



# Stroke View

Georgia Department of Public Health | GA Coverdell Acute Stroke Registry | Winter 2017

## It's Award Season...

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### COVERDELL CHAMPION HOSPITAL OF THE YEAR

Each Champion Hospital of the Year received the most points in its hospital size category. A total of five Georgia Coverdell hospitals received the most points during the period from January 1, 2016 through December 31, 2016. Please share with your hospital and hospital administration the great work you do in stroke care.

Congratulations to the following hospitals:

- ◆ St. Mary's Good Samaritan Hospital (very small-25 beds or less)
- ◆ Habersham Medical Center (small-26-100 beds)
- ◆ Piedmont Newnan Hospital (medium: 101-350 beds)
- ◆ Chandler Hospital-Savannah (large: over 350 beds)
- ◆ Emory University Hospital Midtown (large: over 350 beds)



### STAR AWARDS

Georgia Coverdell Acute Stroke Registry would like to recognize and celebrate individuals and hospitals for their leadership and exceptional commitment to stroke care. The award recipients were nominated by their colleagues. This year, the Star Award honors Ms. Katja Bryant of Northside Hospital Healthcare System and South Georgia Medical Center.

#### Individual Awardee: *Katja Bryant, CNRN, SCRN*

Katja Bryant has been working in the field of neuroscience since the beginning of her nursing career. She has been instrumental in program development and the successful completion of two Joint Commission (JC) Primary Stroke Centers (PSC) and two Comprehensive Stroke Centers in the Atlanta area. Currently she is overseeing stroke program functions for Northside Hospital Healthcare System and their three JC certified PSC's. As the past Chair of the Georgia Stroke Professional Alliance (GA-SPA), she was extremely influential in obtaining the non-profit status for the organization. She also wrote the proclamation for Stroke Awareness Day/World Stroke Day which Georgia Governor Nathan Deal signed in 2014. Furthermore, Ms. Bryant is one of the lead authors of the *Georgia Stroke Curriculum* which is being used for free stroke education across the state. She also teaches the Stroke Certified Registered Nurse (SCRN) review course to enhance stroke education for nursing professionals and is an Advanced Stroke Life Support (ASLS®) Instructor Trainer. A published author, she has presented at the International Stroke Conference. She also plans and organizes Northside's Annual Women and Stroke Conference. Currently, she is working towards her Doctor of Nursing Practice degree. Always striving to improve stroke care and willing to share her talents with others, Ms. Katja is a true leader.

#### Hospital Awardee: *South Georgia Medical Center*

South Georgia Medical Center's (SGMC) Code Stroke program ensures that residents of Georgia receive the highest quality of acute stroke care. For the past 2 years, SGMC has received the *Get With The Guidelines® Gold Plus Target Stroke Elite Plus Quality Achievement award* and *Gold Achievement award (Resuscitation Recognition Criteria)* by the American Heart Association and American Stroke Association. Continually striving to improve stroke care, SGMC is one of the first hospitals to volunteer as GCASR's pilot site to address post-hospital transitions of care as well as developing and testing a 30-day follow-up questionnaire to improve outcomes for stroke survivors. Additionally, SGMC's Administrative Director of Rehabilitation Services serves on GCASR's Steering Committee to guide its work. SGMC also hosts a free educational lunch and learn for the community annually.

## Awards continued...

### 2017 “DOOR-TO-NEEDLE TIME” Award

Door-to-Needle Time (DTN) is the Golden Hour (60 minutes). The Georgia Coverdell Acute Stroke Registry has raised the bar and this award is given to all hospitals that have shown a 20% decrease in door to needle time, comparing 2015 to 2016 data year based on data entered by the time of analysis. In addition, this award is given to any hospital having entered a minimum of 5 patients in 2016 with an average door to needle time **of less than 45 minutes.**

Congratulations to the following hospitals:

#### Hospitals with improved door to needle time by 20 percent AND with an average door to needle time of < 45 minutes

- ◆ Augusta University Medical Center
- ◆ Hamilton Medical Center
- ◆ Medical Center – Navicent Health
- ◆ Memorial Health University Medical Center
- ◆ Piedmont Henry Hospital
- ◆ Piedmont Newnan Hospital

#### Hospitals with an average door to needle time of < 45 minutes

- ◆ Cartersville Medical Center
- ◆ Emory University Hospital
- ◆ Grady Memorial Hospital
- ◆ Midtown Medical Center
- ◆ North Fulton Regional Hospital
- ◆ Northside Hospital
- ◆ Northside Hospital – Cherokee
- ◆ Northside Hospital – Forsyth
- ◆ Piedmont Hospital
- ◆ Redmond Regional Medical Center
- ◆ South Georgia Medical Center
- ◆ WellStar Kennestone Hospital

## Spotlight

### **COWETA COUNTY EMS FAST CHALLENGE WINNER!!!!**

In December during the Coweta County sponsored luncheon for senior citizens, Coweta County EMS distributed 500 FAST magnets and educated seniors on the signs and symptoms of stroke, and the importance of calling 911.

#### **Kudos to Coweta County EMS!**

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### **MOM'S HERO**

Jemma Brown's mother was admitted to Emory Midtown last fall, with chest pain and hospital acquired pneumonia. For those of you who don't know Jemma, she is the Stroke Coordinator at Emory University Hospital Midtown.

Twelve days into her mother's 31-day journey at Emory Midtown, her mother had a huge pericardial effusion and was in early cardiac tamponade. After removing 700 ml of bloody drainage from her pericardial sac, Jemma's mother was admitted to the Coronary Care Unit (CCU).

Around 9 pm, Jemma's mother went into A-fib with an RVR of about 170 and Jemma's first thought was, "My Momma better not throw a clot and have a cardio-embolic stroke!" Jemma's mother sustained her RVR rate of 160-170 all night. Jemma shared her fears in a text to a core group of physicians, including Dr. Fadi Nahab, the Stroke Medical Director of Emory Hospital, who supported her from day one of her mother's hospitalization.

The next morning, while Jemma was feeding her mother breakfast, she noted that she was not swallowing correctly. Also, something was off with her speech. Her mother told Jemma that her tongue felt heavy so Jemma immediately conducted a MEND exam and identified several deficits including right hemiparesis, dysphagia, and slurred speech with a facial droop. She quickly informed the nurse on duty that her mother was having a stroke. The Neuro-hospitalist was quickly notified and CT and MRI confirmed that she had 3 strokes (1 hemorrhagic and 2 ischemic). However, Jemma's mother did not suffer any cognitive impairments and was discharged home because she received stroke care immediately thanks to Jemma recognizing stroke FAST!

Later, the nurse on duty shared with Jemma that she would not have recognized the early symptoms of a stroke and she was grateful that Jemma was with her mother when she was exhibiting the symptoms. Jemma credits Dr. Nahab and his great team of neurologists and the Georgia Coverdell team for their effort to improve stroke care in Georgia including increasing awareness of signs and symptoms of stroke and appropriate emergency response.

**Submitted by: Diana Soto Empaynado, Stroke Quality Management Specialist,  
Emory University Hospital Midtown**

## Spotlight

### HALL COUNTY FIRE SERVICES

#### INITIATIVE FOR A NEW PRE-HOSPITAL TRIAGE

As a Lieutenant in Fire Operations and Paramedic with 13 years of service with Hall County Fire Services including being a Flight Paramedic for the last 7 years, I have seen great advancements in stroke care. Hall County Fire Services operates as a full service Career Department in Gainesville, Georgia. Led by Fire Chief Jeff Hood, it is the 6th largest department in Georgia serving approximately 200,000 citizens and visitors.

#### EMS Care and Transitions of Care

After a few months as a Flight Medic, I began seeing patterns in scene flights and hospital to hospital transfers. I got to the point where I could tell you in less than 30 seconds which patient needed to be transferred to a Comprehensive Stroke Center for a large vessel occlusion. It became obvious that rural hospitals and agencies were the first to call for a helicopter because their nearest Primary Stroke Center was over an hour away. I then began noticing that Primary Stroke Centers were utilizing flight services to transfer these same large vessel occlusion patients. After workups, finding a hospital/physician to accept the patients, in addition to all the other hurdles associated with care transitions, these hospital-to-hospital transfers are usually delayed at a minimum an hour.

At that time, I also had a growing concern that stroke patients did not appear to be a priority in the EMS culture. It seemed that trauma patients received the most attention, followed second by cardiac patients because of EMS STEMI transport guideline. However for stroke patients, I remember transporting lights and siren if the onset of stroke symptoms was less than 3 hours and no lights or sirens if the onset time was greater than 3 hours. Back then, there also was a perception that alteplase seemed to have only about a 50% success rate, and if it didn't work, we hoped for the best that the patient would improve with rehabilitation.

Eventually, advancements in stroke care made its way to improve EMS care. We also learned about Comprehensive Stroke Centers offering remarkable interventions for more complicated stroke cases. However, the question still remained, should we bypass a Primary for a Comprehensive? In my research leading up to this, the American Heart Association still recommended transporting patients with stroke symptoms to the closest facility that had capabilities of a Non-contrast CT. I looked for some sort of prehospital triage for stroke patients across the country and found very little. It was very discouraging when I would hear about a patient that exhibited signs and symptoms of a large vessel occlusion being transported to a Primary Stroke Center initially with absolute contraindications to alteplase, only to be transferred later to a Comprehensive Stroke Center for intervention.

#### Turning Point

In August 2016, while working overtime, I was dispatched as a 2nd due ambulance to a stroke call along with the 1st due fire engine (the 1st due ambulance was already on a call). The EMT initially rolled out with no lights or sirens until I reached down to activate them. The secondary information we received described a 68-year-old female having obvious signs of stroke. This information was supported by the Emergency Medical Dispatch questions from the dispatcher showing strong indications of a stroke. The first due fire engine arrived on scene and the crew advised it was a definite stroke and requested our ETA. A few minutes later we arrived and our patient presented with right sided paralysis, aphasia, and left fixed gaze. Based on what I have previously learned from Grady Hospital's Dr. Michael Frankel and Dr. Raul Nogueira, this indicated a high probability of a large vessel occlusion. I quickly directed crew members to get her on the stretcher and loaded up. I spoke with her family member on scene who informed me that her last known normal was about 5 hours ago, which is outside the Alteplase window. I also questioned him about a scar midline of her chest and he advised it was from a valve replacement. I asked about blood thinners and he said yes while handing me a wicker basket full of medication....(continued on page 5)



## Spotlight continued...

...I now had all the information needed to request a helicopter to transport her to Atlanta, but per our current protocol she didn't meet flight criteria. My heart started beating faster and faster because seconds equaled brain and I didn't want to be wrong and look foolish. So, I went with my gut and asked the officer in command, Lt. Vinson, to request a helicopter for transport. Lt. Vinson looked puzzled but made the request. I made a quick phone call to our local hospital which is our medical control and asked to speak with a doctor. Typically, the dispatcher will relay information, but I NEEDED to speak one on one with a doctor. I painted a good picture and was on point like never before. I was speaking big fuzzy medical words I didn't even know I knew. I told him she possibly had a middle cerebral artery occlusion and needed a thrombectomy so off to the landing zone we go, and arrived to Grady Hospital like clockwork. This was new. Never had we flown a stroke patient from a scene, but I had a physician's backing on a recorded line and felt I was acting in the best interest of the patient. The next day we learned the patient received a thrombectomy reestablishing circulation to the brain. Her initial NIHSS was 20 and a few days later discharged with a NIHSS of 3 and hopefully would resolve to normal with rehabilitation.

### New Partnership for a Triage Mechanism

What happened with the 68-year-old patient created some buzz and people began asking questions. My peers were hungry for knowledge. They wanted to know what I knew. They didn't want to know out of curiosity; they wanted to know because they truly care about their patients and want to make a difference. In the coming weeks I was contacted by Holley Adams, the Stroke Coordinator for Northeast Georgia Medical Center in Gainesville, She wanted to know who she needed to contact to coordinate effective hand-offs and improve care transitions. Ms. Adams and Northeast GA Medical Center were not concerned about loss of revenue or getting upset because they missed a patient coming through the doors of their Emergency Department (ED). They honestly wanted to do what is best for the patients. The dialogue began and within a few days we had at the table: Ms. Adams, our Primary Stroke Center Coordinator; Ms. Carol Flemming, the Stroke Program Outreach Manager of the Marcus Stroke and Neuroscience Center of Grady Hospital (our closest Comprehensive Stroke Center); Dr. Andy Ball, our Medical Director; and Capt. Bobby Ogletree as our EMS Coordinator. We collectively agreed to enter a partnership and develop a pilot program to create a means to triage prehospital stroke patients. We also are utilizing the FAST-ED app. developed by Dr. Nogueira, who is the Director of Neuroendovascular Services at Grady, along with other academic stroke neurologists and colleagues at Emory University. This app prompts the user to perform the FAST-ED assessment and determines the best destination for the patient based on this assessment, eligibility for acute stroke treatment options, and field transport times.

Our focus is to develop a pre-hospital triage protocol for stroke patients. It could be challenging having a Primary Stroke Center in your back yard, but in our case, Northeast Georgia Medical Center fully supports this initiative. Identifying patients with large vessel occlusions will only bring more attention to efficient hand-offs to hospitals and through this pilot program, we are able to identify a group of EMS personnel, whether Paramedic or EMT, who are eager to provide feedback as we develop a protocol. While rolling this out with limited resources, working with a small group has proven to be better than involving too many people. Once we draft the policy, we hope to have more people involved.

### Working with Georgia Coverdell Acute Stroke Registry

Late last year, we were invited to be a part of the Georgia Coverdell Acute Stroke Registry (GCASR). I wasn't aware of the Registry, but when I attended their meeting last December, I was amazed. The December meeting offered great opportunity to hear from other participating EMS agencies and hospitals across the state. We heard a lot of great ideas and group discussions on challenges and opportunities to improve transition of care from EMS to hospital. I feel we have a great system in place and the CDC-funded GCASR has been imperative in the advancement of stroke care in Georgia.

**Submitted by : Lt. Jonathan Mullinax NREMT-P CCEMT-P FP-C – Hall County Fire Services**

## Announcements

### 2018 HOSPITAL AWARDS (NEW)

#### Door-to-Needle Hospital Award

This award will be given to the hospital with five or more IV alteplase treated ischemic stroke patients with the shortest median door-to-needle time among eligible patients who arrived within 2 hours of last known well time and with no reason for treatment delay in 2017.

#### Dysphagia Screening Hospital Award

This award will be given to a hospital with the highest percent of dysphagia screening that has also showed high performance (>90%) consistently for nine months from Jan 1, 2017 – Sept. 30, 2017

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### 2018 EMS AGENCY OF THE YEAR

Each of the 20 Participating Coverdell EMS Agencies are candidates to receive next year's award. One agency with the highest score for their activities during the period from January 1, 2017 through December 31, 2017 will receive the 2017 Coverdell EMS of the Year award.

#### Award Criteria

- Coverdell conference call participation
- Coverdell conference call presentation
- Publication in Coverdell's quarterly newsletter (a short article under 250 words or over 250 words)
- Coverdell sponsored workshop attendance

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### NEW COVERDELL CHAMPION HOSPITAL OF THE YEAR

The 2018 Coverdell Champion Hospital of the Year award will be granted to four hospitals, one in each bed-size category (ranging from very small to large) with the highest score for their participation in Coverdell activities and quality improvement achievements during the period from January 1, 2017 through December 31, 2017.

#### Award Criteria

- Coverdell conference call participation
- Coverdell conference call presentation
- Publication in Coverdell's quarterly newsletter (a short article under 250 words or over 250 words)
- Coverdell sponsored workshop attendance
- Highest percentage increase in defect-free care from the previous year
- Highest percentage increase in NIH stroke scale score documentation
- Administration of IV alteplase within 45 minutes of hospital arrival for 60% or more of its eligible patients without reason for delay
- Shortest median door-to-needle time for administering IV alteplase for eligible patients without reason for delay



## Updates

### 2017 PERFORMANCE MEASURES FOR BOTH HOSPITALS AND EMS AGENCIES

#### Hospital Performance Measures

- 90% of all patients who receive defect free care
- 90% of patients who have a dysphagia screening
- NIH Stroke Scale score documented for 95% of ischemic stroke patients
- 50% of IV alteplase treated patients receiving it within 45 minutes of hospital arrival

#### EMS Agency Performance Measures

- On-scene time less than 15 minutes for 50% of patients transported with a primary or secondary provider impression of Stroke/CVA or TIA, or a 25% increase from the previous year
- 90% of all patients being transported should have their blood glucose checked and recorded (if already at the 90% mark, aim for 95%)

## Coverdell Highlights

#### **December Conference Call**

Thank you to Dr. Michael Frankel, Lead Neurologist for the Georgia Coverdell Acute Stroke Registry (GCASR), for presenting the GCASR's 2017 Performance Measures for both Hospitals and EMS. It was a very informative presentation and we look forward to seeing both hospitals and EMS meeting the new goals for 2017. Mary George, the Deputy Associate Director for Science and the Senior Medical Officer at the Division for Heart Disease and Stroke Prevention at the Centers for Disease Control and Prevention (CDC), who participated in the call commented, "I just listened to Mike's Coverdell presentation with your achievements and goals on today's call – I can't tell you how amazing your progress has been over the past few years! Your goals for 2017 are definitely a BHAG (Big Hairy Audacious Goal), but I have no doubt that you will accomplish them!"

#### **December EMS/Hospital Workshop**

GCASR hosted an EMS/Hospital workshop on December 7, 2016 for our 20 participating EMS agencies and the hospitals they service. Many of the EMS agencies shared their work with their hospitals and the strides they are making to improve stroke care. There were nearly 100 in attendance.

**All of us at GCASR are so appreciative for all the hard work you do to improve stroke care in Georgia!**

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Newsletter Submissions: If you would like to share any information (recent recognitions, success stories, etc.) in an upcoming newsletter in the area of stroke please contact:

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