

Transcription for NC DHHS Navigating COVID-19

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6:00-7:00pm

Presenters:

Ibukun C Akinboyo, M.D.: Infectious diseases:

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University Hospital

Carrie Brown, M.D., MPH: Mental health :

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“Chip” Watkins, M.D., MPH, FAAFP: Testing

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Carolina

Hugh Tilson:

Let's go ahead and get started. Thank you so much for joining this chapter of navigating COVID-19.

Tonight we are doing: ask the experts. As a reminder, this series is sponsored by these groups.

Tonight is the 13th in this series of informational sessions designed to respond to the needs you have

identified as you navigate COVID-19. I wanted to give a shout out to Tom, Elizabeth, Robin, and

Greg for their leadership in identifying those needs and for the partnership for putting on these

webinars. I want to thank everybody for the work you are doing all day, every day. We hope the

information you get tonight will help make navigating these trying times a little easier.

My name is Hugh Tilson, and Tom and I will be moderating tonight. As you can see, we have some

incredible speakers tonight. A very distinguished panel of presenters. I think you all can read this,

and I've asked each of them to do a brief bio as they begin their remarks. So I do just want to talk a

little bit about logistics. First of all, lots of information in these slides, so we have put the slides on

the website and we will put that in the Q&A and they will be easier to follow. And after we are

through we will turn to questions. You can use The Q&A function to submit questions. And then, if

you are on the phone, you cannot use The Q&A, but you can send an email to us at

questionscovid19webinar@gmail.com. I would ask that you wait until you hear from the presenters

because they may answer your questions, but we will try to get to your questions as quickly as we

can. The presentation is on the community cares website and we will also post a transcript of it

tomorrow. So now I will turn it over to Dr. Akinboyo for her remarks. Thank you so much.

Dr. Akinboyo

Hello, everyone. I am one of the pediatric infectious disease physicians at Duke and the director of

pediatric infection prevention, which is the point -- the perspective I am giving on the first few

slides. I will start briefly reviewing the COVID-19 epidemiology. I will not spend too much time on

the numbers. I know you have seen them, and I will move through summarizing some of the

concerns that I think some of you may have. And I will also address a collaborative that we have

established at Duke that helps to disseminate evidence and support public education in one format.

Starting off with the ongoing epidemiology, a quick update, we are up to about 624,000 cases. These

are the ones that are documented and reported. Not every state is consistently reporting, but it is a big

concern that over 20 states have over 10,000 cases reported in children. For most states these are kids

under the age of 19. Most people ask where North Carolina falls. I don't know that we are on the

good end of this, but we do have a large number of cases. One key question that has remained in all of our minds as pediatricians or people that care for children involves what happens in newborns. This is a new article that came out over the last month that is probably the strongest support for a case of vertical transmission. What does that mean? Assuming that the mother can actually transmit coronavirus to the infant, most of them prenatally, not just around delivery or just after. This particular case-- going through what happened. This was a 32-year-old woman who was 35 weeks at delivery. She had a symptomatic presentation. You would consider this a high risk exposure because her partner worked as a respiratory therapist in the ICU. Her partner was asymptomatic and eventually tested negative, so this may have been acquired through other means. The mother was positive and the child was positive. The child tested positive at 24 hours, 48 hours, and seven days later-- and remained consistently positive. The child was asymptomatic though. The mother followed all of the precautions. The child was isolated.

Why is this important? I think the key point here is that the officers had placental pathology. This is shown on the right, what they think they confirmed to be viral particles in the placenta. So having a mother that was positive having some sign of relative inflammation with increased CD68, but no inflammation on gross pathology. I think they are suggesting that this might be a possible case. We need more information, but we are starting to see some early studies that suggest that we cannot take off the risk that a pregnant woman could transmit to newborns.

Another question that comes up is how should we anticipate the next few months. Are you out of the woods if you have had COVID-19 and have some natural immunity, or should we expect cases of reinfection. Unfortunately, we are starting to see more and more that reinfection can happen. I included this because this is one of the stronger studies that had a clearly defined case. I have the reference on the bottom so I will not go through the nuances. This was a healthcare worker that was exposed at work. This was March of 2020. They had the actual viral sample in the lab and performed sequences from the March infection to the May infection. The infection was then again in May. The lower graph is showing that this healthcare worker also had symptoms during the second infection and that exposure occurred at home and they think this is why the symptoms were worse. It was a much longer exposure or a higher dose. But the viral particles were substantially different when they looked at sequencing suggesting that re-infection can occur and occurs much earlier than we anticipated.

Not to be the bearer of bad news, but shifting gears a little bit but to COVID-19 and influenza, as we enter into the flu season. The southern hemisphere sees their respiratory season earlier than us. This summarizes what their experience has been so far. These are available through the CDC and can be reviewed in detail. This was a quick snapshot looking at the typical pattern of influenza infections and comparing each year for the last three or four years (2017-2020). You can barely see the line that tracks the number of positive tests for influenza. Basically showing that the percentage positive for influenza was much lower than any other year recently, even when they were performing similar number of tests. The same thing happened in South Africa. They have a similar pattern there again, they see their season before us. You can barely see the line for 2020 because it is at the bottom of the graph. So what does this mean for us in the next few months? Will we have COVID-19 and influenza spiking? The short answer is, we don't know. The data from the southern hemisphere suggests that we will see influenza not as bad as we've seen it in the last few years, but we know that the COVID and the flu have similar symptoms and it might be hard to delineate what is happening when one shows up with symptoms. It is encouraging that our efforts to curb COVID-19, such as mask wearing and distancing, will likely curb influenza. And we have vaccines for influenza, I cannot preach enough that everyone should be vaccinated if you're over six months of age. And we have antivirals that shorten the symptoms for influenza. We have more encouraging news around the flu and we can manage it and the data from the southern hemisphere show it may be milder, but we should not step back from vaccinations or precautions.

The last question I will address is about vaccines for children. In particular are we at a point where if the vaccine is available, will be mandated and not just recommend that. We already mandate several vaccines. If schools cannot open, will they just mandate vaccines so that they can open? And if you think of COVID and the flu, the reproduction number-- this is a number that tells how quickly the infection can spread -- is approximately 1 for influenza and for COVID-19, it is 2 to 2.5. So would we mandate a vaccine for children, but we are not there yet. We have many different criteria to consider when evaluating antigens for inclusion in the mandatory school program. This shows that if you go through previously approved criteria, COVID-19 may not actually fit with the vaccines that we typically mandate, specifically because we see such a milder course in children and the evidence to suggest an immediate mandate may not be strong enough. That being said, a vaccine may be the only way out of this. So it would be important to include children in the future.

I will switch gears for a little while and talk about the question around schools and kids and COVID-19 and when we will see an end to this. At Duke we have one effort that we've put together called the ABC science collaborative. We're trying to unite science in schools. I will go through a few slides reviewing the aims around this and if you have questions, I'm more than happy to answer them afterwards. So what is this idea and what are we currently doing? The initial case that led to us coming together was that schoolteachers and superintendents are reaching out about some feasible approach to implementing guidance that came from the CDC and the states for opening schools. This was an attempt to have a data driven approach that initiates a direct family and community engaged data dissemination to promote guidance from the state and local health departments. And it is a three-tier approach. Education, sharing new data, and targeting research opportunities. These slides are available and you can read them later.

Our first aim is educational outreach. And this is what that means. We provide webinars, initially focusing on teacher and staff questions, and now we are incorporating parent questions as well as newsletters and new public facing websites. The second aim is to help schools collect data. Schools have struggled with what to focus on in terms of data collection. Should it be attendance or symptoms or testing strategies? Realistically, we are referring to public schools that may not be as funded to support some of the strategies that we've seen in private schools. Our goal here is to provide weekly customized data driven information to school administrators to inform what their practices will be over the course of the year as we go into flu season. We are anticipating that this is not going to go away for the next year and a half, if at all, if into 2022. So creating some specific data dashboards and assessing the impact.

This is where I wanted to get to. Because the goal is to show the full graphic and that this is a potential structure where we have school county data, CDC information, and emerging research and we're following that to a data leader and project manager, leading into the school board. School board is usually thought to be the school district board, but for us, it is just the superintendent. There are a number of people involved and it is not just Duke, we also have a UNC collaborator. And there are a number of pediatricians that help with coordinating this and disseminating information. We all try to do a little bit in our circles and this is one way that is happening and we may be reaching out to people over the next few weeks or months. Thank you. I think that is my last slide.

Hugh Tilson:

We did get one specific to the ABC program. Are you sharing this information with all school systems, or do they need to sign up?

Dr. Akinboyo

Because of the legality and the data concerns, they do have to sign up, but all of the data will be publicly available on the website and we are focusing on North Carolina with plans to reach outside of North Carolina.

Dr. Brown.

Good evening. I'm happy to be here this evening. I'm the chief medical officer for behavioral health and IDD here at the Department of Health and Human Services. More importantly, I am a North Carolinian, I have been here for 28 years and I am very proud of the response from the state and this is definitely a marathon. I am hoping to have a couple of slides to share with you with some resources. I think it is important that we think about the behavioral health impact of this pandemic in addition to the physical health impacts. And particularly on our healthcare providers and first responders. We have had a global pandemic and it is a global trauma. I particularly liked this quote from this recent JAMA article, "daily news of large-scale COVID-19 related disease and death in the community over months or years is almost certain to elevate psychiatric burden in the population. As such, the pattern of stress resembles that experienced by refugees or others exposed to chronic violence rather than acute disasters like the 9/11 terrorist attacks." I was particularly struck by this quote as we head into the eighth month. I think we have all had our own personal experiences as well as clinical experiences and other experiences within the pandemic. This is a long-term project. Just to give you a few statistics that we have thus far in terms of the behavioral health impacts of the pandemic specifically in NC. In regard to anxiety and depression, in good times we have about 1.5 million people over the age of 18 with a mental illness. 1 in 5 don't receive care or treatment, and that's pre-pandemic. Now what we are seeing is a threefold increase in reported symptoms of depression and/or anxiety disorders. It doesn't mean that the individual meets full criteria, but the symptoms of depression and anxiety are up. 1 in 3. So it is a threefold increase. It is not surprising but nonetheless concerning. Younger cohorts are reporting higher prevalence of anxiety and depression. You might've thought it would've been older cohorts given the increased mortality with age. But the other thing is that the prevalence among racial groups is consistent. We are definitely all in this together.

In terms of substance use, particularly alcohol and opioid, we have an existing unmet need. Pre-pandemic, eight out of nine North Carolinians did not receive treatment in a specialized facility. Now we have seen liquor sales increase by 12% and in the nationwide survey we found one in four respondents reported binge drinking at least once and that was in the past week. Up from one in six, pre-pandemic. In 2020 so far North Carolina, initially we experienced a decrease in overall emergency department visits. But a 19% increase in medical or overdose ED visits. And that has been largely driven by the increase in opioid overdose emergency department visits. Unfortunately, a lot of the progress we made, we had a 10% drop in deaths, and now we've seen a resurgence. Another thing we worry about as we head into the fall and winter when social isolation might be even harder given the weather and the fall can be a seasonal component. We are particularly worried about suicide. And one thing that we know historically is that for every 5% point increase in unemployment, we estimate an additional 304 North Carolinians will die from suicide annually. It just reminds us the importance of publicizing the national suicide hotline, talking with colleagues, friends, and patients about safety in regard to firearm storage. North Carolina's primary method of successful suicide is by firearms. So we have a lot of work to do in terms of safety.

How are we bucketing interventions? We have \$116 million of funding from the C.A.R.E.S. Act and an additional \$3.5 million from other federal sources. All have been allocated to address the emergent issues relating to behavioral health. We've focused on congregate care settings and that has been a focus for the pandemic. Also 3 months of temporary funding to support increased staffing and care costs at residential facilities and care homes. We're also trying to manage prices and tying that into Hope4NC and other programs. Also, increasing the state funding services for the underinsured--and this is critically important. Particularly because we are not a state that has increased funding for medicaid. We have \$88 million for increased state-funded services for underinsured. And substance use disorder and abuse, some of that will be covered in the uninsured bucket. Because a good proportion of individuals are uninsured, but there is a particular amount, \$1.6 million and additional \$400,000 set aside for doses of naloxone to make sure we have a broad distribution.

So what else can we do? In addition to increasing funding in areas of behavioral health and making sure we are reaching the uninsured and underinsured, and really, the entire population. This is a global pandemic and the behavioral health impacts of spared no one. We hear a lot about the 3 Ws: wear a face mask, wash your hands, and wait 6 feet apart. We need to think about what is our behavioral health messaging. The department has launched a health messaging campaign that is aimed at prevention. It is called the SCOOP on managing stress. That is to stay connected to family and friends-- and that is based on the evidence that social connections build resiliency. Compassion for yourself and others-- and that is based on the evidence that individuals that have been diagnosed with it who can exhibit self compassion reported decrease in trauma systems. I think it is particularly important as healthcare providers to exercise a healthy degree of self compassion for each other and ourselves as we navigate this pandemic. Then observe your use of substances. This is because we have seen increased use of substances for coping and from a motivational interview prospective, you could say avoid abuse of substances, but the idea is to be curious and observe your use. And promote early intervention which we know can intervene before things become problematic. The next O is okay to ask for help. And wanting to be de-stigmatizing. Struggling is normal. Asking for help is empowering. And then physical activity to improve your mood. There is a wealth of literature showing that exercise will boost your mood and lowers anxiety as well as a treatment for mild depression.

We have two statewide -- in case you don't know about these, in addition to the SCOOP campaign, we have launched two statewide 24/7 crisis lines. The one that I want to draw your attention to is Hope4Healers. You will see the number there and this is a partnership with the North Carolina Psychological Foundation. It is focused on providing mental health and resilience support for healthcare professionals and emergency medical specialists, first responders, and other staff who work in healthcare settings and experience stress from working on the front line. This is available 24 hours a day and it is staffed by mental health professionals. So I encourage you -- if anyone wants flyers, please feel free to reach out to me. I will send you these graphics and you can post them around your offices so that all healthcare providers in the state are aware of this free resource. We also have Hope4NC, also 24/7, and that is available for any resident in North Carolina regardless of insurance status or residency status. It also includes a crisis counseling program through partnership with FEMA and Samsara tailored to COVID and will help individuals impacted by the pandemic. Here's my contact information and if people have questions, you can reach out if you're interested in some of those graphics to post in your offices. Thanks so much.

Hugh Tilson

Thank you, Dr. Brown. Dr. Watkins, are you ready?

Dr. Watkins

Can you hear me? Thank you Hugh. Good evening, everybody. I am a regional medical director for community care of North Carolina.

I am not sure how I got to be an expert in this, but I do have some experience in laboratory medicine. I'm the chief medical officer at a small laboratory here in Asheville. We will be coming online with COVID-19 testing soon and we will be running four different platforms and most of that has to do with the fact that there are still supply-chain issues. And we will be doing PCR and antibody testing. So way back in March the director general of the W.H.O. said you cannot fight a fire blindfolded, and we cannot stop this pandemic if we do not know who is infected. It shows us the importance of testing and we have not had a terribly comprehensive testing program in this country as of yet, but I think it is getting better. Just a word about the viral time course. The blue line is the viral load which waines about after 28 days. And I bring the slide up because of the antibodies. IgM antibodies become detectable about the seventh day and waine about 3 weeks after exposure. IGG don't start

until about day 14 and they will remain in the blood and provide some sort of long term immunity. It looks like about 90% of people will go beyond three months. and half life seems to be about 73%. If you guys want more testing resources, here's a couple of good ones. This is provider guidance on the CCNC website and I put together a point-of-care testing, which is guidance for practicing physicians. It lets you know what is out there and what you may want to consider putting in your office.

So let's look at the tests. So there are basically three tests. There is the molecular or PCR test that detects the virus's genetic material. There is the antigen test that looks at proteins on the surface of the virus, and then there are the antibody tests. The molecular and antigen tests are diagnostic tests and they should be used when we are looking at active viral infections. Or if someone has had a particularly close contact.

So let's take a look at five molecular tests that can be run in the lab that have a certificate of waiver (COW). That is what most smaller practices have. There are high complexity labs like the one we have here in Asheville. So this first one is the expert express PCR. You get results in about 30 minutes. And then there is a sensitivity of 100% and a specificity of 100%. How did they arrive at those numbers? To get an EUA-- emergency use authorization, you have to provide some clinical data. So what a number of these companies have done is got negative patient samples from when before COVID was on the earth and low and behold, 100% specificity. And then they spiked those negative samples with COVID-19 and ran them on their tests, and 30 out of 30, 100% sensitivity. All of that being said, have to be a little bit of buyer beware. And hopefully these companies will be doing more clinical studies and they will report these as they go along. The next test is the A ccua COVID test. This is just kind of a conventional lateral flow not unlike a test for strep throat or pregnancy test where you have the sample in the reagent and put it on the paper and you get lines and then you load into your little machine-- and this is what this one looks like. The third one has had a little more publicity, the ID Now Test. This one gives you a positive test in about five minutes and negative in about 13 minutes. You can use nasal or nasopharyngeal. They have done some pretty good clinical studies with this test. About 95% positive agreement and 98% negative agreement. What do these terms mean, those are terms when you have a new virus and new testing, there is no reference that we can use for that. So you cannot actually call it sensitivity and specificity, but it means about the same thing. So you will see positive percent agreement and negative percent agreement for these tests. This is about the size of a toaster. It is a cartridge system and you put it in there and close the door and walk away and in 15 minutes you have a result. This is the next kind of test, the Cue COVID PCR test. It is a cartridge reader and they have done a little bit more than the minimum on the clinical evaluation and these are very high numbers. They also did 60 negative patients with the spiked 30, so they have specificity of over 95% and sensitivity of 100%. Take that with a grain of salt. This is what it looks like. In this one, that is actually the sample wand sticking out of the cartridge. This runs for about 15 minutes and the answer comes up on your smartphone. I'm speaking to you at about 150 words a minute with gusts up to about 260. The fifth one is the Cobas. This is the first multianalyte one and it just got approved September 14th. It can do SARS-COV-2 as well as influenza A and B with the same sample. So let me show you a picture of this. This is the data on this. So on the COVID test, the PPA is about 96.4. and the NPA is about 98%. For influenza, it is noted too. And this is about the size of a half a loaf of bread. These things are very small and will fit on your counter.

And then there are four antigen tests that can be run in labs that have a certificate of waiver. The first one is the Sofia 2 from Quidel. They had some early clinical sensitivities that ran at about 80%. Over the summer they updated their performance data and they now have a PPA of 96.7 percent and sensitivity of 100%, so pretty good. BD Veritor System is the second one. A little lower sensitivity at 84% here and 100% specificity and because of that lower sensitivity, the FDA recommends that if you get a negative test and you have a high suspicion of COVID-19, go ahead and confirm that with a molecular RNA test. And this is what this one looks like. You may have heard about these first two

because of the Defense Production Act that we have heard about recently. If you are in line to get one of these, you might be disappointed because the government has taken over and they will get out 14,000 of these testing units out to skilled nursing facilities, which is fantastic. But if you are on the list to get one, you could be pushed to the back of the line. If you already have one in your office, then you should be able to get testing equipment. This is the third test from the UK, the Lumira. The turnaround time here is about 12 minutes and the test is touting 98% sensitivity and 97% specificity in the premarket analysis. This one does use a NP swab. This is the procedure shown. The fourth is the BinaxNow, and this is the first direct read card test-- very cool. Very simple test. You do bilateral nasal swabs and stick the swab in the card. You put drops of reagent in and seal the card and walk away and in 15 minutes you have a result. No instruments required. So a sensitivity of 97% and a specificity of 98.5% and you are all sitting there going, oh, my gosh, this is what we are waiting for, are you kidding? This is the card and the little QR code you can read that on the NAVICA app. And you will have something to hold when you sit around the Thanksgiving table. Hopefully you have gone out and gotten the test and it has been negative and you quarantined with your family for five days and retested and you can all go to grandma's house for Thanksgiving, so yay. The government has also taken 150 million of these Binax cards and they've also given first right of refusal to the next 150 million. So you may not be seeing these across the counter anytime soon. We will talk about antibodies next.

It should not be used to diagnose COVID or to determine someone's immunity to reinfection. You cannot use it as an immunity voucher. So antibody tests tell you if someone has had the infection. On September 23rd, the first serology antibody point-of-care test came out. This is the assured COVID-19 IgM IgG rapid test device. This is what it looks like. It uses finger stick blood samples. Again, typical lateral flow technology. And here is the PPA from over 15 days with IgG. PPA is 100%. IgM, a little bit lower.

This link has to do with a code for testing for antigen tests. And this code is seen here. Positive antigen tests with a high specificity, you should feel really good about a positive test of the patient actually having the virus. A negative antigen test needs to be considered in the context of pretest probability, exposure, clinical science symptoms and all the things that will come into your decision-making process. But it should be confirmed with a molecular assay if you believe that the patient has COVID-19.

Here's that bulletin. And this is the guidance link to the guidance on reporting. That is all I got. Any questions?

Tom Wroth:

All right. Thank you so much to all of you. One thing is that you have already hit several of the questions in the chat, but we do have several more. Thank you for these presentations. I might ask one of the questions here to you, Chip, and it is about what is considered -- it might be for all the panelists. **What is considered low incidence as opposed to high incidence numerically? Those terms are used frequently when discussing schools reopening without a hard number.**

Dr. Watkins:

I saw that. I'm not exactly sure what that question means. I think it means, you know, a high incidence in the community? I think we typically think you want that number-- in terms of going back to school-- you wanted to be less than 5% if not lower. And I think that is what they are talking about.

Tom Wroth:

I think that makes sense.

There is a question about sources for testing uninsured that are free for the clinic to obtain. And are there point of care or waiver tests by practices that want to treat the uninsured?

Dr. Watkins:

I am not an expert on the finances. We have gotten a lot of mixed signals from the government in terms of shutting down testing sites and opposing funds for testing and tracing. I know that the Family's First Coronavirus Response Act did create a state option to extend Medicaid eligibility to the uninsured for COVID-19 diagnostic testing. And that is an option that is fully funded by the government, and as far as I know, it is in effect as long as the nation's operating under this declared public health emergency. And I think that was recently renewed with no end date specified. So given the magnitude of the pandemic, it is likely that the national state of emergency will be in effect for the foreseeable future maybe.

Tom Wroth:

Dr. Watkins, one more to you. **Where can we purchase these point-of-care PCR and antigen tests? Any advice to the practices out there about how to obtain some of these?**

Dr. Watkins:

I think your best bet is your big providers, and get on the list. I don't know of a better way to do that. Some of the people in the audience may actually know or may have purchased some. But I would certainly start with McKesson and Henry Shine.

Tom Wroth:

Thank you. Dr. Akinboyo, question about pediatric vaccines. **And with Operation Warp Speed, where the vaccines are in clinical trials, are they being tested in pediatric populations?**

Dr. Akinboyo

A good question. No, they are not. And that is normal for vaccine trials. Just to take a step back to clarify, what is being sped up is the part of vaccine production that has to do with manufacturing and distribution. So that typically takes 3 to 5 years and it extends the vaccine process quite a bit. So that is now occurring in parallel, but as far as I can tell, pharmaceutical companies are still going through the rigorous safety protocols to produce a safe vaccine. Children are not amongst the first couple of trials. We may be able to apply some of the evidence to recommend vaccination in older kids and then they will do a truncated trial on younger kids.

Tom Wroth:

So we are seeing increased incidence in adolescents and that information is starting to come out. **So you're thinking that we will start with adolescents and then try to do trials in younger kids before they move into younger populations?**

Dr. Akinboyo.

Possibly. This has happened with other vaccines. We are in a new time, so potentially there may be workarounds to the typical process, but I don't think they will remove safe practices. There will be a pileup process, so there will be a trial in older kids first prior to disseminating a vaccine product. And it is required.

One quick comment alluding to vaccination again, we need to reemphasize that for kids to become part of the vaccinated population, we anticipate another year and a half. So I'm thinking more 2022 compared to 2021. So all the forward thinking plans have to incorporate vaccination in kids much later than in adults.

Tom Wroth:

A clinical question for you. **Walk us through when you have a child with a fever and comes to your practice. I am assuming we will be doing flu testing and COVID testing. Walk us through**

this scenario. The flu is negative and COVID is negative. What advice do you do and when would you retest and those sorts of things?

Dr. Akinboyo

I will try and address testing first and then retesting later. Is so hard to separate out what is the flu and what is typical bronchitis or one of the many viruses knowing that maybe you will see fewer cases if you have access to rapid turnaround testing for influenza and COVID-19 because we have a pandemic and you would likely do something if it is a flu positive case. It makes sense to test for flu and COVID at the initial presentation. If it is a younger child, for example, less than one year of age and potentially testing for RSV, it may make sense to test for RSV as well. The caveat to all of this is that we are in an era where some of our public policies and state or school policies make influence testing strategies. It is important to stay ahead of that and you may have to test more kids particularly for COVID-19 to rule it out so that they can return to school or return to care sooner than 14 days. I would start off testing for flu, COVID, maybe RSV if the age fits. I would hesitate to retest except if symptoms worsen or if they have another documented exposure and potentially retest at another 5 to 7 days. And then, of course, if it was an asymptomatic test initially, or if, for whatever reason, we captured them too early, maybe then retesting is reasonable. **And then the last question is do we actually have to test all these kids?** We typically don't test all these kids to confirm that they have a viral infection. This year may be different. Not every child that snuffles needs a test, but they may meet the criteria for COVID testing based on what you're already doing, but not necessarily all the respiratory viruses or the respiratory viral panel. They use the same reagents and maybe the doctor can jump in for this. If we are sending a bunch of different tests, we may slow down the entire process.

Tom Wroth:

That is really practical advice.

Dr. Watkins:

Maybe a random thought, but it makes me wonder if we have the amount of tests that we really need for kids, that may actually drive what we do in the schools. We have all read how they have these pods of kids and you can even do tests for the whole pod on a daily basis or something like that so that you would catch this very early and then you can limit the spread by doing that kind of thing. If we had the number of tests that we need, I think there are a lot of creative ideas we could use to keep our families safer.

Tom Wroth:

Dr. Brown, there is very concerning data around the increasing anxiety and depression and substance abuse and alcohol use, and just thinking about how patients have been deferring care and it has been harder to get people to come in. **Tell us a little bit about telehealth for behavioral healthcare and what the uptake of that is like in the state and if it has been an effective modality to reach out to some of these patients that need care.**

Dr. Brown:

That is an excellent point. Particularly because behavioral health may lend itself a little bit more to telehealth in terms of ease. We have seen a remarkable uptick of telehealth in the behavior health sphere. Large health systems, like UNC, almost overnight went to entirely telehealth care in the behavioral health space. We really pushed the behavioral health providers in the Medicaid space to go to telehealth as well as removed all kinds of barriers and hopefully you saw the feedback, which I think just ended in terms of updating our telehealth policy for Medicaid for NC, but I think one single lining of this pandemic is we will push telehealth much further forward in nine months then

we could have done in 10 years. What we have also seen is that no-shows have dramatically decreased. For practices that have collaborative care, I would be interested if anyone on the call practices collaborative care and uses telecare, what they have found in terms of no-shows, etc. I think there is room for plenty of creativity here. And the thing to be hopeful about is yes, the numbers are concerning, but, again, the numbers are increases in symptoms of anxiety and depression, but it is also important to recognize what a normal response that is to the severity and duration of this pandemic. If we do early intervention, hence, really the importance of prevention in the behavioral health sphere, and really focusing on stress management and early intervention and getting people into care, we have a chance to really mitigate a lot of that. I think that is the plus side, but I'm glad you brought up telehealth because I think telehealth has been a really positive development, particularly in the behavioral health sphere. And many of us that are used in person behavioral healthcare -- we are reluctant/ concerns about whether it would be as effective. All of the data is showing that it really is as effective in terms of psychotherapy and medication management. I think where telehealth falls short is for some of the enhanced community practices. So, for example, individuals with serious mental illness in a community that require additional support and have a lot of comorbidities. That is particularly hard to translate that service into telehealth, although, [indiscernible] have done a good job of integrating it into their services. We also have to be mindful when we are thinking about telehealth in terms of access to telehealth and remember that we still have on the order of 700,000 North Carolinians without broadband access. So we have to give a thought as to whether we are exaggerating existing disparities as we shift toward telehealth and ways to mitigate that.

Tom Wroth:

That does make sense. Thank you. I'm going to try to fire through a couple of these. We are almost out of time. **Dr. Watkins, if you are a small independent practice, what antigen test is optimal and available as a point-of-care test?**

Dr. Watkins:

The Sofia-2 and BD Veritor may be hard to get your hands on. As I said, the companies are making 1000 a month and the government is taking the next 14,000 of these. So it will be several months before these come out. You've got the Lumira. I think if you don't have one already, probably getting in line and calling McKesson or Henry Shine to see if you can get on the list as soon as possible.

Tom Wroth:

We have so many other great questions. I want to remind you that the slides are already posted and there will be a recording available as well. I was thinking that when Dr. Brown was talking, she had a great picture of a graph over time that showed the response to trauma for the population. I believe it got to a lot of the things she was saying and what we might expect the response to be in the people that we care for. I wanted to just wind things up and thank the panelists so much for their time. Amazing presentations and you hit the nail on the head. This is exactly what people needed to hear tonight. I wanted to thank you all for taking time at the end of your day to participate in this webinar. And we appreciate the work that you're doing for the state and we look forward to being with you again in another month-- navigating covid webinar. And look out for DHP webinars coming up for Medicaid managed care on the first Thursday of the month. On the third Thursday of the month will be clinical topics and, again, thank you so much, and have a wonderful evening.

[Event concluded]