Transcript for NC DHHS COVID-19 Response Updates

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All right, well my clock says six o'clock. So let's get started. Good evening, everybody and thank you for participating in this evening's DHHS COVID-19 response update. This evening you'll hear from DHHS leaders will provide timely information on the state's approach to COVID-19 vaccination, testing, treatment and other actions. My name is Hugh Tilson. I'll be moderating today. Before I turn it over to our state's health director and chief medical officer, Dr. Betsey Tilson and the rest of the DHHS team I'd like to recognize first that we all wish that we didn't need to be doing this tonight. That said, Thank you for making time in your busy schedules. To participate in this webinar. And thanks so much the DHHS team for their tireless work including preparing the great information they'll present tonight, a few brief logistics. You can adjust the proportions of the slides and the speaker by clicking on the gray bar just to the right of the slide and dragging it to the side. That will make the slide bigger or the speaker bigger. And you can also hide the list of all the people who are who are not speaking so you just see the speaker. So if you look on your screen, there's a View button in the top right click on that and select Full screen then you can get the speaker on there. There's a link in the q&a to the slides. You can download those and follow along. And then after you hear from our presenters, so we'll turn to your questions. We'll try to respond to questions as they come in if we can. We'll also have time at the end. To answer them live. Everybody is muted, except for our presenters. So you can submit your question by using the q&a function on the black bar on the bottom of the screen. And we will record this webinar and make that recording and a transcript of it along with the slides available on the NC AHEC website tomorrow. So now let me turn over to Dr. Tillson.

Dr. Betsey Tilson

Perfect. Thank you very, very much. And thank you all for joining us. We know there's been a lot of things going on a lot of changes and we really thought it was time to do another overview and webinar on all things COVID with everything that's been going on. So thank you for joining us and more

importantly, thank you every day day in day out for caring for your patients, caring for your staff members, caring for your family, caring for your community. We know it's a long haul and we appreciate you joining us in fact Today marks an anniversary that this day two years ago was our first person under investigation. That person ultimately tested negative for COVID. But it was our first person to have been tested. This person traveled through Wuhan had been in a different city in China. traveled through Wuhan and came back to North Carolina. So this was so that was our two year anniversary of our first Pui. So thank you for staying with us on this two year long journey. We hope we won't have to have many more of these as we move forward but we appreciate you staying with us and just really want to recognize the long haul that this has been for, for you all for our providers for our patients for our communities and for our state.

We have a lot of material for you. And so we allotted an hour and a half for this just so that we're sure that we will have enough time to give you all the up to date information but also be able to have time for questions and answers. We will be trying to answer some of the questions in the chat but we'll also have time at the end for some more live questions and make sure that we get most of your questions answered. I will be starting out and covering a couple of the topics I have with me. Many of my DHHS colleagues and teammates and leaders of whom I could not be more grateful to be on the team with so I'll start out and go over some of our trends. Some of our guidance changes I'm going to turn it over to ... was leading a lot of our vaccination efforts as well as Kelly Kimple, you know, well, I will be updating also on some of the our vaccine system upgrades. Then we'll turn it over to Dr. Susan Kansagara who is our deputy Deputy Director for division of public health and who's also now stepped in to be our new COVID operations lead. As Cody Kinsley has moved into our new Secretary role. So we're so grateful to have Dr. Kansagra. Join us tonight, and you'll be seeing more and more her name and she's really stepping in and leading our overall operation work. Then Dr. Fuller Moore of who may be very familiar with has been with us since day one will be going through the therapeutics, Kimberly Clements, who is a huge point for us with the hospital or hospital systems and med surge will do an update on our med surge. It's just one of the things that we're most concerned about right now. And then Robin Deace who will talk about some of our communications updates resources for you all and we also in the wings we have Dr Dowler listening in that if you have a Medicaid specific question, Dr. Dowler can handle that. And we also have Angel ... who many of you know has worn many hats throughout the pandemic but is one of our therapeutic team members as well. So several other people that can be resources for you. So that's our plan for tonight.

And Nevin if you want to go to the next slide. Terrific. And then the next slide. Great. I'll walk through some of our trends with you so you have a sense of what is going on across the state in terms of numbers. I'm sure you are feeling this in real life with either yourself or your family members or your patients or your communities. So I hope that you all at this point are very familiar with our four key metrics that we have been using to follow the course of pandemic throughout these two years, unfortunately, on the left hand side looks at some of our data around cases. The top left is our daily lab confirmed cases we know this is an undercount. And there's many more cases in our lab confirmed cases but this is our daily lab confirmed cases. One of the thing and you can see that the first flip was the one that was last year but this time last year if you look between 11/1 and 2/1 that was the surge we

had last winter and then the surge after 8/1 that was the Delta surge that we had. And now you can see this is the omicron concert so it has eclipsed by might many folds are prior surges. Now we have a lot of lot of testing going on and but we are quite confident that this surge is not just more testing and more identified cases because if you look at the bottom, this looks at our percent positive which is an all time high. We've never ever had a percent positive as high as 33%. We were getting concerned about 15%. So very, very high percent positive, along with very high lead confirmed cases. We know there is a lot out there.

On the right hand side, we look at the metrics of how many people are needing hospital level care on the top right. These are people who are coming to the emergency department for COVID like illness, that red line is this year and you can see it is higher than past years. So people are coming to the emergency department for COVID like illness we are starting to see this. And this is what we call an early indicator we see this move before some other metrics and you're seeing it may be starting to to tip just a little bit in terms of its rate of acceleration. The bottom right is our number of people hospitalized with COVID all time high on here, but maybe starting to decelerate in our rate of hospitalization. So the take home of this is all of our key metrics. Very, very high. Historical highs are rising, maybe starting to see a little bit of stabilization maybe but I don't want to get too ahead of my crystal ball. Okay, next slide please.

A couple other things just to give you a little bit more insight into the data. This slide looks at the case rates across all of our age groups. And you can see that we are having escalated cases across all of our age groups with 65 and under being the age group that seems the most protected and they are the age group with the highest level of vaccination and boosting. So it does seem like this higher age group is enjoying the benefit of vaccination and boosting but we're seeing again, a case rates across everybody including our children. Next slide. Unfortunately the other thing that we are seeing, although we saw a narrowing of disparities of racial disparities in different points of the pandemic, but unfortunately in this omicron surge, you know, once again seeing a widening and disparity with our African Americans having much higher rates than other other racial groups in North Carolina. So unfortunately, we are again seeing that increase in disparities. Next slide. Same thing with our Latin X population. They've always had a higher rate of cases that are non Latin X population they are in that kind of a more purple line up top and you can see high rates in our Latin X population. So really, really, really needing to keep our focus on equity. A lot of our historically marginalized population communities color are our frontline workers are essential workers high rates of exposure, so we need to keep with that lens of equity. Making sure that those populations are being protected.

Great, a lot of the surge is multiple layers that are accounting for the service one, respiratory viruses spread more quickly in cold dry air is fully dry, too when it's cold and dry people move indoors so you have more risk of spread indoors, three are coming off all this holiday season when multiple households are mixing and matching. So all of those things tend to accelerate us through viruses anyways. Plus, now we've had the introduction of the Omicron variant, which seems much more transmissible than the Delta variant which was more transmissible than prior variants. Omicron is spreading rapidly. I will show

you data in a couple of slides it is pretty much overtaking all of the other variants. The good news if there is good news and all this is that the preliminary data that seems to be holding, at least for now is that omicron seems to cause less severe disease, it seems to affect more of the upper respiratory tract, so more Nose and Throat symptoms, more so than the lower respiratory tract with severe lung, lung issues and we are seeing this in some of our hospitalization data. Although our hospitalizations are record high our ICU beds are not at record highs. So fewer people if they've been hospitalized are needing ICU care. So that is a little bit of a silver lining. It's a little bit less clinical severity of Omicron thankfully. But some of the things that we are learning is there does seem to be decreased protection from a primary series of vaccination and past infections. However, boosters do seem to provide increased protection more than the primary series some estimates from earlier data coming from South Africa and the UK, is that boosters can get you up to about 75% protection against infection. And boosters do provide good protection for hospitalization and severe disease as well that 81% protection for hospitalizations for boosters. So boosters still do seem to be very important in preventing severe illness. The other thing we're struggling against and you'll hear this from our therapeutics team that unfortunately a couple of our monoclonal antibodies are not effective against Omicron. So we're down to one monoclonal antibody instead of three, but sooner rather than arrivals do seem to be effective. So we're working through that and that's one of the reasons that we've had a shortage of our treatment is because two thirds of our multiplying bodies are not effective. Next slide.

Okay, so here's just a little bit of data on Omicron. On the left hand side is our sequencing data that comes from we have a network of labs across North Carolina, that sequence a subset of our samples to give us a good idea of what's going on. The red is delta. So you can see how Delta just eclipsed all the other variants in the late summer and the fall, green is Omicron. And now you can see that omicron is eclipsing and delta. And this is our sequencing data. There's a little bit of a lag. So you can see this as data up until the the that first week in January of our actual circumstance data. But we're about 85% Omicron as a week or two ago. On the right hand side, this is CDC data. They look at trends and look at sampling across the country. And they do what's called an out passing estimate estimation of the percentage of Omicron. This is for our region four which is a southeast region and you can see that estimate that we're about 98% Omicron now in the in the southeast, so it's pretty much all on the next slide.

This just a little bit of a data what I said about that vaccinations still provide good good protection may not as strong protection from getting infection, but very good protection in terms of severe illness, hospitalization, ICU. So this is some of our data from our our surveillance with our hospital systems. That still about 77% of hospitalizations are for people who are unvaccinated. 87% of people in the ICU are unvaccinated. So the vaccination still provide great protection against us, especially boosters. Next slide please. Terrific. Okay, so here's my crystal ball. Don't hold me to it. But this is my crystal ball of where we think the Omicron search may. What it might do? How long are we in this? So we're looking at some data from other countries South Africa in the UK were first developed on the next slide. Don't go there yet. I'll show you some data from cities in the United States. But you can see that in especially Denmark in UK, you saw a steep rise, but about four weeks later or so starting to see a plateau and maybe a little bit of a decline. And you can especially see this in the UK where it started surging about December

19th And then kind of the first or second week in January starting to stabilize and come down. Next slide.

You can see within North excuse me within the United States that New York and the District of Columbia started surging about December 19 surged for about four weeks and then started stabilizing in North Carolina where green we started surging about two weeks after New York and district Columbia. So based on this, we are thinking that maybe we have about two weeks more of surging, and then we'll start stabilizing if we have the same trends as other countries in other states. So that's what we are hoping for based on other trends. Of course, we don't know for sure, but we're hoping this is a steep up, maybe about a four to five week continuing and metadata. So we will see but hopefully we'll be in a very different place by the end of January beginning of February.

Great. Okay, a couple of big guidance changes that came out from the CDC and from North Carolina that I wanted to update you on and then I'm gonna turn it over to our vaccine team on Friday. Some of you may have seen this but the CDC did some nuanced changes in their CDC guidance on on masks. I gave you the link to the CDC. page or pages to be perfectly honest. On on masks on the bottom. Those were links directly to CDC. There's a really nice overview on a guide to masks on how to improve your fit of your masks. And then what they updated was this bottom one types of masks and respirators where they really went in to some of the recommendations of higher grade masks thinking about KN95 and N95 for thinking through what is the best mask and basically saying what those of you who fall in line in North Carolina that we came out about a couple weeks ago to say that the most the most important thing is a person shoe wear a multi layered mask it fits well and is comfortable. That's the best mask for person. multi layer fits well that is comfortable. If it's possible. It likely is better if a person can tolerate it. It's comfortable to wear a higher grade mask like a surgical procedure mask or as possible a KN95 or an N95. Those latter two probably offer more protection than the other types of masks as long as it fits well. It is comfortable and people wear it for a longer period of times with the N95 I'm sure many of you worn that is pretty uncomfortable. And so it may not be well tolerated. So that is the new CDC guidance is to wear the highest grade mask that fits well and that you can tolerate and lots more detail in there.

Now for children. It's a little bit more difficult. The N95 are more of them. Most of them are made for adults. There are some child ones, but there's not a lot of data for children N95 is hard to fit on their face. surgical procedure masks are also hard to fit for a young child without gapping. So with a young child that really is going to be that fits well and is most comfortable if they can tolerate a KN95 or an N95 that fits well. That's great. But really it's the fit and the multilayer that's more important for a child. Next slide. Great. They also CDC also came out with updated guidance on quarantine and isolation. And this is with more and more data really looking at the length of time people are the most contagious, and the incubation time and we've gotten more and more data on the CDC felt comfortable in shortening some of the isolation and quarantine periods again based on some of that data and people are most infectious and the incubation period. So I'm sure you all have seen this but just to be sure you have it all one place that both isolation and quarantine periods have been reduced to five days but with important to wear a mask for the additional five days. And also if you are exposed by the quarantine

recommended getting a test on day five after you after your exposure. So five and five we've been saying isolate in a quarantine for five days, wear a mask for additional five days, and then get tested on day five, if you were exposed. There are some exceptions to people needing to quarantine if they've been exposed and this is on that bottom teal color. So and there's a little bit of a nuance that we'll get into in the next slide. But anybody who is up to date on their vaccines, including a booster do not need to quarantine after they've been exposed but they should get tested at.., anybody who has tested positive within 90 days does not need to quarantine if they've been exposed and they don't need to test because they may well continue to test positive from their prior test. But it is important for those people to wear a mask for 10 days and then everybody no matter what especially with our high viral spread should be wearing a mask all the time.

Terrific. Okay. Let's talk about how some of this all translates into our updated K 12 and child care guidance that we've updated in the past two weeks. Okay, that's fine. Terrific. Okay. So one thing is just so we can the data still continues to support the importance of really our two key prevention strategies in our toolkits, vaccination and boosting it is if eligible and masking. Excellent. Okay, so this is how we included the updated isolation and guidance in our strong school schools toolkit. Again, people with COVID-19 need to be excluded from school for at least five days, they can come back with me to their mass for additional five days. Those who are exposed to COVID-19 again need to be excluded from school for five days but can come back if they have no symptoms for 5 days. They should get tested. And then there are some exemptions in the school setting are slightly different than the general population which want to point this out. People who are vaccinated against COVID-19 don't need to exclude it after exposure. Now in our school guidance, it differs just a little bit from the general population and for adults, this includes boosters that don't seek to be boosted to not be excluded from school, but for adolescents 12 to 17 in order to allow them time to get boosting. Then the CDC and we allow their that schools can can forego excluding children aged 12 to 17 until they get their booster so that is a little bit of a nuance, but children 12 to 17 don't need to be excluded from COVID-19 for exposure even if they're not boosted to allow them time to get boosted and people who've tested positive past 90 days don't need to be excluded from school and in a school setting. If the exposure people were consistently masked throughout the exposure, those people also don't need to be excluded from school. So slip a little bit of a nuance difference from the general population just because there's so many layers of protection in high schools. Next slide.

A new update to our guidance is the ABC science Collaborative has been in a research study to look at tests to test to stay so people who've been exposed to COVID-19 who otherwise don't need an exemption for exclusion those people were able to stay and get tested and they found a very low secondary and tertiary exposure rate for those populations. So a new element in our strong schools toolkit is people again who've been exposed who don't otherwise meet infection if they're in a school setting where there's a mass requirement, mass require school settings only. So those children or people basically unmasked exposure in a mass required setting, but they can stay on as long as they wear a mask and then they get tested on the day of notification and it's posted day five as possible. We're gonna continue to monitor this data now go back, go back. We can continue to monitor this data with Omicron. And again, this exception is only for schools that have a mass requirement of currently

the ABC collaborative is also doing a research pilot in mass optional schools. So depending on the data that we can think about if we want to adjust our policy to also mask optional schools, so that is currently ongoing and we will see if we can alter policy. Excellent and this is going to be the last one for me is child care. They ought we updated this on Friday of last week. And basically very similar exclusion criteria with the K 12. We have the five and five. The exception here though, is because of the importance of wearing the mask for the five days when you do come back. There are a subset of people who are in childcare who can't wear a mask, including children under the age of two. So anybody who's unable to wear a mask and it may be three or four year old and they just cannot wear a mask reliably. So anybody who cannot wear a mask reliably, should be excluded for those 10 days, but people can wear a mask reliably and they can be the five and five including staff and then teachers which has been a really big strain on our on our childcare settings. So those are the bigger changes in the childcare. Very similar again, except for a subset of people who can't rely. Okay, that's it for me. I'm going to turn it over to Ryan to talk about vaccine updates.

Ryan Jury

Thanks. Welcome, my name Ryan Jury Vaccine Program Director for the state of North Carolina. So I was going back and doing some checking here since August 30 of last year there have been 11 CDC recommendation changes to the vaccine program. So it's been a very busy fall and just this year there were three changes. So our intent and hope in the slide is to kind of summarize the changes that have happened this year. The three CDC recommendations that have gone forth from the program. It's basically kind of breaking out by vaccine brands. So first with Pfizer, currently, individuals between the ages of 12 and 15, we're now recommended to receive a booster dose just a reminder, the only vaccine that individuals under the age of 18 can choose for their booster is the Pfizer product. So mixing and matching is not allowable for any individual under the age of 18. In addition as they change or shorten the time between when the primary series was completed and when a booster would be recommended, and that's come from six months to five months. And then lastly, they added a recommendation for children who are moderately or severely immunocompromised between the ages of five to 11 to receive a third primary series dose also known as an additional dose 28 days after completion of a primary series. In addition, that Maderna was also the recommendation was changed and shorten the time interval from six months to five months for individuals over the age of 18. So what we've done so far is update all the standing orders and executed them and tried as much as possible to keep you all up to date on the current recommendations. Again, apologize it's been a very busy fall and hopefully, the Spring won't be as busy but that's kind of where we are right now in terms of the current state of affairs over the last couple of weeks.

I'm just also want to kind of call this out. It was kind of confusing initially. And I don't think that it was very obvious when the initial FDA Amendments, the emergency use authorization started and then there was some confusion and I think finally we've got some clarity here but want to just let everyone know that with the changes from those individuals being eligible for a booster from six months to five months, those who received an additional primary series or a third dose because they were moderately severely immunocompromised can now receive a booster dose and the 13th of January mark that five month mark for many individuals who have received an additional dose. And so we just want to let you

all know that it is allowable for in some settings for an individual to have received up to four doses. And then that would be an individual who is moderately severely immunocompromised has completed their additional dose and then waited five months and then therefore can receive their booster dose. And so wherever they are in the vaccine journey is wherever they start, so they've just completed two series then within 28 days they can get that third dose, but they do need to wait the appropriate time. So an individual shouldn't be rushed through the schedule and the schedule is 28 days and then they wait five months months for a booster dose. Just reminder that the Moderna dose is different for the booster dose. And so individuals for modeles really may compromise when they do receive a booster dose should receive the half dose or 50 microgram dose for their booster dose.

Ryan Jury

This does not apply to individuals who have received J&J. It's this time there's no FDA Amendments emergencies authorization for additional dose for those who received J&J. There's only an EUA for a booster dose. Next slide. So we've tried to capture here and recognize that this image was created specifically to talk a little bit about the eligibility individuals who are moderately or severely immunocompromised to receive a fourth dose or that that booster dose now that it's been five months for those who have received an mRNA vaccine. In summary, we can kind of start on the right and go to the left because I feel like it's simpler on the right gets a little more complicated on the left, but those who receive j&j as a primary series, it's recommended that all individuals receive a booster dose if they're over the age of 18. And they can mix and match as they see fit. For Moderna it's encouraged individuals receive a booster dose five months since completing their primary series if they're over the age of 18. And they also too can mix and match for those who received an additional dose and were moderately or severely immunocompromised, they're also eligible for a booster dose. And lastly, for Pfizer, those individuals who were it's badly five months in or over the age of 12 can receive a booster dose. The only catch here is that those individuals between the ages of 12 and 17 can only receive the Pfizer as their booster dose and are not eligible for mixing and matching. In addition, that children over the age of five are eligible for an additional dose 28 days after the completion of their primary series.

This is just a reminder that the state dashboard is up to date. I think this weekend we went over several updates and included additional dose and booster dose data by counties for those who for those who are interested and so they're continued to try to make sure the dashboard is relevant and useful for all of you as you think about vaccine rates in your communities. Currently individuals in North Carolina who have at least receive at least one doses currently to 64% for the total population and for those that are eligible for the vaccine, 67% of individuals have received at least their first dose and in relation to additional and booster doses. Those individuals who are fully vaccinated who have received an additional or booster dose and are over the age of 18 is currently 48%. And individuals who have received their complete primary series and received an additional booster does over the age of 65 is currently at 66%. The other age groups to think about are adolescents and pediatric and in particular the five to 11 year olds so our adolescent primary series with one dose is currently at 47% and for the age group of five to 11. We are at 23%.

In relation to North Carolina, we are at 23% which is somewhat of an anomaly here and in the south and we would attribute a lot of our success to the work of our pediatric primary care providers or pediatric health care providers. As we've evaluated the strategies of other states, many states either leaned heavily on the vaccine pharmacy programs or but Kentucky and North Carolina leaned in pretty heavy on creating a primary care network to be able to help us vaccinate individuals who between the age of five to 11. We see currently that we're at 23% and very proud of that but also have a lot of work to go or initial and early market research data indicated that there were so probably between 30 and 40% of the population who would be interested in getting vaccinated. From the Kaiser Family Foundation and some state market research data. What we've learned is that really the ideal setting for individuals under the age of 11 to get vaccinated would be in a primary care home and where they can receive counseling and I know Dr. Dowler on here to talk about Dr. Dowler on the chat but wanted to just promote the ability and effectiveness of counseling in our primary care settings, as well as also wanted to call the increased Medicaid reimbursements. For children who are on the Medicaid program. The vaccine administration fee has been increased recently, and those are available within the Medicaid bulletins for more information. I think it's also extremely important for us to think about recruiting providers and and how you know how many providers we need to be able to move forward. We've started to receive some chatter and signaling from the federal government that the under five year old vaccine program might happen at the end of this quarter or beginning of next quarter. And there are some considerations to really think about because pharmacies may not be the ideal setting for children under the age of five to get vaccinated. And so currently, we have about 967 primary care medical homes that are in the vaccine program and are going to look pretty aggressively in the next two months to be able to encourage as many additional locations to enroll within the vaccine program. And kind of what we see is really this goal to try to put a vaccine vial in every fridge and also focus on ensuring that we have appropriate access needed for the under five program when that program launches later this year. Currently, about 71% of vaccine for children providers are dually enrolled in our program, the COVID vaccine program and looking to enroll many more so if you have friends or referrals, please let us know. Recognizing that there are a lot more flexibilities now than there were before and Dr. Kimple, who's with us will talk a little bit about what some of those flexibilities are with using potentially NCIR.

Amanda Fuller Moore

So we did want to take a brief moment this evening to update you along the integration between the systems that we're using for COVID-19 vaccines, so our COVID-19 vaccine management system or CMS, as well as the North Carolina immunization registry. So we appreciate all the feedback that so many of you provided. You know we hear you we trying to continue to make enhancements and minimize the burden as much as possible on you all, as you go about doing your important work. First stat we really wanted to make sure that even if you were not participating in the COVID-19 vaccine program that all providers had access to that COVID-19 information. And so you could take benefit from that opportunity to provide outreach to your patients and counsel your patients. So we went live back in October with an integration to push the COVID-19 vaccine administration and CVMS to our North Carolina immunization registry and so they have a consolidated record in that registry, which is inclusive of COVID-19. As part of, you know, the planning then in the fall with the rollout of the pediatric COVID-19 vaccine as well as flu season where we're trying to administer both flu and COVID-19 at the same time. We and and also acknowledging just the importance of you all as providers and being that trusted voice for vaccines. We

rolled out an integration, starting with a focus on our vaccines for children's providers. To have that option to use NCIR for COVID-19 vaccine documentation and reporting. So for example, if a provider is already participating in the Vaccines for Children program, they're using NCIR to document those vaccines. It's already part of that workflow. They can just add COVID-19 vaccines to that list of other vaccines that they're managing and report the COVID-19 doses as part of that system, and so this really may be helpful for some of our primary care providers, especially for our Vaccines for Children providers. When you're looking at one consolidated immunization record, and also checking COVID-19 status. The other thing I'll just mention around that is as we're seeing this decrease minimum order quantity, more and more providers may be moving away from this hub distribution model. It shouldn't be receiving direct shipments of vaccines and so as we move forward with ongoing vaccination with boosters, potentially with additional pediatric doses and and as Ryan mentioned with the initiative to really try to put a vial in every fridge, this is a good opportunity for some providers so as not to miss vaccination opportunities in the office. Lastly, I'll just mention that starting today actually we combined the records in CVMS. So the state COVID-19 vaccine program and the Federal pharmacy program are now in CVMS and are visualized Better Together as one record in CVMS. So this can help a lot of the providers that are currently using CVMS many individuals we now have received their boosters from pharmacies and so it's even more important that these records are accessible and everyone can get the right dose at the right time. And these individuals who have access to the COVID-19 vaccine portal so where they go in to get there they can print out their pdf of COVID-19 Vaccine Information. They will also be able to see the pharmacy doses listed as part of that record, or have the option to call the help desk to get if they don't have an email and access already to get access to that. And so we're excited about rolling that out as well. So those are just some of the some of which are reminders for you all with the opportunities with COVID-19 vaccine program and some new updates with regards to the system you're using. And with that, I believe I'm passing it on to testing.

Dr. Susan Kansagra

Great thank you, Kelly. Again, this is Dr. Susan Kansagra, appreciate everyone being with us today. So I'm going to cover a few updates on testing one, one just to start off with and say is, we know certainly across the country and certainly in North Carolina, we are seeing a huge increase in the demand for testing and that has really strained our supply nationally and in the state. And so certainly if you've been experiencing frustrations out there your patients have certainly empathize and understand and we're trying to do a number of things to increase the supply in North Carolina. So first to give you a sense of what those things are. We as a state are working to contract with a number of vendors. That provide support. We have onboarding two additional vendors, Mako and radius for a total of 14 vendors that we have statewide. These vendors help support local health departments also support testing events and communities. And we're also using them to alleviate some of the pressure on emergency departments. Across our states are pairing them up in hospital systems where we can, if you in your community see a need for a testing event. Certainly you can put in an event request form the link is here and we'll send it out with the materials as well. But we are taking requests and helping to position these vendors in places where they can you know which priority populations in places with high mood. So just be aware that we're also working to fulfill staffing related needs especially as folks are doing their own collection helping to support staffing needs for local health departments as they do community testing. Federally, there's some new news that's happening this week as well. First federally we are working on also asking

for additional assistance around testing sites in North Carolina. So we are working to make those requests and pull down their supplies. And then additionally there are some additional point of care tests at home test that are available and I'll talk a little bit about those on the next slide that we just launched a day benefit.

And then lastly, for supplies we are fulfilling supply will return certain providers. Now again, we're really focusing on local health departments and other priority providers. This doesn't mean that every provider will be able to access testing supplies for us we are working on certain high priority providers that are serving, you know marginalized populations or other specific populations and so just keep that in mind as well. So for how to find testing, you know, important thing to keep in mind while we're seeing the strain in our testing supply, that you know the place that your patients may have been going to or you may have been going to might need to look at other options like multiple places in line and so as an example in our state, you can find no cost community testing sites through our website. There's still hundreds of events going on each week. And so to the extent that you know, you need testing, you know, plan ahead and for those appointments. Again, just a reminder, you know, we're encouraging everybody to share not to go to the emergency department just for testing. We want to save and utilize that resource for people that are sick. So obviously want to really encourage as many people to go to our website to find it. Community testing site is one place you can go and stay. And besides provide both PCR testing and rapid testing as you know, in addition, DHHS is offering a new cost, home collection kits that you can

I've been very much I think we lead the way on North Carolina in offering that as I mentioned earlier with LabCorp pixel programming now that's been expanded by the federal government nationwide. So that is open now and is an option for people who don't have access to other ways to be able to order those kids which we're hearing that the turnaround time is about seven days to 10 days right now. So we'll season's it's the first day of the program opening up. And then lastly, but only they have also announced that insurance will be covering the cost of at home COVID in contests that you buy in a pharmacy, or another retail locations. And so, payers will have different processes on how to do this. People can go in and oftentimes be covered right there on the spot. But certainly if there is an out of pocket expense and they're paying upfront they'll be able to get so that information would encourage people to go back to their insurance. Carrier and see what how they're offering that. Next slide, please.

So, another thing to keep in mind as we think about antigen testing, specifically indigene tests are less sensitive and PCR tests. But they remain more specific and that means if there is a positive result for the antigen test, you do not need an additional test. You don't need to get PCR testing, you can take that test and take that result. If you have a negative result in import individual that is symptomatic or clinically feel that this is a presentation consistent with COVID-19 or illness, then certainly you can give a negative test result you can do a PCR test but if it's positive get in situations where the test is positive to begin with, you don't need to do a confirmatory test. So again, just remind me that these engine tests are really important tool when you use them correctly. It's really important to look at the type of test you're using the patience for that test right now, we are seeing that these continue to be sensitive for

Omicron and certainly that is being studied and so we will see if additional data comes out but keep the keep the instructions in mind for the particular type of tests that's been used. For example, sometimes they're required with certain frequency or within a specific time and symptom onset. And certainly now these tests are currently labs. I know there's a lot of stories out there around using them orally as well but for right now, these tests are authorized to see if there's no more more data and evidence emerging. And the other really important thing to keep in mind is if somebody has symptoms, don't wait to test to isolate and that's a really important message, especially now when you're saying that testing. Supply is in high demand that if somebody is symptomatic, they don't need to wait to isolate to get their test result. They should go ahead and start to isolate and certainly refer those testing options that I mentioned. But don't wait to isolate.

Next slide please. Another way that we're making testing available throughout the state is through our K through 12 testing program. And in this program, we are using federal funding to provide support for school based testing and we're doing that in a few ways. We are contracting with vendors that are providing support directly to schools and offering PCR and antigen diagnostic testing. We're also providing tests to the schools directly that they can use to do their own antigen screening or diagnostic testing. And then we're also providing funding for staff and support so for example nursing support or extenders to be able to provide that additional support and school to help with this and the many other needs that we know are coming up in schools today. Next slide, please.

There's over 3500 schools in North Carolina that 2200 are enrolled in the program. And so this is a flow chart that shows you what different schools are doing. I won't go through all of this but know that you know about two thirds of schools are enrolled in this program. So that's another opportunity certainly, if you you know are seeing things in your practice to remind folks that this may be able to ...

And then lastly, again, as we think about the testing we know that this is really important strategy one of our goals is to help kids stay in school. We still not too late they can still enroll in this testing program and still opt into it. And so I would encourage you know, to the extent that schools are interested to continue to contact us and we can help get you on boarded. We're working to continue to identify additional suppliers of point of care testing that we are making available to schools, local health departments and other community partners as well. In continuing to do that, and then also, you know, important thing for schools to remember is that when you're enrolled in this program, you also have access to our vendors that can do PCR testing. So if you have antigen testing you may want to think about using those in specific situations and conserving those for example for diagnostic testing, kids are symptomatic and using vendor for more ongoing screening needs. Another important point here to keep in mind and this is really not just limited to our school program, but Abbott today has announced that they will be extending the expiration dates on their some lots of their tests by another three months and so if you have Abbott tests, please hang on to those there will be more information that is coming out on the specific lot numbers that this applies to and that's another way that we you know, are able to extend our testing supply as well as we get that information. We're passing that out. So with that, I will

actually go one more slide. I think that was my last slide. And so with that, I'm going to turn it over to Amanda Fuller Moore, who is going to give us an update on your kids.

Amanda Fuller Moore

Thanks, Dr. Kansagra. Good evening, everybody. So in the interest of we don't have tons of time, I am going to give you lots of information with even more information on these slides. But I'm not going to go through every bit So this slide just pulls together for you all of the information about all of the currently EUA authorized monoclonal antibodies the top three REGENCOV, Bam/Ete and Sotrovimab are for treatment. The last one Evusheld is our pre exposure prophylaxis product for a very narrow window of patients. One of the things just want to draw everybody's attention to we do have variant efficacy on this slide. So only the Sotrovimab of our treatment monoclonal antibodies remains effective against Omicron. Though it is not for treatment, the Evusheld product also has retained its efficacy against Omicron. Another piece of helpful information here is our allocation estimates. We'll talk a little bit more about those in another slide or two but just so that everybody sees that we are getting very low weekly allocations of these products. On the next slide.

You will see our oral anti viral so Molnupiravir and Paxlovid. They are both coming into our state at this point but in low volumes so again, you have that variant efficacy and allocation estimates for each of these products. Just a reminder that both of these have very specific EUA requirements. So with our Molnupiravir it is for the treatment of mild to moderate COVID-19 in adults who are at risk for progressing to severe disease when it when other treatment options are not accessible. So it is sort of our last line in our treatment options and then the Paxlovid There are a number of pieces there to dispensing that. It does have to they both do have to be started within five days. However just a few reminders that Paxlovid does require a dosage adjustment which there are specific instructions in the packaging on how to open that packaging for creating an appropriately dosed package that you provide to the patient and there does have to be some very specific drug interaction. Monitoring with Paxlovid prior to dispensing.

So on our next slide, and you can get an idea from this of how we are doing our allocations and also our provider prioritization. So just keep in mind that this week, and and really all weeks but for this week, just to give you the specific numbers, we are getting 7846 treatment courses amongst the products that are effective against Omicron. So that's just over 1100 courses per day. But our current seven day average for cases per day is over 32,000. So we have very few treatment regimens as compared to our cases per day. So we are really asking providers to be sure that they are following those tier one and tier two NIH treatment guides that they are really reserving our treatment options for those people that are unvaccinated or immunocompromised and at high risk for progression to severe disease, hospitalization and death. So just we know that it's frustrating and that it's difficult to find treatment. But we are really wanting to make sure that providers are aware that our allocations from the federal government of these products is very, very low. And so we wanted to also make sure that we're really clear on how we are doing these we are still receiving allocations of the Regeneron product and the Bam/Ete product,

but we really asking that providers attest to being able to ensure that a patient does not have Omicron before they are using this so that they are able to test and administer the product within 48 hours. If they are using one of those products. So at this point that is likely a very small percentage of our providers that are able to do that.

So just so that everybody has it in their hands because you can we'll have these slots available to you want to make sure that people are aware of how to request or monoclonal antibody so they're Regeneron and Bam/Ete are in a combined request. Both of these are linked down at the bottom so it's one for Regeneron and Bam/Ete and then a separate form to request Sotrovimab we've sent out links before so please do make sure right now that you're using these or when you go to request you go to the most recent email related to requesting to ensure that you get the right links. So these are requested every week. We review those requests on Monday and Tuesday and either approve or deny them. And then we transmit those orders send an order confirmation, and they're typically shipped within two to three days after that.

On the next slide, you'll see the difference in the process for every shelled and the oral anti-virals won't appear here in packs livid. The links to the request forms for both of those are also on this page. Overall, it's still the same request. We review the orders based on our allocation we transmit those orders and notify providers and then shipping occurs within two to three days. All of these products are shipped from AmerisourceBergen. So we have seen over time, a number of issues and they're shipping which is outside of our control so sometimes they're shipping doesn't quite go according to our plans but these are the estimated timeframes for how those products are shipped. So we have a rolling allocation request for every show. And then every other week requests for the more new pair of beer and the packs loaded. On the next slide. Just to make sure everybody is aware you're going to see over the next couple of days some updated information related to physician dispensing guidance specifically for the COVID-19 their oral antiviral. So this is specifically related to Paxlovid and Molnupiravir. All physicians advanced practice registered nurses and physician assistants who are having an active license that is in good standing with their respective governing body can prescribe and dispense from their office for treatment of COVID 19 in accordance with the products EUA if there is absolutely no charge to the patient for the drug or the act of dispensing. This includes seeking reimbursement of dispensing fees through third party payers or cash charges to the provider or alterations in office visit fees. In addition, the product must be labeled in accordance with state and federal dispensing laws. And so we linked for you there where the Board of Pharmacy does have information on what the prescription label must contain. So physicians who are dispensing any other products would have to be registered with the Board of Pharmacy in order to be a dispensing physician. And the same is true there for nurse practitioners and physician assistants who wish to dispense medications. Whether there's a fee charged or not they do have to register with the board of pharmacy but specifically when it comes to if you're only dispensing the oral COVID-19 anti-virals You do not have to register to do just that. As long as there is no fee and the product is labeled accordingly. So we are adjusting all of our surveys to reflect that. If you're interested in dispensing the oral COVID anti virus and you have not yet registered with us through the H pop portal there is linked there at the bottom, the new provider enrollment survey. That is how you get started.

Amanda Fuller Moore

You have to register with us and with H prop in order to be considered for allocation of these products next month. We are really trying to focus in on some wayfinding improvements because specifically with our oral anti virus you do have to have such a shortened window you only have five days from symptom onset. We have tried to be really thoughtful in our find COVID-19 treatment section on our website, continuing to try to make some improvements to that website but specifically with wayfinding we do encourage people to use our North Carolina based wayfinding tool. There is a federal wayfinding tool. There are some issues that we see with that tool, including that once we've placed an order the provider appears on that federal tool so it doesn't actually mean that the product has arrived at their office. And so we just want to make sure when we are putting people on our tool on our Wayfinding tool that it is because we know that the product has shipped to and then arrived they are showing inventory at their site. So if you have a patient who meets the criteria for treatment, we encourage you to assist them in patient wayfinding and us do that using our North Carolina based wayfinding tool.

So again, we do have some new provider guidance and updated standing order. So we have really asked for patient prioritization of those tier one and tier two folks. In the NIH guidelines so immunocompromised individuals not expected to mount an immune response as well as unvaccinated individuals who are at risk for progression to severe disease. We also do know that people are struggling in some cases with drug prioritization. And so, since some treatments do have reduced susceptibility with our emerging Omicron environment we have published we have provided what NIH recommendations are for using these therapeutics with Paxlovid being first followed by Sotrovimab and then Molnupiravir. There has been a lot of information coming out in the last few weeks related to the outpatient use of remdesivir. There is now a billing code for that. And North Carolina Medicaid has also put out information related to reimbursement for that use of outpatient remdesivir. We also have our statewide standing order has been revised to account for that patient prioritization and criteria. And so just making sure everybody is aware that new standing order is available on our website. So at this point, I'm going to turn it over to Kimberly Clement to talk about some of our medical surge efforts.

Kimberly Clements

Thank you, Dr. Fuller Moore. I appreciate it. Good evening, everybody. And thank you for joining us tonight. I appreciate this opportunity to share with you where we currently are with our med surge numbers. Compared to the previous surges. So what you see here on this first slide shows the comparison between our winter 2020 surge, our summer 2021 surge and our current surge. That current surge is that line in red that it's going steadily upwards. And it started towards the end of 2021. It shows where each of these surges were at the same point in time. So for this particular one, you can see where we were at Week Six for each of the previous surges and we are continuing to go up whereas in the other surges we're starting to come down to that point. The current inquire thing hospitalizations increasing at a rate kind of at a higher rate. Whereas the summer and winter incline hospitalization start to decrease at this point. That is the takeaway from this slide. Next slide please.

One of our top priorities is to maintain our hospitals capacity, and we have a variety of med surge levers that can be pulled many of these we've already pulled to help protect that hospital capacity. Each of these options is another layer of protection that can be considered to preserve that capacity and avoid going into crisis standards within our healthcare system. From this list, so far, we have pulled the first three levers to statewide patient coordination process, the staffing pool for health systems to hire personnel from and working with them on scope of practice flexibilities. We have a few few other levers that we can still pull but at this time we have not needed to pull those additional levers but we are ready to do so when the time comes. And with that, I will turn it over to Robin Deacle for communication.

Robin Deacle

Thank you, Kimberly. I want to start by saying thank you not just for sticking around to the bitter end of the webinar, but for some of the data that's in the middle of the slide. You all are making a difference and it's because people are trusting you when they're asking about whether they should be vaccinated especially for children in their pediatrician, so just want to say thank you and you do make a difference. I know that as a patient sometimes I have a lot of questions for the doctor and I might not remember everything. So one of the things we've done is at the very top of the slide, the vaccinate, mask and boosts. Three things you can do these are best tools against severe illness, hospitalization and death from COVID-19. And our three simple things to remember to remind people to do get vaccinated get boosted when you're eligible and wear a mask. I think we've spent a lot of time on making sure it's a well fitting high quality mask the highest quality you can wear. So, three quick things to remember as you're speaking with your patients, Vax mask and boost. Next slide please.

There is a lot of information that we have put together I think I heard Ryan say 11 CDC vaccine vaccine recommendation changes since August 30. Every time one of those happens, we update our toolkit on the website. And if you go to our COVID19.ncdhhs.gov site on the website, there is in the vaccine section of toolkit and there is in the slow the spread section, materials and resources and you will find a lot of English and Spanish language materials there that talk about the benefits of vaccines that talk about the safety and efficacy of vaccines just are good materials to be able to share with your clients patients to help them understand what's going on. And our final slide from communications tonight is a request for your help. Next slide please.

Yes, the what I just said in the first slide our market research showed that people trust their doctor to give them advice and one of the things that we have been doing in the community is giving webinars or events talking about vaccines or actually hosting a vaccine event and if you are willing to spend some time and talk to people about COVID 101 and give them some information, we would really appreciate that. In fact we provide all the slides and the talking points for you to do so and help with all the logistics to make it happen. My colleague Kelly Wright is the person to contact if you are willing to do that kelly.wright@dhhs.nc.gov And just again want to say thank you. I know that there's a lot going on. You heard a lot of it tonight and I appreciate your help and communicating the importance of vaccines, boosters and masks to your clients. And I think I'm passing back to Betsey.

Dr. Betsey Tilson

Thanks. And although we are six minutes over our our proactive one phase I will say our team was busily answering questions in the chat and I think that we have answered almost all of the questions in the chat. So I'm very excited for that. And I'm very, very grateful for the team. There's a couple outstanding questions that we can get to but before we do that, one I just want to again reiterate a thank you for joining us. Thank you for staying till 707, thank you for your day in and day out. The detailed nature of your questions just tells me you all are in it. You know in the thick of it. We know you are trying to navigate this changing landscape just like we are so we'll really appreciate that and appreciate you. Joining us really also want to thank the team so much in not just presenting tonight but all the work that goes behind that I think you can see that things are changing so quite quickly and you know trying to put that around and turn into guidance and standing orders and provider help and allocations as quickly as we can in order to get you what you need as long as you're with your patients. So really want to thank the team for all of that, that hard work. Okay, so now we do have a little bit of time and it looks like a couple more questions have come into the chat. Do you Hugh, do you want to moderate those couple of questions or what would you like to do?

Hugh Tilson

Sure. Ones a comment and it's it's great the patients trust their doctors. There are plenty of examples of community primary care doctors giving up misinformation unintentionally, because of beliefs or concerns about vaccine or something along those lines and don't know if you wanted to make a comment about that.

Think it's it's how do you I think the answer is how do you make sure that primary care doctors really have good information that they can give out? Because there's so much that's potentially confusing and I think a lot of the comms information you already sent out might be the right response to that.

Dr. Betsey Tilson

I was trying to answer but my mouse was going a little crazy. So I couldn't unmute I'm sorry for that awkward pregnant pause. Yeah, I think as you heard the information is changing so quickly. It is very hard even for us to keep up on it and we are on it 24/7 so but we want to try to do this a couple things for the we want to try to be sure that we are a trusted source of information and updating information for you. So we try to do these, these regular webinars, Dr. Dowler does them through through Medicaid and eat Senate medicine all during these updated webinars. We have lots of information. On our website. You saw that from Robin, you can always ask us if you have questions. So we want to be sure that everybody has the most updated information, the most updated facts because we know all of our physicians and our providers they want to do the right thing for their patients. And so we do want to be sure that everybody has access to the most up to date and reliable information.

Hugh Tilson

Got a number of thank yous on here so lots of great information and really want to thank you and your team for pulling it all together. So let me just relay those on behalf of the questioners. But this one we're getting increased requests for return to work, school sports notes or retesting after positive tests on asymptomatic post isolation quarantine, that it's on the CDC page used to request employers not asked for this keyword a statement of similar guidance back on the CDC website or on the DHHS website.

Dr. Betsey Tilson

Yeah, and let me go over there. There is a lot of confusion and it'll feel a little public health wants to but it's actually really important. There is a difference between isolation and quarantine. Why you do that? And then what is the recommendations for those two things and people use isolation and quarantine interchangeably, and which doesn't really matter except when we talk about the need for tests. So let me just do a little bit of public health one on one hygiene on what we what we mean and what the guidance are and then we can think about what we can do to make it more clear for you all so what if you test positive or your symptoms if you have symptoms of COVID you have COVID either symptomatic diagnosis and you test positive but if you are sick and have COVID then you isolate and people who have tested positive for COVID and are isolating do not need to retest on day five or day 10, they do not need to retest as long as they meet that critical criteria for coming out of isolation when they can come out of isolation which means I need to be isolated for at least five days. And if they are without symptoms or their symptoms are improving. It can come out of isolation go back to school back to work as long as they can wear a mask for the next five days. There is not a requirement or even a really a recommendation to test in order to come out of isolation. So if you are sick with COVID-19 have tested positive you need to isolate the excluded from wherever you are for five days. Go back in if you are feeling better symptoms or Google roadmaps for the next five days. Now if you are exposed to someone with COVID-19. Then you are to quarantine which means you stay keep yourself away from other people during the incubation period. So in case you do turn positive you haven't been continuing to spread so close contacts need to quarantine and apply that need to be excluded from school and for those five days. Now it is recommended although it's not required but it is recommended at after day five of your close contacts and recommended that you test you get a test to them. Because if people are going to turn positive they typically turn positive by then. So it's recommended that you test on day five after an exposure. But if you have an exposure and you remain asymptomatic, you only have to be excluded for five days. You can come back wear a mask for five days. It is recommended that you get tested on day five but not required. So in neither case is there a requirement of testing day five and the recommendation is if you've been exposed and you've quarantine. We in our in our strong schools toolkit we especially for those who who has tested positive who don't certainly don't say you need to be tested to come back in. We can try to make that a little bit more clear on our K 12. And we can think about in our in our business guidance to make that a little bit more clear as well.

Thank you for that. We just got another question. A couple of questions. How about medical system was family members who tested positive are they allowed to come to work or do they need to be isolated for five days until the COVID antigen test comes back negative?

Dr. Betsey Tilson

Well, it depends. I hope that medical assistant is fully vaccinated and boosted. If anybody healthcare professional enough is fully vaccinated and boosted they do not need to quarantine or they do not need to be excluded. After a close contact. Go vaccines and boosting this is a really really, really important that well there's many many many reasons why it's really important people with vaccine booster first to protect their own health. B prevent the spread and C that they don't do not have to quarantine or exclude yourself after an exposure so that medical assistant A if they're fully immunized and boosted, they can just stay in work. It is recommended that they get tested again five if they are not vaccinated, they should be excluded from work and it is recommended they get tested on day five before they come back then they should definitely wear a mask all the time for those five days.

Hugh Tilson

There's a question here with children going back to school on day five with masks on how do they eat lunch?

Dr. Betsey Tilson

Yeah and this is just a pragmatic thing you know as much as possible they're gonna have to opposite are gonna have to take your mask off. You don't want to eat lunch. You want to just minimize that as much as possible. It's not going to be perfect in all schools are going to be able to keep those kids six feet away. But you just want to minimize the amount of time without a mask. Obviously continue to eat and the schools are just going to have to do the best they can in order to allow that child to eat and have plenty of time so unmasked so that child can.

Hugh Tilson

Thanks and then there's a question about the UNC system not requiring a vaccine went on campus. Are you able to comment on that?

Dr. Betsey Tilson

I think probably rather not. UNC has made some policy decisions at UNC.

Hugh Tilson

Last question is there's a link to the H POP registration on the deck that is not active, and you provide it and there's an email address. So that's the last follow up I think typically when I say that there's another question that comes in.

Dr. Betsey Tilson

Or people realize it's 716. And they don't have to talk about H POP or isolation and quarintine.

Hugh Tilson

All right. Well, Dr. Tilson, thank you and your team so much for great information. Great webinar. I'm getting texts about how awesome it was. So thank you so much, and I'll turn it over to you.

Dr. Betsey Tilson

Ah, terrific. Oh, wait, late breaking oral antivirals can and Amanda if you're still on and or Angel was here. Okay, question.

Hugh Tilson

You transfer oral antivirals to other sites, and is there a process?

Amanda Fuller Moore

Yeah, we've had a few questions related to that. So we're gonna try to work through making sure that information is in our provider guidance. We know some of our providers either have more than they need or aren't moving the product. So we will try to make sure we get some specifics on that into our provider guidance. You can always reach out to the COVID therapeutics mailbox if you are in that situation of needing to transfer those out.

Hugh Tilson

Thank you Dr. Fuller Moore, now Dr. Tilson all your say goodbye

Dr. Betsey Tilson

Alrighty. Terrific. Well, thank you all again. I'm glad we allowed extra time and I'm glad we ended early. Yay. Thank you all very, very much. Um, and let us know um, you know when it's time to do another one about these. We felt like there was so many changes that was time um, but please let us know and let us know, especially through your professional societies. If and when it's time to do another one. We don't

want to overburden you with evening webinars, but we do want to be sure that you are getting timely information. So let us know. You can certainly forward follow up questions to us we will try to be as responsive as possible. Again, I just want to extend my gratitude for you all in the field day in day out and when it's done well to to our own internal team day in and day out. Again, this marks two years of this COVID journey for us. Thank you all for staying in the game with us. North Carolina is better because of everything that you all do. And I'm so grateful and appreciative for for that and we will come out of this COVID pandemic stronger than we started and the partnerships and our communications and us working together. We will ride that wave as we move into recovery. So thank you all very much.