

STROKE ADVISORY COUNCIL MEETING MINUTES

February 15, 2023

1 - 2:30 pm

Members/Partners

Present: Wally Ainsworth, NC Office of EMS; Sue Ashcraft, Novant Health; Andrew Asimos, Atrium Health; Pat Aysse, American Heart Association (AHA); Sharon Biby, Cone Health; Annabelle Black, Novant Health, Greater Charlotte Market; Melanie Blacker, FirstHealth; Stephanie Bradbury, Chiesi; Haley Brennan, Novant Health, Huntersville & Mint Hill Medical Centers; Olivia Broomer, Cone Health; Anna Bess Brown, Executive Director, Justus-Warren Heart Disease and Stroke Prevention Task Force (JWTF); Stacey Burgin, Coverdell Stroke Program, CCCPH, DPH; Adrienne Calhoun, JWTF Board Member, Piedmont Triad Regional Council Area Agency on Aging; Amber Carter, Cone Health; Tonya Chang, AHA; Shannon Chesney, Duke Raleigh; Matt Ciancarelli, J&J; Desiree Cihelka, Mission HCA; Sylvia Coleman, Coverdell Program Nurse Consultant; Michael Crist, HIE; Ron Cromartie, Innovative Healthcare Consulting; Tom Curley, Novant Health New Hanover Regional Medical Center (NHRMC); Carissa Dehlin, Novant Health, Matthews Medical Center; Yolanda Dickerson, JWTF Board Member, AHA Volunteer; Shanta Dube, Levine College of Health Sciences, Wingate University; Jonas Dusenberry, HIE; Abby Fairbank, AHA; Heather Forrest, Duke; Melissa Freeman, Duke; Michelle Geroleman, WakeMed; Lorrie Heath, Novant Health, Forsyth Medical Center; Jess Hagins, NCDIT; Sarah Jacobson, AHA; Edward Jauch, Chair of Research, MAHEC; Joanna Keeter, ECU Health; Amanda Lambert, Novant Health, Rowan Medical Center; Lori Lefler, FirstHealth; Clarissa Lowry, Novant Health, Forsyth Medical Center; Lisa Lucas, SAS; Sandy Maney, Genentech; Jim Martin, Tobacco Prevention & Control, DPH; Kim McDonald, Chronic Disease & Injury (CDI), DPH; Davin McGinnis, Novant Health Greater Winston-Salem Market (GWSM); Heather McLawhon, Novant Kernersville Medical Center; Jamila Minga, Duke; Tonia Mitchell, Wilson Medical Center; Lisa Monk, Duke Clinical Resource Institute, Improve Stroke; Terri Moore, Coverdell Stroke Program, CCCPH, DPH; Margaret Murchison, JWTF Board Member, WWPG Broadcasting; Kathy Nadareski, WakeMed; Sharon Nelson, CDI, DPH; Peg O'Connell, Chair, Stroke Advisory Council (SAC); Sarah O'Neal, WakeMed; Melissa Papadopoulos, CCCPH, DPH; Mehul Patel, UNC Dept. of Emergency Medicine; William Pertet, CCCPH, DPH; Ruth Phillips, JWTF Board Member, Community Health Coalition; Renée Potter, UNC Stroke Program; Joey Propst, JWTF member; Julia Retelski, Cerebrovascular Program, Atrium Health; Matthew Schirmer, SAS; Birtha Shaw, Diabetic Supply; Janie Sifford, Novant Rowan & Thomasville Medical Centers; Tish Singletary, CCCPH, DPH; Lauren Stevenson, Novant Health NHRMC; Bridgette Story, ECU Health Beaufort Hospital; Chuck Tegeler, Vice Chair, SAC; Sarah Van Horn, UNC Health Blue Ridge; Emily Volk, Northern Regional Hospital; Angela Wagner, Novant Health GWSM; Julie Webb, Duke; Kim Webster, HIE; Erika Yourkiewicz, Novant Health NHRMC.

Welcome and Introductions

Peg O'Connell, SAC Chair

Stroke Advisory Council chair Peg O'Connell welcomed everyone in the room at SAS Institute in Cary and welcomed all joining virtually via MS Teams. She thanked SAS for hosting the meeting.

Everyone present introduced themselves by name, role, and affiliation. Participants joining virtually introduced themselves in the Chat.

Peg called for the approval of the minutes from the November 15th SAC meeting. She reminded members that they had received an email with the minutes in advance of the meeting. The minutes were approved by acclamation with no corrections noted.

Peg added that she would be leaving the meeting early to get to the legislature where a bill to expand Medicaid will be presented on the House floor. Representative Donny Lambeth introduced the bill and has been working on expansion for eight years. In addition, Senator Gale Adcock introduced a bill to restore funding for tobacco prevention and cessation. Both items are on the Task Force Action Agenda.

Coverdell Stroke Program Update

Anna Bess Brown, Justus-Warren Heart Disease and Stroke Prevention Task Force and Stroke Advisory Council

Anna Bess thanked the Stroke Registry work group including HIE executive leadership Christie Burris and Michael Crist. Michael Crist praised the partnership and expressed his thanks to the work group. He said he could not ask for better team work than we had on this project. He expressed the satisfaction of taking data and transforming it into useful information and added that the Registry will be useful for many years to come.

Anna Bess thanked Fred Eaker who has been our fearless leader and coordinator; and Matt, Jenell, Lisa, Jonas and their colleagues on the HIE/SAS team who worked so hard to envision the Registry and pick all the indicators to determine what data would need to go in it. She thanked many who served on the Registry work group over time. She offered special thanks to Mehul Patel, Amy Ising, and Wayne Rosamond for their commitment and expertise.

Anna Bess noted that the project has been a long time in the making: we submitted the proposal to the HIE Use Case Group in 2018 and applied to the CDC Coverdell program in 2021 to fund it. DPH was awarded and began this round of the Coverdell program June 30, 2021. Even before we could draw down funds and get the MOU executed, the work group was hard at work.

The Stroke Advisory Council seeks to ensure that all North Carolinians receive the highest quality of acute stroke care currently available.

In support of a statewide system of care for stroke patients, we are excited to have the Registry to assist with these goals:

- Understand the incidence of stroke in our state
- Link EMS and hospital data for statewide data sharing
- Promote greater networking of EMS and healthcare facilities across the state
- Decrease death and disability by addressing gaps in care
- Improve geographic and demographic disparities
- Track access to rehabilitation after stroke

Having a Stroke Registry is providing us with data and with opportunity: to provide state of the art care to all no matter where you live, to explore high-need areas in our state, and identify gaps in the provision of care so that we can address these issues through training of providers, providing resources for hospitals, and so that we can seek funding to improve our statewide system of stroke care.

On Monday the Division of Public Health hosted a site visit in pursuit of national accreditation. The site visitors recommended that DPH use statewide data to inform our work to reduce disparities, and that is exactly what the Stroke Registry does.

We are so grateful to NC HealthConnex for building a Stroke Registry within the HIE. We are grateful for the support of our branch leadership in Tish Singletary and to Kim McDonald and our CDI section and of the Division of Public Health at DHHS. We are grateful to the CDC and the Coverdell Stroke Program which funded the development of this Registry.

This Registry holds information on strokes in our state, on the people who have them and on where they

live, on their treatment, and on their rehabilitation from a serious event; and it fits with the Goals of the Coverdell Stroke Program (see slide 10).

We wrap up Year 2 in June and in Year 3 will begin a monthly call for stroke coordinators. We hope you'll join us to share information, resources and support.

Stroke Registry

Michael Crist, HIE Assistant Director

Jonas Dusenberry, HIE Applications Systems Specialist

Kim Webster, HIE Business Development and Outreach Specialist

Matthew Schirmer, SAS, Senior Manager, Health Informatics Consulting

Kim Webster gave an overview of the NC HealthConnex (NC HIEA) system and services. Matt Schirmer described the development of the Registry, and Jonas Dusenberry provided a live demonstration of the Registry. Matt described plans for future work. See slides and view the recording to see the demo.

Questions and Discussion

1. Tom Curley with Novant New Hanover Regional Medical Center noticed that Novant does not appear on the list of facilities under the Encounter by Organization tab. The work group had noticed that also. HIE confirmed that Novant is submitting data to the HIE, and the HIE team is working to resolve the issue. Matt noted there have been challenges with this tab, and there is also opportunity.
2. Peg asked if the eastern part of the state should be bluer. Matt explained that under Stroke Volume by Patient Address, the number of people with a stroke diagnosis in Wake County, which has a lot of large data contributors, is dark blue. Under the Prevalence tab, the darker blue means more strokes based on the population of that region.
3. Jamila Minga, researcher at Duke, asked if it is possible to look at hemisphere. She noted that there are many codes, that codes are not consistently used, and that there is a huge disparity of care for those that experience right hemisphere stroke. There is no good diagnostic label. Lisa Lucas with SAS explained that the codes are not at that level; we don't see hemisphere. Hemisphere is not a coded diagnosis but part of imaging. Matt Schirmer with SAS added that this is an area of opportunity and that the HIE receives a lot of non-coded data. Anna Bess noted that sometimes the people who enter data into the HIE are not the stroke data experts. We encourage all hospitals that provide stroke services to join the Stroke Advisory Council. We urge hospitals to find out who is entering data into the HIE and to educate them on the stroke data they'd like to go to the HIE.
4. Renée Potter asked if hospitals enter data. All health facilities (hospitals, providers, ambulatory care centers, etc.) that receive state funds (Medicare, state health plan), which is most of them, must submit data as required by state law. Michael Crist added that 9000 facilities have connected.
5. Chuck Tegeler, SAC vice chair and Head of the Dept. of Neurology at Atrium Wake Forest Baptist, asked if any other states have a stroke registry within an HIE. There are none that we know about. He also asked if hospitals must submit stroke data (as with the former registry). Matt Schirmer explained that no; hospitals do not have to enter data, that HIE data submission occurs through an automatic pull from EMRs.
6. From the Chat: who has access to the Registry? Anna Bess responded that currently access is limited. A few state employees can access the Registry now. We hope providers will have access in the future.
7. Kim McDonald, CDI Section Chief, asked about the limitations. Matt responded that the HIE receives data from tens and tens of different EMRs, that data is not standardized, and that they

have to go find data sent in text. Race and Ethnicity, for example, are not all captured in a standard way. Many health facilities have their own ways of coding Race and Ethnicity.

8. Chuck asked if there are elements that can be used to improve quality. Anna Bess responded that yes; development began with a list of required data elements from the CDC Coverdell Program. There are several of those elements that are not collected in the HIE. From the beginning we knew that the data in the HIE Registry would not be used in the same way hospitals use GWTG and that using the two together (GWTG as a QI tool and the HIE Registry as a population health tool) would give us a more comprehensive picture of stroke in the state.
9. How do you link up a person who had care in different places? Matt explained that HIE interoperability allows matching through patient identifiers.
10. From Dr. Jauch in the Chat: can NEMIS or GWTG EMS tab data be integrated? Anna Bess responded that HIE is in discussion with NCOEMS. Michael Crist explained they are working on governance: can the HIE access all the data or will HIE need to contract with each EMS agency? They're working on it.
11. The group discussed the stroke type categories and noted that Hemorrhagic is not subdivided in two: ICH and subarachnoid (SAH) which are different and have different treatments. Matt explained the HIE has a data warehouse that is able to query. Right now we could break ICH down in to two categories but can't do it within the Registry.

Chuck Tegeler thanked everyone for their work and congratulated everyone who worked on the Registry. He noted, "The Stroke Registry is exciting and will be a disruptive technology for stroke patients."

Changing NC Stroke Designation Law

Tonya Chang, American Heart Association, VP of Field Advocacy, Southeast

Tonya Chang explained that North Carolina's stroke designation law needs to be updated by adding Thrombectomy-Capable Stroke Centers to the state designation and by including Acute Stroke Ready Hospitals and Comprehensive Stroke Centers as the original 2013 legislation only references Primary Stroke Centers (see posted slides).

Anna Bess noted that this recommendation was made by the EMS Work Group in the report that responded to proposed EMS Stroke Protocol legislation introduced in 2021.

Questions and Discussion

Chuck Tegeler noted that this legislation does not speak to bypass, and Tonya Chang confirmed that this change definitely does not speak to bypass. She added that this would formalize what North Carolina is already doing. Chuck added that new research shows there are many more candidates who could benefit from thrombectomy. Melanie Blacker with FirstHealth added that DNV calls the category "Primary Stroke Center Plus" and Joint Commission calls it "Thrombectomy-Capable." Tonya Chang responded that the AHA definition includes all-encompassing endovascular language. Pat Aysse clarified that there is a data requirement for facilities providing thrombectomy. Jim Martin asked about the timeline for the legislation. Tonya Chang responded that AHA's priority is Medicaid Expansion and that the plan is for AHA to work on this stroke designation bill this session; if not this year, AHA will work on it next year.

Tonya added that the request of SAC members and partners is to inform hospital leadership that this change is coming. AHA will advise the NC Healthcare Association (formerly Hospital Association) that work on this stroke designation is coming.

Anna Bess explained that as the EMS work group previously made the recommendation, the Stroke

Advisory Council could vote today to endorse this effort.

Sharon Biby, SAC member, made a motion for the Stroke Advisory Council to endorse AHA's efforts to update stroke designation law to include Thrombectomy-Capable Centers per AHA guidelines. Ed Jauch seconded, and the motion passed unanimously.

Chuck thanked everyone for attending, SAS for hosting, the HIE team for the Registry and demo, Tonya Chang for the presentation and work on stroke designation.

2023 Stroke Advisory Council Meetings

All meetings from 1-2:30 PM

- **May 11 - virtual**
- **August 8 in the Eagle Room, DPH - hybrid**
- **November 8 – virtual**