Navigating COVID-19: Remind, Recall, Repeat- Tools to Link Patients to Care

May 19th, 2020
6:00 pm- 7:00 pm

Presenters:
Hugh Tilson, JD, MPH, Director, North Carolina AHEC
Christie Burris, Executive Director, HIEA
Jessica Brehmer, Business Development and Outreach Specialist, HIEA
Karen L. Smith, MD, FAAFP, Independent Rural Family Physician
Wendy Holmes, Immunization Branch Head, N.C. DHHS' Division of Public Health

Hugh Tilson:
It's 6 o'clock. Let's set started. Good evening everybody. Thank you for joining us for this week's chapter of the Navigating COVID-19, series. This evenings topic is Remind, Recall and Repeat: tools to link patients to care. This series is sponsored by CCNC, North Carolina Pediatric Society, North Carolina Psychiatric Association and North Carolina Academy of Family Physicians and North Carolina AHEC. I can't believe it but it's the seventh in our continuing series of informational sessions designed to respond to needs you have identified as you navigate COVID-19. We start by recognizing Tom, Elizabeth, Robin and Greg for your leadership and identifying those needs and great partnership in putting on these webinars to respond to them. I'd also would like to thank everybody for the work you are doing, patients, your staff and your community every day. We hope that information you get tonight will make navigating these trying times a little bit easier. Next slide.

My name is Hugh Tilson and I'll be moderating today. We have some really great panelists tonight. We have Christie Burris who is the executive director and Jessica Brehmer, a business development and outreach specialist for the North Carolina Information Exchange. Dr. Karen Smith, who is a family physician in Rayford NC, and Wendy Holmes who is the head of the Immunization Branch of NC Division of Public Health. Thank you, guys, so much for taking the time to be here, I've seen the slides they are great. You put a lot of time and thought into these, we're really looking forward to hearing what you have to tell us. Next slide.

After the presenters provide their information to you, we'll turn to your questions. We learned in the past for forums that presenters will often address your questions during their presentations. We'll have time to get your questions and I would encourage you to wait until they are through before submitting a question. You are submitting -- if you are on the webinar, please submit your question using the Q&A function on the black bar at the bottom of the screen. The Q&A function on the black bar at the bottom screen. All of your lines are muted. So, if you are participating by phone, you'll need to submit a question using your G mail account. It's questionsCOVID19webinar@Gmail.com . It's questionsCOVID19webinar@Gmail.com . We'll record this webinar; we'll get the transcript and post it on the joint CCNC and NC AHEC website. Now let me turn it over to you Christie, thank you so much.

Christie Burris:
Thank you and thank you to all the sponsors of the webinar series for all the work that you are doing and inviting the HIE to speak to you tonight. Next slide, please. As many of you know, the North Carolina health information exchange authority was created in statute in late 2015 to manage the state health information exchange. We are a business unit within the department of information technology that have entered into a private-public partnership with that institute, providing much of the technical integration, technical support help desk and analytics environment. We partner very closely with AHEC, Office of Rural Health, CCNC, Medicaid and other sponsor organizations and the divisions of public health and mental health a build out the HIE across North Carolina. In addition to creating the authority as the governing statute mandated connectivity for health care providers who receive stayed state funds for state health services, such as Medicaid and state health plans. So, for the last four years we've been working to deliver this mandate in close coordination with state held organizations. We've made significant progress building out a statewide technical infrastructure. To connect communities with care across the health care continuum. We have grown from 2500 facilities and 6000 health care facilities live today including 113 hospitals, sending over 700,000 messages daily. The centralized repository has grown from 3 million patients in early 2016 to just under 10 million as of this month. There are now over a 100 million continuity of care documents available for exchange We have the standard face documents, the patient summaries of medical visits and encounters. Additionally, it's really important to note that patients travel and relocate to North Carolina from other states. So, to that end, we have enabled interstate connectivity with more than 20 other HIEs in neighboring states as well as with the VA and the Department of Defense. Via the E health exchange network as well as a national network of HIEs known as the patient centered data home. I want to briefly describe how both of those work for you all. With the E health exchange network, its query based, meaning that the provider will enter the name in the search whereas with the PDCH network, it is based on zip codes when a patient travels across state line and making health information available whenever or wherever their occurs. And this way when a NC resident presents to an out of state emergency department while on vacation, based on their zip code that information is routed back to the HealthConnex. We add that da to the longitudinal record in the HIE. When you look at the network through the COVID 19 lens, we know that the virus is not bound by locality, county, state or country. We have established national data sharing work to make care more complete. Next slide, please.

I wanted to share with you tonight a few of the challenges that we've seen in terms of data collection and data sharing. So, many of you have been reading in various news media the pandemic has really highlighted systemic issues across the U.S. through clinical data sharing and the need for a comprehensive data sharing and Eco system. Some of the challenges that we have seen across the country inpatient matching, lab data, due to limited demographic included. Patients have been seeking care outside of emergency departments during the stay-at-home orders. They are using telemedicine, urgent care, primary care and health departments. Research shows that when they are included, the numbers belong to the ordering physician and not the patient. Additionally, the current inoperability of the landscape creates data

silos. One example the is lab data. As you all know when physician orders a lab test, it's processed, and the results reported back to that ordering physician and the state surveillance video team. Other members of the patients care team may not have that readily available to them. So, the ordered results do make their way to the HIE via messages, but it can be delayed. When North Carolina is not immune to these challenges, we believe we are in a good position due to the hard work of the state's department of health and human services and the Office of Emergency Management to really coordinate and mobilize a coordinate response. Next slide please.

So, in thinking about the North Carolina HIE's response for COVID19, when it first hit, North Carolina in mid-March, our agency knew that having access to robust repository and clinical data would be key in working to combat the is spread of the coronavirus. So with the full help of our advisory department on of the first things we did was to quickly disseminate a call of action to some of the largest health care systems throughout the state who have, to date, filtered the data we shared based on the Medicaid and state health plans. We urged them to expand all data sharing during the public crisis as COVID-19 was rapidly spreading across the state. Today we are pleased to share that Duke, Wake med and Wake Forest Baptist heeded this call to action. We are still working with a few of the large health care systems to expand data sharing as well but remain hopeful they'll share more of the data with the HIE in the near future. So, another thing under the core HIEs like NC HealthConnex, providing data sharing services, to really look at that longitudinal health record at the point of care. With respect to COVID-19, to serve as insight about who is impacted, where the virus is spreading, who should be tested, and which communities are at greater risk. We know that NC HealthConnex participants need timely information and situational awareness of COVID19 so you can make plans to resume more normal business operations. To that end we have been conducting outreach to our hospital and large EHR data feeds to insure they are using the recommended CDC guidelines to ensure accurate tracking and analysis in the outbreak. We are encouraging telehealth visits be entered into the EHR system to ensure that information from those visits become part of the patient’s health record. And we know that DHHS needs more clinical information to support their syndromic surveillance efforts. Both through the NCS and their NC Detect program. We are working with these teams to provide NC HealthConnex the data to them to support those efforts. And finally, we know front line health care workers need timely access to comprehensive date to form the patient medical history prior to contact protect the workers on the front lines from potential exposure from the patients who may have COVID19. We are also working with the Office of Emergency Medical Services to ensure NC HealthConnex data is available to their intake medical team should they need to be deployed to field hospitals and areas of the state in response to COVID19. Next slide please.

I want to walk through briefly some of the outbound services that really highlight the work that we're doing around COVID-19 for our participant users and then I'm going to turn it over to Jessica Brehmer to go in more details about each of these. As many of you are probably NC HealthConnex participants, know that we have access to data patient in two ways, one via the web-based clinical portal and the being bidirectional EHR integrations. We have developed for the

clinical portal a COVID19 reference guide and we will walk through where to find COVID19 related data in the clinical portal with you in just a minute. Another service outbound service that can help with COVID19 is NC notify. And this is a service that is billed off mission, discharge, and transfer information as well as continued care document across all facilities to let providers know patients receive care outside of their EHR or network. We also developed a cohort monitoring system looking at the real time data flowing to the HIE based on the ADP and CPD data available to us, just walking you through how that works. But that cohort monitor is essentially a COVID19 registry and we are working to make that available to the providers in early June. I already worked to express the public extract to work on syndromic surveillance and segmenting the population and continue to mobilize the response. At this point, I'm going to turn it over to Jessica Brehmer to address more specifically some of the tools that you all can us through NC HealthConnex.

Jessica Brehmer:
Thank you, Christine. Next slide please.

In the next couple of slides, I'll show you screenshots from the clinical portal and discuss important section where you can find COVID19 information. The procedures and clinicals tab in the procedures viewer displays procedures, test results, transcriptions, and radiology reports. If NC HealthConnex has received any COVID19 test result on your patient, they will be located here. You may click on the specific results row and the details will open. Please know that test names will vary by source. To get to this section, you must enter the patient's demographic data or search by local medical record number on the patient search screen which will be the default screen once you sign into the clinical portal. Next slide please.

This screen shows you a summary of the patient clinical data. You may receive an alert at the top of the screen letting you know that your patient has been seen at a health care facility in one or more of the neighboring states in which we are connected to. If you received this alert, you will need to click refresh until the alert disappears. To see clinical information about those encounters, you must click the documents tab and find the document that you would like to view. We are connected to the following via the E health exchanges. East Tennessee, the Georgia state designated health information exchanges, the regional HIE in Georgia, Richmond, Virginia, South Carolina, the Veterans administration as well as the Department of Defense. Next slide please.

In the documents tab, you will be able to see the continuity of care documents. This means if your patient has been seen at a health care facility with COVID-19 symptoms, this document will give you details about that encounter. If there is a document that you would like to view, you may click the blue text under the document column and a pop-up window will display the document for you. Please, remember, we receive information from multiple sources. So, the information displayed will be in the way that we receive it. Next slide, please.

Moving on to the patient centered data home that Christie talked a little bit about this already, but I want to go a little bit into details. The patient centered data home is a cost effective, scalable

method of exchanging patient data among HIEs. It is based on triggering episode alert which triggers the health care provider that care has occurred outside of the patient's home HIE. It enables providers to initiate data exchanges to access real time information across state and regional lines and the care continuum. So, let's walk through these steps. Number 1 are the away care team facility sends an alert to the away HIE of a patient encounter or ADT. Step number 2, the away HIE sends alerts to the home HIE based on ZIP code lookup tables. Step 3, the home HIE notifies the away HIE if there are patient records. At this time, the home HIE sends the alert to the patient usual home doctors. Step 4, the home HIE and the away HIE exchanges clinical data on the patient to improve short and long-term care coordination. And lastly, the away HIE delivers records to the away care team and the home HIE shares post-encounter summary with the home care team. Next slide, please. Next slide, please.

PCDH is an initiative of the strategic health information exchange collaborative that put into practice the vison that clinical data should be available when ever and wherever care occurs and centered around the patient to improve patient care. In this module, if you can go back one slide for me -- perfect. Thank you so much. I'm just going to start over on this slide, just so everyone can understand exactly the slide and the talking points around that. So PCDH is an initiative of the collaboration room caves that put into practice that collection of data should be available wherever and whenever care occurs and centered around the patient to improve the patient care. In this module, all clinical data becomes part of the longitudinal patient record and the HIE where the patient resides calls the data centered patient home. NC HealthConnex went live on the PCDH network in late 2018. So, when Christie explained earlier, the biggest different, the E health exchange is query based and PCDH will push notification based upon zip codes. Next slide, please.

Now, moving our focus back to North Carolina. Health care providers are often unaware when one of their patients has received care outside of their facility or EHA network. More than ever, there is a growing need for health care providers to be notified of certainly events in a timely manner to support successful transitions of care and improve care management. NC notify is an event notification service that actively notifies provider as their patients seek care across the care continuum. Based on admission, discharge and transfer mission from emergency department, inpatient, urgent care, this service is currently monitoring 2.7 million patients statewide and has generated 126,000 patient alerts just in March alone. For COVID-19, N C Notify offers several fields that are particularly valuable to providers in monitoring the COVID-19 related episodes. These include, indicated COVID-19 symptoms or conditions, discharge disposition indicating status of the patient at discharge. Discharge location, indicating the facility or organization which the patient has been discharged. Patient class, indicating the type of visit such as in-patient hospitalization. And then participants will provide a list of patients with whom they have an existing relationship. NC Notify scans, NC HealthConnex and provides stats reports at custom delivery and rolled back to the participant. Next slide, please.

In the previous slide, I mentioned that participants would provide a list of patients in which they would like to monitor or receive alerts

on. Several health care providers were hitting a roadblock when it came to be pulling the patient list from their EHR. In version 3 plus, there will no longer be a need to submit a patient list if you are already connected and sending data to NC HealthConnex. We will be able to use the new audit attribution future to go to the facility and then you can have access to a patient panel loader where you can manage a subset of your patient population. There is dashboard-like platform that will be accessible through the NH HealthConnex clinical portal received through ASTP or DSM. Next slide, please.

Hugh Tilson:
Jessica, we need to move on pretty quickly, please.

Jessica Brehmer:
Okay. Thank you so much.

Hugh Tilson:
Yep. We are just about out of time.

Jessica Brehmer:
Okay. We can go ahead and move on to the next slide. And this will be my next slide. So, this slide walks you through a cohort monitoring program that we have developed in response to COVID-19. The program is essentially a COVID-19 registry based on data available and health information exchange. Across the data conditions, we are receiving own average 700,000 messages per day. This program is a way to segment in real time the N bound ADTs and CCDs across all facility and focused on COVID-19 data. As data is flowing, we are scanning using criteria based on CDC guidelines and med caught coding terminology created in response to COVID. We are learning that providers are more apt to document COVID-19 like symptoms in EHR in leu of testing results. Wee assign patients to co-horses that you see here. Symptoms like cough, shortness of breath, fever or a combination of these, suspected cases documented in the provider visit, test orders and positive test results that have been shared. Once patients are bucketed, we are developing various workflow steps, one which will be available to providers within the clinical portal. We began developing this workflow in mid-mash and should be available to participants in early June. Patients with whom a patient has a provider-relationship with, will be displayed in the clinical portal clinician tool section segmented by the four cohorts shown in the spring. It will provide the patient name to be cared into the patient longitudinal medical record. Now, I'll turn it over to Dr. Smith. Thank you so much.

Karen Smith:
Thank you for allowing me to graciously share how do we put all of this together at the point of care for the doctor, the patient and the community? Well, let me just kind of take our colleagues back. 34 years ago, many of us feared an unknown, unnamed, unidentified virus and we feared through the out surgery, be a at the obstetrical delivery and even a simple needle stick. We stuck together but things were together. We had the compassion then but the environment for technology was different. Next slide.

See what we want to try to do today is to pull everything together, where are we at 34 years later, what do we have available? We're going to look at those strategies and review the role of the health care

data at the point of care and what about the patient perception? How do they accept all of this information? Next slide.

That's our team and that's what we start with. Interestingly enough, this group of individuals came together March 5th of this year for staff retreat. What was the topic? I pulled it right out of our agenda. We spoke about patient satisfaction, telehealth as well as how do we improve our vaccination rate in the practice? But the best thing out of that retreat? We bonded because, one week later, our bonding just as we have done with all of our colleagues, was going to take us to places that we had never experienced. Next slide.

Well, was this the signal of the beginning of the pandemic? We know health care workers were honored, they were told how wonderful their work was, so much so that major corporations said, come on in. We'll give you a meal and a day and get the best donuts in town, right here in North Carolina. So, the champions were quickly identified. Next slide.

But did we really need donuts and burgers, or did we need health care data? I would say to you the donuts were sweet, the burgers were great, but I love the data and that's what made things work in our neck of the woods. Next slide.

We had to change what we were doing. Our patient messaging started off with call us first. And that was a campaign to get our patients to reach out to us before they went to the emergency room or before they went to an urgent care. Call us first. We had to change. Not only did we want you to call us first but we're going to call you. And we still want you to call us first before you come to our office but we're going to call you. So, we kind of reversed that messaging just a little bit. Next slide.

This is what we were looking at. We had technology that we did not have 34 years ago. Any of those on the phone remember what a floppy disk was. Well, that's what we had a long time ago. And what we found, using our ACO data, the [indiscernible] data was that we have a rapid uptake of telehealth in the practices hitting up 35% of all claims within 20 days. This was amazing. But I can tell you that was a lot of effort, strategy, good timing and my colleagues that just presented, that data made a difference. Next slide.

Well, we also needed to be sure that we were going to get paid for all of this work. Many of us were already utilizing the annual wellness visit campaign, chronic care management, our transitional care visits from nursing home or hospital, but were we going to get paid if the patient could not access televideo and what about telephonic? Well the updates were coming in continuously and this is one that came out just last week, confirms that we could still keep up with our annual wellness visits, with our patients and we were going to get paid for those services because, remember, a lot of our practices closed doors or stopped seeing patients, one because of fear. Two, were they going to get paid? And, three, just not knowing where we would be at the end in terms of our financial status. Next slide.

So, what was the strategy? We could now connect but who did we need to contact the most? Who were the most vulnerable patients that we needed

to reach out to? Well, yes, age really was identified as having a strong influence and there was a scoring system a vulnerability score that we used. So, in our ACO data, we actually knew who the very high-risk patients were, the high, the increased risk, the average risk. We like all of our patients but who did we need to call first? Clearly, the ones in red. That's what we did. We started calling and we reached out to them. Next slide.

Fill up the schedules. Don't close the doors. We need doctors and doctors needed patients. And, so, we monitored the ADT service events. We identified those patients and we started filling up our schedules. If they didn't want to come in face to face and we preferred to do the telehealth visits, we needed to do it and that's what we did, and we even came one plan to make the most out of those visits on telehealth or telephone. Next slide.

Here you go. Each patient was individually identified, and we knew what to do with those patients. But our game plan, stay well at home. And this is the game plan that that team who bonded together in our morning huddles, we came together and we highlighted those patients who were in red because we needed to make sure that we were giving unified communications to the patients that we were calling or were getting on the telehealth video. Next slide.

Well, I tell you, in order for compassion to really defeat Corona, we needed collaboration from all of our partners across the health care system in North Carolina. And our good present, Dr. Sam Cykert up at UNC provided us with a great tool that, when we identified those patients and we had them before us, what were we looking for? What were some of the key things to keep the chronic care managed patients healthy and stable? And, so, there's quite a bit of information that's going to be provided and I encourage you to take a look at it because if your system does not provide that stratification that our ACO provided, you can still accomplish the goal of really paying attention to those patients who need care. Next slide.

So, we have those tools. You can query your HER and look for those patients. Remember the game plan. Fill up the schedule. Get these patients an eye contact or ear contact so they know that you are there for them. Next slide.

And more pearls. Remember that team approach. Have your nurse, your CNA, your RMA do the pre visits, the pre calls. And more pearls. Take your time, scroll through these and we'll answer questions at the end. Next slide.

Ah. Vaccine administration. A good colleague of mine, a past American academy, president, Wanda Tyler, shared with me that vaccination rate had decreased across multiple states, multiple payers, multiple EHRs and the ages of the patients really did exemplify a decrease and this data is a glimpse of what she's about to present. But it also told us that we have a challenge to overcome. Next slide. And, so, we were fortunate. Remember our retreat. We spoke about implementing a new vaccine strategy in our office. Well, that Monday, we had that box in our office and we had vaccinations. So, I would say to our patients, we don't have a vaccine for coronavirus, but we definitely have a vaccine for pneumonia vaccine and all the other immunizations. So why

not get protected against diseases with vaccines that we already have. Our vaccine administration rate soared. Next slide

And how do we do this? We are getting ready to also utilize more technology to make sure that we can reach out to more patients. The flu is coming, and we want to be ready for that and when coronavirus finally get a vaccine, we want to be ready and we're going to use the same type of technology. Next slide.

Well, our patients were so thankful. This beautiful bouquet of roses and flowers just came to me just last Thursday. I didn't get one donut. I did get a couple of burgers, but I received a beautiful bouquet of flowers and a great pineapple coconut cake because our patients appreciated us sticking it out, displaying our compassion and not interrupting service. And, so, I would like to go ahead and turn it over for more information on immunizations because that is the next challenge.

Hugh Tilson:
Wendy, are you there?

Wendy Holmes:
Yes, can you hear me.

Hugh Tilson:
We got you. Thank you.

Wendy Holmes:
Thank you. Hey, everyone. And Doctor Smith, thank you for continuing to vaccinate children and individuals and keeping that strong recommendation. I'm going to go over the current situation in North Carolina and talk about the use of the recall functionality and the registry and how it can help you identify children or individuals who may be lagging behind or coming to immunizations that may have missed a couple of visits. Next slide.

So, the goals of the presentation, of course, is use of reminder/recall and how to perform those, how to perform the reminder-recall functionality using the registry. Next slide.

As you are aware, there's been national notice of vaccine administration and ordering and CDC started looking at this last month. We had some conference calls with them. They started noticing trends with our awardees which means that vaccines for children program participants at North Carolina -- well, they looked at the United States and North Carolina and other states specifically and broadly throughout the United States. They see a downward trend of around 60% of vaccine orders and also vaccine administration data has gone down and associated with those ordering trends. We also looked at North Carolina and went back to the beginning of March and even before the state of emergency was activated in North Carolina and we started seeing a decrease in the ordering patterns along the providers and decrease in the number of doses that were reported as administered to North Carolina Immunization registry. We saw a significant drop at the end of March and through the month of April and, so far, we've seen, you know, the large he is decrease around 65 to 70% of reporting reported doses administered. Next slide.

So, with this trend that we are seeing, and we know that this is related to multiple factors with COVID, but mainly people were not getting out and parents were afraid. There are some positive notes with this from CDC observation. They are seeing coverage and they are expected to be maintained are doses administered. It's pretty steady around the cohort of 24 months, or two-year-old. The message here is that if you need to prioritize patients, if you have to prioritize because of factors within your own office or community, focus on the children who are the most vulnerable which are the newborns, children under 2, and vaccinate them at every opportunity if they are eligible. And collaborate with local health departments because we know that they are really taking the blunt, the burden of the disease investigation and that is across the state. Parents that would normally take their children to the local health departments are for established patients at local health departments may not be seen for well child check. Or they may have delays in their visits. And, so, if you could, to the extent possible, accept new patients during COVID-19 or at least provide immunization services for children who may normally receive those services at the local health departments and help with this effort. It's almost liked the safety net has been reversed. It is what we are looking at. Because all local health departments across the state are considered safety net providers what we are seeing now is private providers pediatricians becoming more of the safety net. If it's possible, if you have the capability, if you have the resources and it would be safe to see additional patients, then patient volume and vaccines available, we would encourage that. And then the use of reminder-recall. This would be the reminder/recall functionality in the registry that I'm going to walk you through now. Next slide.

So, reminder/recall, about communicating, you know, notifying the parent or the guardian, hey, your child is due or coming due. Maybe overdue. It assists providers in this notification, generates the letters for the patients. There is also postcards, notification that is auto generated through the information that is in the patient demographics within the registry. And next slide.

The benefits of using reminder/recall, it is easy, cost effective. It is automated. And, so, it also helps reinforce the medical home or the immunization home with parents and it brings those children in who may already be falling behind on other well visits. So, there's a lot of benefits to use of reminder/recall. It assists providers in identifying when vaccines have been administered and they are given too early, maybe too many doses, minimum intervals in between products or live vaccines may have been violated. And, so, it helps improve the clinical administration of vaccines throughout your practice. It also saves time, money, because it is an automated process and it does not take people to do the job. Next slide.

So, there's four users that are in the registry. Four types of users at the practice level that I'm going to go over. Reports, that would be like your administrative staff, front desk, they can search the client records. And they can view client records which would be only the immunization certification or record. Typical users are your nurses, your staff, your CNAs. These are the people who would normally use the registry to document a vaccine as administered, they have

limited capability as far as user role to generate any reports or to any exams, inventory control. Each practice required to have, at a minimum, a vaccine coordinator and a backup coordinator. The inventory control could be assigned to the backup coordinator who would be responsible for receiving vaccine shipments and managing and placing orders through the registry for your practice and then the administrator. So, each practice, they are required to have two administrator users assigned and that would be your vaccine coordinator and could be your track-up or even the physician. So, this user role has the capability of perform all of the functions at every user role that we just reviewed, you have that capability and in addition to that, the full use of reminder/recall, assessment report and benchmark report. So, this is the highest-level user roll and the registry practice. Next slide.

This is a screen shot of the reminder/recall screen to generate that reminder/recall report. I will just walk you through this briefly but the first selection in the criteria would be clients associated with your organization or residing in the county. And I had may be clients associated with your organization and residing in certain counties. So, I know in wake county, Clyde, Johnson county, other counties come to a wake county pediatrician's office but reside in another county. That is when clients were within the organization and also residing in other counties. So, you could select that criteria. The second tier are would be the vaccine groups. All vaccine groups are the ACIP-recommended vaccine. So that would be the 431, 13314 and the --

Hugh Tilson:
Did we lose you?

Wendy Holmes:
You can hear me?

Hugh Tilson:
Yep, you're back.

Wendy Holmes:
You can hear me?

Hugh Tilson:
Yes, we can see you now.

Wendy Holmes:
Selecting the vaccine groups, you can hit certain vaccine types that you want to generate the report for, such as meningococcal, MMR, you can select which vaccine type you would like to generator use all the vaccine groups which would be the ACIP recommended vaccines. Anything that's highlighted in blue on this screen and there's only one field here, the birthday range, that's the required field in order to generate the record. You would include generate and that would start processing the report. These are clients now they are associated with your organization that have received one or more immunizations and are -- it could be any age, unless you specify the age. Next screen, please.

This is what a report -- the status of the report and what it would look like, once that report generated has been done. It may take several minutes to get the final report depending upon how many clients are associated with your practice. Once the report is complete, you will see a blue link and, at that point, you would click on that and that would bring you the list of clients. Next screen.

So, this is a summary of the clients and their statuses with the query. And you can see they are active and inactive and that would be the number of clients that were associated with the cohort or the age that you selected. And then the ones that are active would be receiving services and you have not designated them under their demographic field as inactive, moved or gone elsewhere. And there is breakdown of the different criteria here and, you know, the most important piece about this is that every client must have a responsible person, at least one associated with that client or that patient. And that responsible person must also have a phone number, a city of address and a zip code to be eligible to receive notification. In order for you to pull that client listing up, you would have to have a zip code, city and a phone number. One of those three, in order to get the listing of that client. Next screen.

This is the type of notifications that you can generate from your report and the client query listing is -- it is a full list of client names. So, all patients that fell within that cohort or any other information about the responsible person associated with the client. The letter is a standard letter, but you can customize it to put your practice information or phone number. The reminder cart is a standard postcard but, again, that's a customizable report and you could print, you know, and then the Avery mailing letters that these would be pulling the data from the client responsible person and the client extract which is the text file. It shows you which clients were omitted and why they were omitted. These are the descriptions of those types of notifications that I just went over. And that, you know, explains what -- why they were notified or omitted from the report and what is needed in order for you to be able to get that particular report output. Next screen.

So, the message -- and this is a consistent message with Dr. Smith and everyone. We know that immunization coverage may be affected by COVID-19. We anticipate that, based on the data that we have and based on immunization ordering and trends and reporting doses administered. So, the recommendation is to establish that reminder recall process for all pediatric and adolescent patients with the focus on pediatric patients and maintaining the coverage level, high coverage levels with those that are at risk or most vulnerable. And designating your staff to oversee this effort. Our staff, we worked with practice coordinators closely. So, we may actually be working with someone that's your vaccine coordinator or contact person through IQIP visits. That's a process that CDC is using and that we administer. IQIP is something that replaced AFID. You may be familiar with that. IQIP is immunization quality improvement provider. That's right the new process. But we are still looking fundamentally at the basic coverage, how to improve coverage, targeting populations and the focus on the strategy that would be most appropriate for your practice and to improve and yield the best outcome. We would, you know, encourage you to use other reports on the registry but reminder recall is a method

to generate these notifications and send them out and it would take little effort. Training staff, making sure that staff, again, are familiar with how to look up records, scheduling appointments and making sure that there is no missed opportunity at the time of checkout or any encounter, really, and then using notifications to identify patients who are due and overdue. Next slide.

We just talked about the first bullet here. Knowledge, training, and we do also routinely provide some training annually. This year, I'm not sure if we're going to be able to do that. Our consultants also are available to assist and provide that one on one consultation and support for your office. You know, facilitating these conversations with children, parents, and with individuals, I mean, I'm not sure how often that you are having these conversations now with these parents, but when you do have the opportunity, talk about the importance of vaccination and maintaining them, you know, high coverage with -- ensuring that children under 2 are vaccinated. And then, looking at your coverage levels, you know, routinely run those reports and measure and evaluate and send notifications. You can send notifications. There is no minimum interval between notifying a parent. Next slide.

And for this, I do want to encourage you to generate those notifications at least on a monthly basis if possible, but, again, focus on children that are two and under and the recommendation at this point is to get that good list of clients that are due. Have your list available and don't bring them in unless you can safely administer vaccines. If you have the capability, you can separate them from sick patients, if you can work out some type of workflow within your office, bring them in if possible and bring them up to date by mid-summer, if possible, because we know from data that children who start lagging behind often stay behind and never catch up. We won't see the results of that for at least a year of low coverage or, you know, lack of uptake. And that's all I have, and I will answer any questions or provide any additional guidance and feel free to ask any question. Thank you so much.

Hugh Tilson:
Thank you so much, Wendy and thanks, everybody, for your great presentations. There is an interesting conversation going on in the Q&A section about how the different systems work with each other. Is the immunization registry data, the AMR, the HIA, there is a follow up between the intersection between the NCIR and the HEIEA. Christie, do you think you can talk about how they are connected and the process?

Christie Burris:
Sure, and Wendy can jump in as well. So, today, when providers enter the immunization information into their EHR, if they are submitted data to NC HealthConnex, that data travels to the HIE and get added to a patient's longitudinal record. So provider A gets immunization. Provider B can see it happens again, across the care team and the care continuum. We have been working with Wendy's team very closely for a couple of years now to enable electronic reporting to the immunization registry to providers EHR and providers can choose to connect directly with their EHR vendor through immunization registry or they can choose to leverage the interface that they have with the HIE to do the query and reporting. So, we work very closely with Wendy's team on that. And

we -- I've actually also been talking with Wendy's team about a closer integration for immunization data to be reported out through the HIE, but that's still a very fluid link as well. Wendy, feel free to chime in.

Wendy Holmes:
Can you hear me, Christie?

Christie Burris:
Yes.

Wendy Holmes:
Okay. Yes. We are partnering together, and we are trying to get as much information to improve our dataset and it's really not data for us. It is data for the providers. And the benefit and the goal is for to us have a 95% representation of children under six years of age. In our registry and that's a CDC and healthy people goal. But the more information that we can get from providers, the better through electronic health record exchange and HIE, there's a lot of benefit going through the HIE. The one thing is that, you know, they don't have to use multiple connections and so Christie is right. We want to focus on getting more information on children's records but immunization histories in general and having that information, especially in light of the upcoming influenza season, and the possibility of having a COVID vaccine available as early as this fall, the more records represented in the population and being able to document that information timely and reporting and sharing that information is very important for us and it's been for CDC also.

Hugh Tilson:
We've got a couple of questions about why are not all practices linked to the HIE? What do they have to do? How many providers are connected? Is there a requirement for practices to be connected by a certain date?

Christie Burris:
Great question. That was a multi-part question. I'll see if I can unpack that a bit. So, if health care providers are receiving state fund for the division of health care services, that would be Medicaid or state health plan, there is a state requirement for them to connect to the HIE and begin submitting data. And we've been working to deliver this state requirement for several years now and if you recall, the first slide I shared, we now have over 6000 facilities who live and on the HIE and I will point out that first slide also showed that we have 5000 facilities who are in onboarding. So, there's still a lot of integration work to be done to get everybody up and on it. I will say, though, we have built 65 bidirectional phases. So, there is bidirectional capabilities for those who live to be able to stay within their EHR and receive HIE data back in. But for those who were not live and would like to really receive the benefits of looking across the patient population's longitudinal record, the web-based portal does not retire a data to be flowing or type to be billed. It requires our requirements and the credentials to be issued. Last question, we had several timelines within a state law that have passed as well as will have been modified. The most recent deadline for connectivity was June 1 of 2020 which, obviously, is several weeks away. And, so, we were fortunate to work closely with the general

assembly when they did their COVID-19 relieve package to have that deadline extended until October of 2021 to really allow for those who are already in onboarding to just continue to focus on treating patients and getting through COVID-19 and then we would, you know, kind of do the work that we need to do to get them moving. But if you have not yet signed an agreement with AHIE and do receive state funds, Jessica Bremer is the person that you can follow up with. I have the information on the slide deck to get information about that. If you want to receive state funds with you want to understand the benefit to your practice, feel free to reach out to us as well. We are open to all providers across the state regardless of your payment type or pair mix.

Hugh Tilson:
Thank you. I know it is 7:00 but we have a couple more questions if you all will indulge me for a couple of quick questions. How long does it take for a recall postcard or letter to be generated and mailed? Who pays for the postage?

Wendy Holmes:
Okay. It does not take long. The mailing is a physical effort but the report to generate, the reminder-recall notification, it may take up to five minutes at the most. It depends on the number of its clients that are associated with the organization. And once that notification -- once that query is submitted and all of the criteria for the query, then it is electronically. You would pull the list up and generate the list and generate the notification, whether it is a postcard and it may take 10 to 15 minutes, I would say.

Hugh Tilson
We often need to print a copy of vaccine record for school. How long does it take for the vaccine data to go through the HIE and on to the NCIR?

Christie Burris:
This is Christie. I'll start to answer that and then Wendy, crime in. With the way that data flows to the HIE, it is flowing near real time. When a provider provides the vaccination within that visit, when they close out the record, the encounter, the data will flow to us, depending upon the connection to near real time on once daily. We are looking at about 50-50 in terms of the connection. Some of them of sending batch files once daily and some are sending them near real time. And then, the second part of that question is for those who have enabled electronic reporting to NCR through the HIE, that also is happening near real time. Wendy, do you have anything to add?

Wendy Holmes:
No, that's correct. It's depended end also on the connectivity of the provider's internet. And, so, that is always a factor but -- yes. The ability of the provider internet to maintain connectivity and submit. And also -- nothing else, Christie. I think that's it. That covers it.

Hugh Tilson:
And we are way over time but let me just say we have one other comment that we have many families asking why with COVID-19 should they change desists for vaccines? They are looking for concrete patient education around this situation. So that's more of a statement than a question.

Let me just thank y'all for making the time to present to us tonight. Just incredible information. Really appreciate you making the time. For those of you who participated on the webinar, thank you and we hope that this was helpful. Before we sign off, let me just give y'all the opportunity to say any last words, Christie, Jessica, Karen or Wendy. Anything that you want to say to the people who still here?

Wendy Holmes:
I would like to address that last question or comment. There are some talking points for providers to discuss with parents about the importance of vaccine and how to approach that that I'm happy to provide, send to Elizabeth for her to feel free to share with all providers if she would like that. I'm happy to do that.

Hugh Tilson:
That would be great. Thank you.

Wendy Holmes:
Yes, you're welcome.

Karen Smith:
This is Karen Smith. I would encourage all of our providers for all the practices to reach out to your patients. You will be amazed at what you will discover. And it is a great opportunity to really connect and make a difference in their health care lives.

Wendy Holmes:
Dr. Smith, I agree. I appreciate you saying that. This is Wendy Holmes.

Hugh Tilson:
That's a great point, Dr. Smith. Thank you so much for that. And you've shown that it actually works. So, thank you for sharing that with us. Well, on that note, I want to thank everybody. Y'all take care. Stay safe. Stay healthy and talk to you next week.

Wendy Holmes:
Thank you.