the mountains where the health department, the
federally qualified health centers and MAHEC, as well as emergency
management partnered together and they developed rotating testing sites
in the subsidized housing communities. Another thing is in your
community, it may actually, because you are really spread out or you
don’t have a lot of subsidized housing communities that you can go
into, it maybe work best to bring people to a trusted place. So, drive
through testing like you see in the slide with the mass testing related
to meat processing plants outbreaks, you see the teams here on one of
these, are great examples where sometimes the testing needs to happen
at your clinic or maybe at a plant or somewhere else and not in the
community. Providing culturally competent education and resources is
critical and ideally your team will involve local health department
educators. They’re terrific partners in these testing events and again,
I mentioned earlier critical components of the CCNC AHEC contact
tracing is intentionally hiring a workforce best fit to serve the
community that are experiencing the COVID-19 infections right now.

Many of our historic we marginalized populations are uninsured or maybe
insured but without a medical home. We really believe that as much as
possible in ordering providers needs to be on site for the testing.
Early on, folks would come to be tested, but they didn’t have a
doctor's order and they would not necessarily have access to that and
they will be turned away, so making sure that you have the ordering
provider on site accomplishes two things. One, it reduces an immediate
barrier to testing, which is key, but two it creates a linkage to care.
So, an example of this is the mass testing Piedmont did with the local
plant outbreak. They tested almost 500 people, but over 200 of them were folks with without medical homes, so through the process of being tested and connecting with Piedmont they were linked to a medical home. So, they were following up on both positive and negative results to reinforce that relationship, and so that really is the best practice - not only linking to the medical home, but making sure you are following up on negative test results and establishing that linkage for future care.

Finally, the last thing I will say from the best practices is really reach out and partner with trusted community organizations to share your testing resource and help bridge trust in the community. We think this is going to be really important as the vaccine becomes available, and we want to be able to go back into the same communities and provide the vaccine and be seen as trusted partners.

Next slide.

So, we’ve learned a lot over the last two months. This is something we have learned from our outbreak and how to manage a facility outbreak. There is a link here that is pointed to a toolkit and some resources on our website, so if you would like to lean in and get involved and you’re not sure how to start we have put together a few-page how-to guide with some important early lessons we learned. Things like making sure you have porta potties on site and tents are good but tents that don’t fly away are better, so we learned important things and rather than having to re-create our learnings we have that information out there publicly.

Next slide.

So, community partners are really critically important. Our local health departments have been incredible infrastructure in our response to COVID-19 around the state but they cannot carry all the water. It is really important that federally qualified health centers that are in almost every community in the state are eager and willing to help with many of these testing events and to the point earlier about preserving PPE and using mass testing and concentrated testing is really the most efficient way to offer testing and a lot of the communities. Emergency management is also an important partner. At this event, you see the picture from Chatham. They pulled in the National Guard support team that came in that cost the county nothing, but the county has to request it. The state cannot request that for you, but they were a tremendous help in doing the testing and sending it up and it was a really positive thing, but we also had medical students there, so they were doing a COVID elective. They came and helped do testing and contact tracing and supported the FQHC with them dealing with bazillions of results. Then also, health systems in some communities are helping with testing, and then mobile clinics who are finding and tracking down and building a database of who’s got mobile clinics so they can drive out into communities, is there a way that your county might want to rent something or borrow something from a neighbor to go out into communities.

So, with that I'm going to turn it over to my colleague Dr. Kansagra, who has done an amazing job leading the testing particularly in the long-term-care space, so I'm going to turn it over to her to tell you about that.
Susan:
Thank you all for being on the front lines and everything you're doing every day to support all the response effort.

I wanted to share a few tools that we have in our website for long-term care settings. Obviously, this is such a high priority population in our response, and if you go to the DHHS website under our guidance page in the long-term-care facility you will see a host of different resources, and this is a few. One of the things that I want to point out is that we do have a long-term-care infection prevention toolkit, which includes an assessment that those providers at working facilities can take. Now, this is a facility assessment that really supports what you can do in addition to testing and how you would implement procedures as a result of testing. For example, cohorting procedures at facilities, so take a look at that if you're working at long-term-care settings and the resources we have there.

Next slide, please.

In addition, we have a number of training specifically on infection prevention control for more of a staff level in a number of settings for congregant care. For example, there's many tools for nursing facilities but also training available for assisted living adult care homes and other smaller, congregant care site. So, the links are also available on our website as well and the UNC SPICE website as well. It's a statewide program for infection prevention, control, and epidemiology.

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In addition, I want to point out that CDC just this week is put out two new guidance related to testing in nursing homes. Both of these have just been posted this week, and, again, they really go through factors to consider when implementing facility-wide testing as well as logistical concerns and how to actually facilitate the implementation of that testing and when to consider serial weekly testing and prioritizing those population that should subsequently get further testing. So, I encourage people to check this out as well. We are continuing to prioritize, in conjunction with the local health departments, facility wide testing particularly for those that have one or more COVID cases and helping to support that as well and providing advice and support on follow-up testing that’s need in those cases as well. And, we are actively looking at this to see where else we should be putting our efforts.

Next slide, please.

The last slide goes through a flow chart, and this, again, it's also available on that same page DHHS long-term care site, and this goes through considerations as they relate to discharging patients from hospital settings to long-term-care settings and post-acute care. Oftentimes, you get the question around what you do with if somebody has tested COVID positive in the hospital and needs acute care, and there is some considerations there that you will see on the left-hand side of the chart, and we are actively working to identify facilities that are accepting COVID-19 patients and obviously keeping those cohorted in designated facilities and designated units where there is
no interaction with non-COVID patients to provide better cohorting. In addition, if you look at the right-hand side of the chart, you will see often times get the question if somebody is not does not have a test in the hospital should they be tested before they go to a long-term-care setting. And, yes, testing should be considered in this setting. Obviously, the most important recommendation we would make there, because somebody would always be incubating, and that test even if somebody is incubating the virus and may not be positive. So, the number one recommendation we are making is when somebody's coming into the facility that for 14 days they should be on transmission-based precautions.

So, this flowchart again is on the DHHS website on the long-term care test, and I will turn it back over to Dr. Dowler to go through other considerations as it relates to our homeless population.

Shannon:
Terrific. Thank you.

Obviously, our homeless population falls into that high-risk category, and the new guidance says regardless of symptoms anyone at higher risk should consider testing, so that individual living homeless shelters or in shelter camps, testing is important features. Recognizing that transportation can be a barrier, the on-site rapid testing does have some benefits here, but to the point of if someone was symptomatic you would want to follow that up with the molecular test, because of that false negative potential. The most critical thing is connecting individuals to services including non-congregate sheltering.

Next slide.

So, easier said than done. Non-congregate sheltering, even though we have done a ton of work at the state level, I think there is still a lot of question marks around the state around how to take advantage of this resource. So, we have teams working on trying to demystify it and make it a little more accessible. So, North Carolina has been approved through FEMA funding for non-congregate sheltering and hotels, motels, or dorms for people without another safe place to live. So, you can use this for essential workers and vulnerable populations including those experiencing homelessness. It includes food, transportation, laundry, and security. 75% is reimbursable by FEMA and 25% by the state. This has to be applied for by the county, so the county, just like I mentioned earlier to get the guard support to come out to your community and help you with mass testing, counties have to apply for this non-congregate housing. There are some exceptions where nonprofits can band together to apply for it as well. So, we encourage calling 211 to find out more about non-congregate sheltering in your community, but there's also link here to the website where there's a lot more information. We do have a team of folks working on this and trying to help pull this resource together and make it more available.

Next slide.

Last week, I had a ton of meetings with local health departments, federally qualified health centers, and others talking about what was going well and what are their barriers. So, it might feel a little discordant if you're out there in the community feelings like you don't have access to these things, and here we are saying test more people
because we have these things. And, so, I wanted to make sure you were aware of these two links that we have. One is the PPE, how you apply for PPE to get your clinic or your location more PPE access, and the other is around testing and testing supplies. So, it feels like we have maybe a little disconnect between what the community is feeling as far as access to PPE and testing and what the state is feeling as far as what we have available, so we want to make sure that we're getting the communication out to you of how to get these resources. But, what I would like you to do a follow-up is, if you're following this process and you're still not getting what you need in this resource base and it's keeping you from being able to set up this mass testing are going into communities where historically marginalized populations are, we want to know. I want to hear about it, and share specific examples of how you tried to access these resources and how you have been successful. Knowing that these resources are pretty new, a lot of the message we see is maybe old messages so we do encourage you to go to this process in this pathway, but if you're still not able to get your needs met I really would like to hear from you so we can figure out where that disconnect is.

With that, I am going to turn it over to the queen of pep, my esteemed colleague, and the cheerful cheerleader for us at DHHS, Dr. Betsey Tilson.

Betsey:
Thank you, Shannon but I'm not sure I can match your enthusiasm, so I appreciate that.

So just to tie it up a little, I think, I hope you appreciate the passion of the whole team from the secretary down. We're really, really trying to bring all of DHHS and in partnership with the community, with the providers, I think you hear from us that this is passion to us, this is mission us, this is our core work, and this is a pandemic that nobody has ever seen before with a myriad of problems to solve every day, but that we are really trying to focus in on taking care about our people and bit by bit trying to streamline all the operational pieces that keep popping up. So, this is the core mission and, I think, I am optimistic to think that all the problem solving that has to do with this pandemic I think is going to leave us with even a stronger system when we get through this pandemic. To be working more together, to be having capacity, and to have a better system at the end. And, I also think that we have talked about health disparities, we've talked about that forever, but this pandemic has certainly shown a spotlight on those disparities. And, all the work that Shannon was talking about, that intentionally thinking about vulnerable communities, that this has shown a spotlight on those inequities. I think that is a silver lining, that if we intentionally lean into them we could be better at the end of it. That's the first piece on the end of this slide, a call to action an ultimate goal, and all the good information that you have heard from our colleagues that this pandemic has shown a spotlight on these disparities and this is the time to really lean in and intentionally address to keep us all better at the end of it.

Two, make sure that you're aware and you have downloaded and printed out and copied this new provider guidance that secretary Cohen was going into. I had a conversation a few days ago with one of our providers and he was telling me that the patient trying to get a test. She was a known contact of a positive and she was trying to get a test
and she was told no, no, you don't have symptoms even if you are a known positive I can’t test you. Please download that provider guidance and share far and wide. Especially people who are symptomatic and are known contacts of a positive, regardless of symptoms we wanted them to get tested, so share that with your colleagues. Also, think about intentionally providing access to some of our higher priority and higher risk populations.

Three, coordinate with all the folks on the ground with your local health departments. Those health departments really are that chief public health operator for the county. Work with your local health department and coordinate and help them be that champion of that community coordination. Help facilitate that.

Know all of your commercial labs’ capabilities. So, we definitely have a state lab, but most of the testing in North Carolina is not going to go to our state lab. As awesome as Scott is, the state lab is not meant to be a really high throughput commercial lab, but we have a lot of commercial labs in North Carolina, so take advantage of them, know them, be sure that we are tapping into the capacity of all of our commercial labs and getting supplied from them. Know the testing sites in your area, and on this last slide that testing site brings us directly to our website. This is enhanced with a digital tool that you can Google your ZIP Code, or your patients can, and you can know where the testing sites in your community are. Look at that and make sure you know the testing site in your community, and also on that site you can add a testing site and modify a testing site, so help us keep those testing sites up-to-date and know that you can refer your patients to that. This is a good strategy to preserve that PPE. If you can’t do it, know where you can send your patients.

And then, again, I don't think this can be reiterated enough, you can request a PPE through that site and you can also request a sample collection. I wanted to be sure you had all those links in one place.

I would say lean in. Let’s take advantage of this pandemic so that North Carolina is better than we found it, and really think about how we tackle our underlying disparities through the lens of COVID-19.

With that I will stop, and you have access to all sorts of DHHS teams to field your questions, which I believe my lovely husband will help to prioritize and sort some of those for us.

Tom:
And your colleague Tom will help with that, so thank you so much Dr. Tilson. Thank you, Dr. Dowler, Dr. Kansagra, Dr. Shone, and Dr. Cohen of course. It was a wonderful presentation.

We have a lot of great questions here, and I am going to start with some Scott questions. A lot of testing questions.

I don't think that that is a specific testing for me, I can give a stab at, but others on the phone might be in a better position. I believe I understand that question correctly, this is sort of what Dr. Cohen was
saying at the beginning. In those groups that she had on her slide, that providers are encouraged to think about if a patient falls into one of those groups and has any of those symptoms of COVID-19 to include that as part of the differential of going ahead and testing, because of those risk categories and an indication of symptomology of COVID-19 that would be worthwhile to test. Did I answer that or maybe somebody else can do it better?

Shannon:
I think that can also be interpreted to say that we are leaning into those high-risk populations, so even not knowing what their environment is like, living in more congested housing that is higher risk, and also having another opportunity to provide education. So, you can do testing for those that don't have symptoms at all that are in that high-risk category. Betsey, would you agree with that interpretation?

Betsey:
I really think the spirit of this is that, have a high level of suspicion if you know people are in high risk environment, especially since we do know that there is a fair amount of asymptomatic spread. So, I would not go out and routinely test asymptomatic people because they are in the high-risk category, but especially if they are presenting to you, may they have some unusual non-classic symptoms, it's really to have that be a high level of suspicion if people are coming to you. And then, also, thinking about this more intentional community outreach and thinking about how do we get access to testing in the community of people that we know are a higher risk.

Tom:
Great, thank you all.

We have a case scenario here: What to do it with a patient with classic COVID symptoms, a negative flu test, and they have a negative PCR test? Would you retest in a few days, and in the meantime, would you recommend quarantine?

Betsey:
I'll take this one.

So, one, I think as clinicians, part of it is thinking over to say my first day of medical school, my mentor said to me, “Before you order a test, think about what you're going to with the results, so think through that.” I think somebody with class COVID symptoms, they're flu negative, and their PCR is negative, there is a chance of false negatives and it also depends on what PCR test you’re using and what level of sensitivity are in our state lab. Our level of sensitivity is quite low and it can pick up very small viral particles, but different tests have different sensitivities and there can be false negatives. So, if you think that person has COVID, I would a) isolate them, and just you isolate sick people and quarantine people who have exposure who have not yet developed symptoms, so I would isolate them and you could think about testing in a couple of days to see if maybe they have more viral shedding now and you can pick it up on a less sensitive test. And, again, there have been some, likely some of the Avid testing where they were realizing that there were a lot of false negatives, thinking about retesting. You also have to think about how you did the sample collection. We know nasopharyngeal is more sensitive, because you're farther in there and you can get more viral load, than a nasal
swab so also thinking through what was your modality and that gives you a little bit of an idea of the sensitivity of a test. Scott, what else would you say, and/or Shannon?

Scott:
I agree. I would not say anything else. I especially support the “know what you're going to do with the result before you get it.”

Tom:
There’s a few questions about the nasal swab technique. This is really compelling because of not burning through a PPE. Can you talk about whether we know what the negative predictive value and sensitivity of that specimen collection technique is?

Scott:
That’s the question we’re getting asked a great deal, because we don't know the true prevalence it's hard to assess the diagnostic test’s true false-positive false-negative rate until you know the true prevalence of the disease in the community and that is still being assessed. So, we have research assessments, and that is not clinically calculated. What we understand is that there is going to be more virus accessible through an NP swab than a nasal swab but I would say that compared to not testing at all or avoiding testing because of not wanting to do one or the other, I would definitely opt for doing the nasal swab. So, I think that it is sort of part of the awareness of how this was done and, again, I think in the end if you have someone with symptoms and they test negative that’s a snapshot in time and it's at that point we do not detect viral RNA and if symptoms persist and concern persists I would go ahead and do another test. So, I know it did not answer the question largely because we just don't know clinically what these rates are yet, because we have not yet had a well-established prevalence of the virus in our community.

Betsey:
The only thing I would add to that is, also, if you think through when people - I think there's a lot of factors to get to the sensitivity piece, and that people with more viral shedding it's obviously easier to pick it up. So, thinking about asymptomatic people, especially who do testing like the contact of a known positive and they are symptomatic, asymptomatic people seem to shed less virus. Now they still can shed virus and they can still be contagious, but it’s less, so thinking through if you’re using a nasal swab in an asymptomatic person there may be lower sensitivity that an NP swab in a systematic person. So, thinking for that as well is another piece of the effectiveness of the test.

Tom:
Great, thank you, Dr. Tilson. One more question and then we will wrap things up.

Several questions about PPE and concerns still about shortages in different parts of the state, so thank you for going through the process and offering those connections. We know that there is a known issue with getting enough gowns for North Carolina. Is there a plan in place to get more gowns?

Betsey:
We are working hard. We had a shipment the other day. It was not huge, but that was the first shipment of gowns we’ve gotten in a really long time, which I’m hoping that maybe the gown supply chain is loosening up, because that has been the piece - we’ve had absolutely no gowns for forever. But, I am encouraged that we got our first gown shipments this week. So, our strategy is to find every vendor in the entire world and in North Carolina and also think about as we get on the North Carolina manufactures to make them, but we know that this has kind of been a whack-a-mole supply chain where every time we get one supply chain then another one falls, and now the current supply chain is gowns and we are working on it.

Tom:
Thanks, Dr. Tilson.

Hugh, will you close our session and provide some reminders about next steps?

Hugh:
Thank you, everybody, for making the time to be here this evening.

Couple questions on here about when these slides and the recording will be available. If you go to the NCA AHEC website there's a green bar at the top with COVID-19 resources, and these slides are already posted there, and they will be the recording and a transcript sometime tomorrow. We will push to get that out as quickly as possible. I want to remind everybody that this time is usually reserved for our Medicaid-related webinars. We stole the time tonight and I'm glad we did, very, very useful information, and we will reconvene next week with what is happening across the state with Medicaid patients and will share the latest data about telehealth uptake and patterns, and we will discuss the care gaps and how to address those, and look at trends and discuss future continuation of clinical telehealth policies. So, we hope you will join us for that.

I got a number of questions that we are not going to be able to be addressed tonight. There will be a provider update tomorrow at 12:30, and you can find information on that on the NC AHEC website as well.

Lastly, Tom and Bob, thank you so much for working together to stand this up and thank you so much for all the great leadership at DHHS to provide this information to everybody and thank you for participating.

Dr. Tilson, I don’t know if you want to say any final words or anybody else on the panel?

Betsey:
I just want to thank everybody who helped convene this call and all the people that took the time out to join, and then all of my DHHS colleagues for helping to put all this together, especially Shannon who really was a driver for this, so thank you for that. And again, I think my say the flowers grow in the valleys, because that's where the soil is richest. So, I think we should take advantage of this pandemic as the valley and just make sure that we take advantage so that the flowers will grow and that we are better for it at the end of it.

Hugh:
Thank you so much. Have a great evening everybody and have a great Memorial Day weekend.

[Event concluded]