



# Georgia Coverdell Acute Stroke Registry Quarterly Newsletter

Georgia Coverdell Acute Stroke Registry  
Participating Hospitals



SPRING 2012

## Coverdell Partners:

Georgia Department  
of Public Health  
(DPH)

Emory University  
School of Medicine

Georgia Medical  
Care Foundation  
(GMCF)

American Stroke  
Association (ASA)

Georgia Hospital  
Association (GHA)

If you have  
anything you would  
like included in an  
upcoming  
newsletter or have  
achieved recent  
recognition in the  
area of stroke,  
contact:

Kerrie Krumpf  
[kkrompf@emory.edu](mailto:kkrompf@emory.edu)

or

770-380-8998

## Our Coverdell "Champion Hospital of the Year" Award Winners



**Chatuge Regional Hospital**



**Atlanta Medical Center**



**Fairview Park Hospital**



**Wellstar Douglas Hospital**

## AND... Our First Annual Star Award Winners



**NE GA Medical Center**



**Debbie Camp  
from AMC**



## Do We Practice What We Preach?

It was a normal day in the hospital for Brenda. Meeting at 7am, another meeting at 8am, to the office to run admission reports, then out to make rounds and hurrying through the hospital to make sure everyone was seen before they were discharged. She arrived back in her office around 12 noon and began to answer emails when she experienced a sudden onset of dizziness and blurred vision. Realizing it was 12 o'clock and she had not eaten breakfast and only gulped a cup of coffee this morning; she grabbed peanut butter, crackers, and a bottle of water. The dizziness continued but she was called to the ICU to see a patient. In the ICU, she began to sway to the point where the ICU nurse told her she needed to sit down. Ignoring her symptoms and the ICU nurse's suggestions, she quickly responded, "I've got too much to do today to be sitting." Sound familiar?

It was now around 1:15pm (1¼ hours after symptom onset) and her "lunch mates" were calling for lunch. She proceeded down to the cafeteria to meet her friends but only after making a stop on another floor to visit a new admission. Arriving at 2 pm in the cafeteria she sat down and attempted to eat lunch. "Wow, I'm really dizzy today for some reason. I thought it was because I had not eaten, but I'm not really sure what's going on," she said to her co-worker, now 2 hrs after symptom onset.

She tried to finish lunch but couldn't due to her dizziness. At 2:10pm she decided to go by the ED. "I think I'll go by and ask Dr. R to look in my ears. I'm sure I just have some fluid behind my eardrum," she told her co-worker. As she approached Dr. R, ED physician, her first response was, "Are you ok?" The charge nurse took one look at her and told her she needed to sit down until she could clear a room. Reluctantly, she complied.

Ten minutes later Brenda was on her way to CT. Diagnosis: Code S, possible stroke. Upon returning to her room in the ED, the Neurologist, Dr. P was waiting for her in the room. "We're sending you for a stat MRI," he said. "No you're not", she responded. He went on to explain in reviewing the CT, the Radiologist had seen an area in the cerebellum that looked suspicious. Dr. P. reassured Brenda he thought it was not a stroke but the Radiologist felt pretty strongly about sending her over for the MRI. NIHSS=0, but she did have nystagmus, B/P=106/60, HR=116.

As she arrived in MRI she apologized to the tech, telling him she was sorry to make more work for him. The MRI tech quickly responded, "Dr. L., radiologist, called me and told me to clear the table immediately, he was sending you over now. As Brenda heard those words she began to wonder if this really was a stroke (now three hours from symptom onset). As she lay on the MRI table, her mind raced, trying not to think about "what if." When she returned to the ED there was no Dr. P, Neurologist, waiting for her. She waited, and waited, and waited. What seemed like an hour was really only 15 minutes. She texted him, "Where r u?" After another 10 minutes, "Where r u, why r u not here?" Her fears began to grow more real by the minute. She had not called her family. How would she tell them?

After 25 minutes, Dr. P arrived with what he said was good news and bad news. Which do you want first? The radiologist felt the MRI was positive for a stroke; they reviewed the films with another radiologist who also agreed this was a stroke. Dr. P. said he felt it was not a stroke but a peri-vascular space that was evident on all slices of the MRI. He sent pictures of the MRI to a Neurologist at the Cleveland Clinic who confirmed the MRI was not positive for a stroke. The final diagnosis ended up as dehydration.

The news was good, this time. But this incident had forced Brenda to face the painful truth that we cannot ignore our own symptoms. We do not have "Super Powers," despite our personal beliefs. How often do we tell our patients, DO NOT WAIT! Call 911, Go to the ED. We teach our patients to recognize the symptoms of stroke, stressing the importance of them getting to an emergency room. Do we practice what we preach? No, for you see...Brenda is me. I have to admit this was one of the scariest experiences I can remember. I cannot stress enough how important it is for us to listen and take heed to our own words or wisdom. This incident has renewed my sense of urgency when talking to patients about getting to the ED as quickly as possible. ***If only we can practice what we preach.***

## How far can you reach?



**Emory University Hospital** is a tertiary center for many adult specialties including stroke. Nearly 1,000 patients were treated for stroke in 2011 and almost half of our patients suffer hemorrhagic strokes.

Many of our patients are referred to us from outside hospitals within a 35 mile radius of the hospital and return home to their communities. Emory University Hospital (EUH) is proud to offer community outreach health fairs that reach communities far away from our campus. When I joined the EUH campus in my role as

Stroke Program Coordinator, I was unaware of the phenomenal work the nurses did with community stroke outreach at this hospital. Now that I have a much better understanding of the effort and passion that the ladies and gentlemen bring to the table, I would like to share it. Two of our neuroscience nursing departments have unit councils that are particularly concerned with patient and community stroke education. The Neuro-ICU council meets as the Education Committee and focuses on community stroke education and the annual health fair on the EUH – Clifton Campus. The second unit council is the Patient & Family Education Committee for the neuroscience units 2G, Neuro-Critical Care Intermediate (NCCI) and 3G. This council provides a quarterly community stroke outreach in communities often more than 25 miles away from Emory University Hospital. Stroke awareness, among other community education, is provided by frontline nurses in communities where our patients are working and living. Emory nurses in the community partner with churches, health departments, local pharmacies, local healthcare providers and educators. Emory staff also provides support, such as hand hygiene teaching and nutritional education in addition to stroke awareness education. Health fairs have taken place in Mableton, GA, at the Presbyterian Church of Ghana and in Lilburn, GA, at the Calvary Assemblies of God. Dr. Aaron Anderson, Lauren Ayala, NP, and Ann Huntley, CNS, of the EUH stroke program have presented at community health fairs and spoken to participants about signs and symptoms of stroke, risk factors and stroke prevention.

On April 28, 2012 the group provided services in McDonough, GA, at the New Covenant Church of God and had over 300 participants. The following day on April 29, 2012, a different group volunteered at Zoe Baptist Church in Conley, GA, providing health screenings and a presentation on Stroke prevention. This month we will provide a stroke seminar at Highlands Presbyterian church in Grayson, GA. We are proud to say that we reach the patients in our community.



Submitted by: Katja Bryant, Stroke Program Coordinator, Emory University Hospital

## Gwinnett Medical Center - Stroke Stories

CB is an 82 year lady who was getting her hair done at a local hairdresser, when a Gwinnett Medical Center (GMC) nurse, also at the hair salon, noticed CB slumped over to her right, and not responding well to the hairdresser's questions at 2:00 PM. Recognizing this may be a stroke, the GMC nurse, Beth Zeigler, had "911" called. EMS arrived within minutes, found CB to have slurred and delayed speech, and right-sided weakness. En route (lights and sirens), EMS checked vital signs, placed her on the cardiac monitor, performed a finger stick for blood glucose, re-assessed, placed two IV lines, obtained a quick history of HTN and activated our hospital Stroke Alert page all within 14 minutes. On arrival to the hospital at 2:25 pm, the Stroke Team went into action. She was quickly registered and triaged while one nurse drew blood, another attached her to the monitor and obtained vital signs, another entered orders and made sure CT was ready, and a tech took care of CB vomiting and running labs to the laboratory. CB's initial B/P was 243/108. Her initial NIHSS, done by Dr. Greenwood, was 7 for slurred speech, right facial droop, and right sided weakness. The Stroke Alert CT was done by 2:40, and was "normal," however, en route back to the ED, CB became much less responsive and flaccid on her right side. Pupils, which had been equal and reactive initially, were now left 5mm and right pinpoint, both non-reactive. Rapid Sequence Intubation and then blood pressure treatment to lower it to tPA range (<185/110) took some time. TPA was given at 3:35. At this time, her GCS was 6 because she kept her eyes spontaneously open. No response to pain was noted. Dr. Nash had spoken to CB's daughter (who had remained in the room during most of the activity) about tPA and the option for neuro-intervention at Grady. Because of the time of day, a helicopter was arranged and arrived at 4:30 PM. Given the deficits, where was the stroke?

The initial thought was the stroke was due to a carotid dissection, but after the stroke conference on Nov 4<sup>th</sup>, we should have considered a posterior circulation stroke. CB had a basilar artery thrombosis with residual left posterior cerebral artery clot. If you recall, Basilar Artery thrombosis carries a 80-90% mortality rate. When Dr. Nogueira at Grady performed the CTA, no intervention was needed. The tPA and transport may have dissipated the thrombus. The best news is her outcome. She has been extubated and is following simple commands. She is receiving therapy, and is making terrific improvement. Stay tuned for another stroke story starring our own new clinical manager!

Submitted by: Susan Gaunt, Stroke Coordinator, Gwinnett Medical Center



My name is Taylor Choi and I'm a Patient Care Technician in the neuroscience department at Gwinnett Medical Center. In the summer of 2010, I was in the nurse extern program at this department in the Gwinnett Medical Center. In 1998, I suffered a debilitating ischemic stroke in the left side of my brain. It has taken me a long time and a lot of hard work to be where I am today. It is amazing and frightening how quickly life can change. It seems like within a blink of an eye, I went from being a healthy teenager with typical concerns around school, friends, and boys, to not being able to speak, walk, or take

basic care of myself. At times I wanted to give up and wallow in self pity, but I had to prove that I could overcome this adversity by setting goals for myself and working hard to achieve them. After seeing firsthand all the care that was provided to me, one of the goals I made with myself was to become a Nurse. Having been a patient myself, I know how difficult and debilitating this process can be and I can empathize with what the patients are going through. As a nurse I hope to render aid in the process of recovery and rehabilitation. My personal experience has opened my eyes to things that I never thought had been possible before and with the support of my nurses, doctors, family, and friends they helped me find the strength within myself that I did not know I possessed. As I face new challenges and lingering frustrations every day, I find courage knowing in my heart that all I have achieved and the effort I put forward, puts me closer to my goals. I truly hope to prove to myself what I can accomplish with my passion and dedication to helping others.

Submitted by: Taylor Choi, Patient Care Technician, GMC Neuroscience Department

## St. Joseph's Atlanta Nurse-Focused Stroke Rounds

Saint Joseph's Hospital of Atlanta is a community-based acute care adult hospital. The hospital first achieved certification as a Primary Stroke Center in 2009. In 2011, the facility redesigned its Stroke Team to form a Stroke Advisory Committee. This Advisory Committee has allowed a multidisciplinary approach to patient outcomes. The committee has weekly rounds on the designated inpatient Stroke Unit that are collaboratively facilitated by the Stroke Program Medical Director and the Stroke Program Coordinator. The multidisciplinary rounds play a role in helping healthcare providers identify opportunities to improve patient care and ultimately patient outcomes. In addition to the Stroke Committee rounds, in an effort to improve the overall knowledge base and engagement of frontline nursing staff, the Neurovascular-Stroke Unit Director implemented an additional stroke round for nursing staff, inclusive of the Unit Director, Charge Nurse/Shift Manager, Stroke Program Coordinator, Clinical Nurse Specialist, and Patient Educator. These rounds have since been coined Nurse-focused Stroke & Vascular Rounds.

Nurse-focused Rounds have progressed from an assembly of nurses to what is commonly known as "Walking Rounds" in most facilities. During these Walking Rounds, the group engages the patient and family in their plan of care, reinforces teaching, provides opportunities for questions or clarification, and addresses service aspects of care. To better equip the nursing staff with understanding the "Get with the Guidelines" Stroke Quality Measures, a stroke rounding tool was created. In addition, the rounding tool has helped the nurses focus specifically on pertinent stroke information expected to be reported. Monthly, during these nurse-focused rounds, the group performs a National Institutes of Health Stroke Scale assessment on a real patient and then compares and discusses findings along with the rationale for associated scoring. We have recently begun involving the Clinical Care Partners in the participation of rounds so that they are engaged in the overall care of the patient; this helps them have a better understanding of how they too make an impact. The structure of these rounds continues to evolve as overall improvement in patient outcomes is at the forefront of our care delivery.

Our efforts have allowed us to further develop RN competencies beyond the American Heart Association's National Institutes of Health Stroke Scale Computer-Based Module. This has increased confidence and communication skills when presenting patients' course of care and treatment plans. Patients and families tell us they appreciate having the opportunity to hear and participate in their care. In addition, patients have an opportunity to receive answers to their questions which often relate to outstanding diagnostics and medications. Overall, feedback from patients and families has been most positive since implementing the Nurse-focused Stroke & Vascular Rounds. Furthermore, the success of our Stroke Program changes was clearly evident during our last Joint Commission-Stroke Program recertification. Considerations are underway to implement a similar approach to improving patient care delivery for other specialty areas within the hospital.

Submitted by: Rashan Knight, MBA, MHA, RN, Unit Director Neurovascular-Stroke, and Dee Lacey, MSN, RN, QI/Stroke Program Coordinator

## Georgia Stroke Professional Alliance

The next Georgia Stroke Professional Alliance (GA-SPA) meeting is scheduled for Thursday evening, May 17<sup>th</sup> and Friday, May 18<sup>th</sup> in Savannah, Georgia. We have a full schedule beginning with Debbie Summers speaking at 7pm on May 17<sup>th</sup> at Garibaldi's Restaurant. The May 18<sup>th</sup> meeting will start promptly at 10am. Debbie Summers will begin the day with another great presentation, followed by committee reports. During lunch, there will be a presentation on the management of ICH by Dr. Jay Howington. In addition, there will be a REACH presentation followed by our very own, Trish Westbrook, who will talk about "Creating Stroke Education Materials." As you can see it will be a packed meeting. If you're interested in attending the journal club, the club will meet one hour prior to the 10am start of the day's events.

The GA SPA has something exciting for baseball fans too. If you would like to support the stroke initiative, join us for a fun night at Coolray Field as the Gwinnett Braves take on the Rochester Red Wings. For more information about the GA-SPA and the baseball game contact Kerrie Krompf at: [kkrompf@emory.edu](mailto:kkrompf@emory.edu).

## [International Stroke Conference-2012](#)



A great time was had by many of our Georgia Coverdell Stroke Coordinators, Georgia Coverdell physicians and our AHA partners at the 2012 International Stroke Conference which was held in New Orleans in early February.

## [Redmond Regional Medical Center \(RRMC\)](#)

Redmond Regional Medical Center has had a BUSY last few months. We are steady getting the word out to the public for stroke awareness and it shows! RRMC has an education display at the Mount Berry Square Mall with various information handouts available to the public. These include ways to recognize stroke symptoms, what to do if you should witness a person having a stroke and modifiable risk factors to aid in prevention. We also have a risk assessment tool for any one that would like to enter their values and see where they fall in terms of risk factors for stroke.

We have been involved with health fairs reaching numerous people that are taking the time to listen to education about stroke and asking wonderful questions in response. We provide each person an assessment tool and a Redmond stress reliever ball as a reminder of what to do at the first sight of stroke or stroke-like symptoms.

To add to reaching out to the community, Misty Burkhalter, RN, Stroke Coordinator, has also visited 2 skilled nursing facilities and reached out to over 40 health care workers in their own environment. These visits included a power point presentation, handouts, and stroke signs & symptoms magnets to take home and share with their friends and family. The educational experience concluded with refreshments and an open opportunity to ask group or one-on-one questions about stroke.

Ending on a very upbeat note, RRMC is very honored and proud to be a part of the stroke honor role. With that being said, M. Burkhalter, RN was able to work with a very distinguished panel of colleagues (Kim Anda, Debbie Camp, James Lugtu, Susan Zimmerman, Lynnette McCall, Trish Westbrook & Nojan Valadi) to create an absolutely wonderful abstract that was presented at the International Stroke Conference in New Orleans. The title was "Does Mixing rt-PA at the Bedside Improve Door to Needle Times Without increasing the Risk of Complications?"

RRMC is very excited about the upcoming events we have already planned, and can't wait to share the news in May for National Stroke Awareness Month.

Submitted by: Misty Burkhalter, RN, Stroke Coordinator, Redmond Regional Medical Center

# When the Swift Fall, Survivors Stand to Stop Stroke

Written by Catherine Whitworth on behalf of the family of Drew Hill

If you followed Georgia sports you probably heard of Drew Hill, former Newnan High athlete (football, basketball and track) who went on to play for Georgia Tech. He became the 12<sup>th</sup> round draft pick of the Los Angeles Rams in 1979. His 14 year NFL career on the field took him to the Super Bowl with the Rams his rookie year, included two Pro Bowls, and ended back in his home state of Georgia with the Atlanta Falcons. When he retired he remained in Georgia to pursue a career in business and enjoy the game of golf. As professional football players go, he was small of stature but swift of foot. I can still recall the announcer calling out the yardage as Drew ran 101 yards down the field leaving the pack behind to score a touchdown as if nothing could stop him. But something did stop him. This athletic, 54 year old, seemingly invincible man was stopped short by a stroke.

He was fast, but so are strokes. It is said that strokes strike fast so we need to think FAST and act FAST, hence the acronym:

**F**ace: uneven smile, facial droop

**A**rms: numbness or weakness

**S**peech: slurred speech, difficulty speaking or understanding

**T**ime to call 911

Another acronym for the Stroke signs and symptoms is BE FAST:

**B**alance: coordination problems, vertigo, dizziness, trouble walking

**E**ye: blurred vision, visual changes including visual field loss

**F**ace: uneven smile, facial droop

**A**rms: numbness or weakness

**S**peech: slurred speech, difficulty speaking or understanding

**T**ime to call 911

Timing is crucial when it comes to stroke care as 2 million brain cells die every minute of a stroke; and the treatment window is only a matter of hours from the time someone was last known to be without signs or symptoms if successful intervention is to occur.

After Drew passed so many of his colleagues stated that they didn't want to see him slip into the nether and be forgotten. On sportswriter John McClain's NFL blog with the Chronicle it was written, "He was a genuine, a class act, always polite. He treated everyone well." When I spoke with his oldest children they all agreed they wanted some good to come of this loss. In memory of him, they decided to take a stand against stroke.

If this could happen to him, how many others were unknowingly at risk? If his passing could somehow heighten the public's awareness of the risk factors and the signs of stroke then he will continue to be a force on earth. Maybe others do not have the same risks Drew had, but just knowing that if a stroke could take out someone who seemed so unstoppable it might help others to realize it could happen to them.

So how could this happen? What do we need to know to strike down strokes before they strike down someone else?

Georgia may be in the heart of the "Bible Belt", but it is also part of what is called the "Stroke Belt." If you haven't heard stroke is the fourth leading cause of death and the leading cause of disability. There are some risk factors that we cannot change such as being male, being black and being elderly. Drew was not old, but he was a black man living in the south. There are risks that we can do something about: hypertension, diabetes, high cholesterol, atrial fibrillation, heart disease, smoking, heavy alcohol use, physical inactivity and obesity. Many of these risks are impacted by our diet and lifestyle choices. It's known as "Life's Simple Seven." This refers to the seven health factors that when met decrease our risk of heart disease and stroke: being a non-smoker, maintaining a proper body mass index (BMI), having an active life-style, eating a healthy diet, maintaining a healthy blood pressure, controlled glucose level, and low cholesterol. The traditional Southern diet of rich, fried foods, that are often high in cholesterol, and low in Omega 3 contribute to so many of the modifiable risk factors as they are influenced by what we eat, how much we eat, and how often we eat. It is so easy to think that we can always make the changes later, unfortunately too many of us wait too late to make the changes we should.

So how can you stop a stroke? By assessing your risk, knowing where you stand, and asking yourself do I want to control my risk or am I going to let my risk control me? If you have high blood pressure, make efforts to control it; if you have high cholesterol, make efforts to reduce it; if you have been diagnosed with atrial fibrillation or heart disease follow your physician's advice to control it; if you have diabetes, manage it; if you smoke, stop; if you consume alcohol, do so in moderation; if you are physically inactive or over

weight, ask your physician if you can start a simple exercise program. No one is invincible as evident by this family's tragic loss. Stroke is preventable. We all need to know the risk factors and the signs and symptoms of stroke.

Remember: BE FAST, think FAST, act FAST, take a stand against stroke, and stay ahead in the game of life.

In memory of Drew Hill October 5, 1956 - March 19, 2011, father, grandfather, athlete, fellow Georgian. --- Gone, but not forgotten.

## **Memorial Health University Medical Center- Savannah, GA**

Following the wealth of knowledge gained at the 2012 International Stroke Conference, the Memorial Stroke program has decided to focus its attention on decreasing both door-to-CT and door-to-needle times. This year, Memorial was fortunate enough to send a multidisciplinary team to ISC; this team consisted of Dr. Joseph Hogan, Emergency Department Stroke Champion, Amy Malone, a member of the stroke team, and representation from nursing, Leigh Reid from the emergency department, and Lynne Stern from critical care (NICU). Nursing Leadership appointed these two nurses Stroke Nurse Champions prior to the conference.

The goal of the multidisciplinary approach at the conference this year was to "divide and conquer." Because stroke patients touch so many disciplines in the hospital, we felt appointing Stroke Nurse Champions and utilizing their skills would help to bring back best-practices as it relates to their specific area.

With that said, the first PI project of 2012 is to improve door-to-needle and door-to-CT times. Dr. Hogan is leading the way in this ED-focused, time-sensitive performance improvement effort. In 2011, we began to see an increase in door-to-CT times, which in turn causes an increase in door-to-needle times. Because of this persistent increase in treatment times, the stroke team has met with radiology, registration, nursing leadership, ED physicians and EMS personnel to develop an action plan.

Starting in April, patients with acute neurologic deficits, who arrive to the ED via EMS, will receive quick registration at the ambulance bay entrance and will be transported by EMS directly to the CT scanner. Because EMS pre-alerts the ED of suspected stroke patients, this allows us time to page out a Code Stroke prior to patient's arrival. This page alerts radiology to clear a CT scanner for possible acute stroke patient, the registrar to prepare for quick registration, stroke team, pharmacy, lab, Chaplin services, as well as the ED physician. We hope this change in protocol will show a decrease in both door-to-ct and door-to-needle times, as well as decrease the potential for long term disability in rtPA eligible patients. We will keep you posted on our progress.

## **Coverdell Highlights**

### **March Conference Call**

Once again this year, stroke coordinators from several Coverdell Hospitals presented highlights from the American Stroke Association's International Stroke Conference which was held in New Orleans in February. We would like to thank the following people for a very informative presentation: Susan Zimmerman (Wellstar Kennestone), Amy Perez (Grady Health System), Tammy Kemper (Athens Regional), Susan Gaunt (Gwinnett Medical Center) and Debbie Camp (Atlanta Medical Center).

### **April Conference Call**

Due to the many requests from our hospitals, the April call was devoted to Advanced Reporting. Mary Robichaux, from the American Heart Association/American Stroke Association, showed those on the call how to drill down their data when running reports. Thank you Mary for a most beneficial presentation.

### **May Conference Call**

Our guest speaker on the May Coverdell conference call was Dr. Michael Frankel, the lead neurologist for the Georgia Coverdell Acute Stroke Registry. Dr. Frankel gave a brief update on the Coverdell Hospital progress related to door to needle time in under 60 minutes. In addition, Dr. Frankel presented on "Tracking and improving outcomes post-discharge" and the challenges we face while tracking these patients. A great big thank you to Dr. Frankel for a most informative presentation.