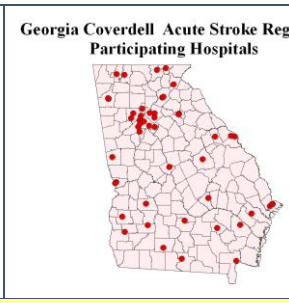
Georgia Coverdell Acute Stroke Registry Quarterly Newsletter



SPRING 2016

Coverdell Partners:

Georgia Department of Public Health (DPH)

Emory University School of Medicine

Alliant Health Solutions-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 Krompf
kkrompf@emory.edu

or

770-380-8998

Congratulations to our Coverdell "Champion Hospital of the Year" Award Winners

St. Mary's Good Samaritan Hospital

Clearview Regional Medical Center

South Georgia Medical Center

Emory University Hospital

Congratulations to our 2016 Star Award Recipients

Shelley Nichols – Individual Star Award Recipient

Grady Memorial Hospital – Hospital Star Award Recipient

Georgia Coverdell Welcomes New Staff

Victoria Davis

Victoria N. Davis is currently the Evaluator for the Stroke Coverdell Acute Stroke Registry and Epidemiologist in the HIV Surveillance Program at the Georgia Department of Public Health. Miss Davis has been with the State of Georgia for nearly six years. She received her Master's in Public Health Epidemiology Degree from Florida A&M University and her Bachelors of Science Degree in Health Science with a minor in Biology from Columbus State University. Victoria is excited about her new position and thrilled to be working with such passionate, knowledgeable, and friendly people. Welcome Victoria.

Denys Fluitt

Georgia Coverdell Acute Stroke Registry would like to welcome Denys Fluitt. Denys joined GCASR on March 1st as the Program Coordinator. In this role she will work closely with Chronic Disease, Healthy Behaviors & Injury Epidemiology (CHIE) Director to develop and recommend policies and procedures for GCASR, assist with grant reporting requirements, build relationships with hospitals and EMS and various other tasks. Denys is originally from Valdosta where she was employed as the Healthcare Liaison for the South Health District for four years. Prior to joining Coverdell, she was the Healthcare Liaison for the North Central Health District in Macon for four years. She graduated from Valdosta State University in 2005 earning her Bachelors of Fine Arts, Speech Communication with an emphasis in Public Relations. She completed the Masters of Public Administration program in 2008 from Valdosta State University. Denys brings almost 9 years of Public Health experience to the Coverdell program and we are very excited about working together to make our program thrive even more.

Patricia Hashima

Patricia Hashima is a developmental psychologist with expertise in planning, implementing, and evaluating community-level approaches to promote the health and well-being of children and families. She received her PhD in psychology from the University of Nebraska and was a National Institute of Mental Health post-doctoral fellow at the renowned Family Research Laboratory of the University of New Hampshire. In her scholarly work, she has made creative conceptual and empirical advances in the identification of the dimensions of social support that influences human behavior. This work is cited in developmental psychology textbooks and was a basis for CDC's strategic plan to promote safe, stable, and nurturing relationships and environments. Prior to her employment at the Georgia Department of Public Health (DPH), Dr. Hashima worked at the Centers for Disease Control and Prevention and various academic research centers devoted to the development and application of innovations in program and policies to promote the well-being of children and families.

Currently, Dr. Hashima is also a member of the Performance Management Team of Georgia DPH to help guide the agency's performance improvement activities. Furthermore, she chairs the agency's Quality Improvement Committee to ensure that the agency-wide performance management and quality improvement initiatives are focused and aligned to improve operational and program efficiencies and effectiveness. We are thrilled to welcome Patricia to the Coverdell team.

The Reality of CODE STROKE, ICD-10 and Reimbursement

Most of us know what a stroke is. Clinically, the basic description of a stroke or CVA, cerebrovascular accident, is "a sudden malfunction of the brain caused by disease of the brain's blood supply." Hemorrhagic strokes involve rupturing of a blood vessel, with bleeding into the brain. In the more common thromboembolic strokes, the blood supply to a part of the brain suddenly stops; either from a blocked artery in the brain caused by hardening of the arteries (atherosclerosis) or by a blood clot that travels from another area like the heart, and lodges in a brain artery 9an embolus.

The symptoms experienced depend on the artery that ruptures, or is blocked. As healthcare providers, we understand strokes, but applying our knowledge of the actual stroke events to each stroke patients' medical record timely is critical when it comes to reimbursement for the care provided. The problem for small rural Primary Stroke Centers (PSC) that fast track their Ischemic Strokes to Comprehensive Stroke Centers (CSC) is the lack of information available during the short visit at the PSC. Since *TIME IS BRAIN*, every second we utilize to diagnose the exact location of the stroke event impacts the outcome of our patients. Keeping the patient at the center of our delivery of care is Georgia's priority; but, the fact still remains that all healthcare facilities must be reimbursed appropriately for implementing best practice.

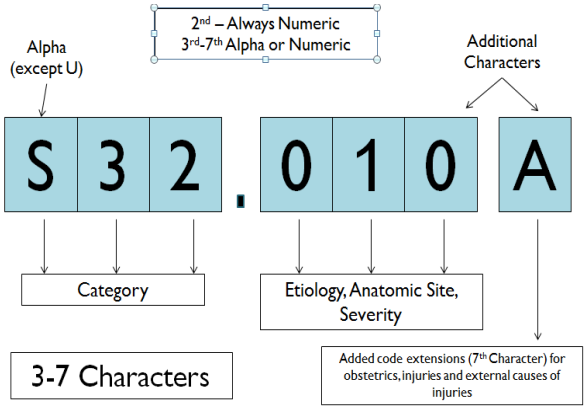
When a patient is identified as having a stroke by EMS personnel, a CODE STROKE is called at

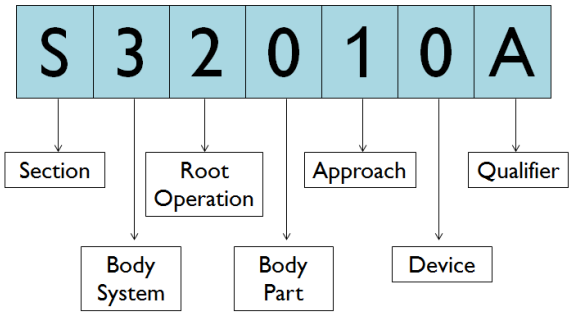
the PSC. The patient bypasses the Emergency Department and goes straight to the CT scanner. Once a bleed is ruled out, the patient may continue to show a neurological deficit with a NIHSS of 12. The stroke team completes the Activase Checklist, and the patient may be a candidate for the medication. As the staff prepare the medication, the Emergency Department Physician, certified in NIHSS and ASLS, notifies the neurology team at the CSC. The neurologist agrees the patient is a candidate and the order is given to complete the administration of the Activase. The patient qualifies for interventional medicine, so transportation is arranged and the patient is fast tracked to the CSC. Sound familiar? Of course it does.

This is what we as healthcare professionals do every day. In order to shave off seconds, neurology has the patient sent as soon as possible to the CSC; performing the CTA exam at the CSC where the intervention could be performed. Perfect scenario right? Not for reimbursement…

Because the CTA and MRI/MRA show the details of the stroke and cause of the neurological deficits, documenting in the Emergency Department as a provider becomes frustrating. Stroke Coordinators are asking for providers to be more specific. Coders are saying they cannot accept words such as 'probable' or 'possible.' Without clear technological reports, this leaves the ED providers' hands tied. "Just tell me how you want me to document and I will" is the frustration from emergency physicians. In reality, there isn't a clear answer. If time does not allow for a CTA to be performed before transfer, locating the exact cause of the event during the 60 minute transport goal is next to impossible.

Furthermore, ICD-10 requires coders to follow an algorithm by identifying the exact location of the event from the provider's documentation. *(See ICD-10-CM Diagnosis Code Format)*





The seven key documentation elements for reimbursement are acuity, site, laterality, etiology, manifestation, external cause of injury, and finally, signs and symptoms. At the time of the transfer, the provider will probably know the site and laterality. Code category I-63 specifies the cause of the ischemic stroke, e.g., thrombosis, embolus, or unspecified. ICD-10 CM code I-63.331 denotes cerebral infarction due to thrombosis of the right posterior cerebral artery. If the CT scan can not specify, the Coders will have to code "I-68.9 unspecified." According to the Georgia Department of Public Health FAQ's released October 30, 2015; item #15, reimbursement for unspecified codes will take a significant to zero reduction in reimbursement after the ICD-10 honeymoon phase, October, 2016. NOS, or "not otherwise specified" codes may be denied as there is not enough clinical documentation to determine the diagnosis. The financial impact could possibly push PSC and remote stroke centers into reviewing the cost of their stroke programs. What happened to just doing the right thing for our patients? We have moved from providing what is right in best practice to not being financially stable for providing excellent care for our communities.

During 2015, our organization reviewed 12 cases with I-63.9 codes and calculated the proposed reimbursement loss of $63,000. For small organizations that transfer 50 patients annually, the financial impact would be approximately $262,500.00--- Just do the math.

Submitted by: Teri Newsome, RN, Director of Quality Management, Habersham Medical Center

The Power of Community Stroke Education

Dr. Nahab, Associate Professor, Department of Neurology and Pediatrics at Emory University and Medical Director of the Stroke Program at Emory University Hospital and Emory University Hospital Midtown wanted to share with you the story of a stroke patient he saw recently in clinic. The patient and her husband were kind enough to allow him to share their story. She is a 50yo lady who developed post-partum cardiomyopathy resulting in congestive heart failure at age 36. While hospitalized at Emory University Hospital Midtown in early October 2015 for a CHF exacerbation, her husband happened to notice pictures of stroke signs on a FAST poster when coming out of the elevator. Within 2 weeks, they were driving near Macon when he noticed his wife stopped speaking and had right arm weakness while sitting in the passenger seat. He immediately knew she was having a stroke, took her to Navicent Medical Center in Macon and she received IV tPA. She ended up with a very small ischemic stroke, got placed on warfarin and has recovered to very mild residual expressive aphasia. She is back to work as a 1st grade teacher and thankful to everyone.

It's a reminder of the power we all have working together to educate our community, being prepared to give patients the best treatments available when they arrive to our hospitals, and the great outcomes that result from everyone's hard work.

Medical Center Navicent Health's 1st Annual Stroke Program Recognition Dinner

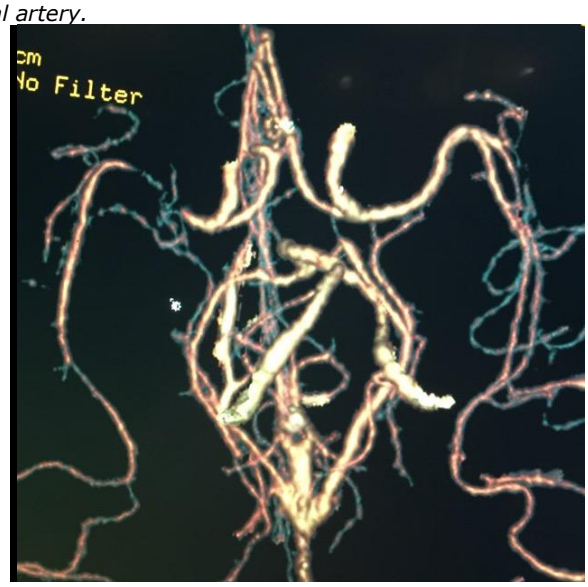
On Thursday, March 24th, Medical Center Navicent Health held its 1st Stroke Program Recognition Dinner, celebrating the Emergency Center's accomplishments in Activase administration. The evening was filled with fun, food, laughter, and ended with over 30 Nurses, Physicians, EMS personnel, and CT Techs being recognized for their efforts in improving stroke care for our Middle Georgia residents. Recipients were presented with trophies, brain lapel pins, certificates, and t-shirts acknowledging their achievements of a DTN in 45 minutes or less.
The program began with an excellent presentation by Dr. Michael Sore, an Emergency Physician and "avid fisherman" as he would say, from Clearwater Florida speaking on "Helping Improve the Quality of Care in Acute Ischemic Stroke".

Submitted by: Denise Goings, Stroke Program Coordinator, Medical Center Navicent Health

Double Jeopardy

On April 1, 2016, the neurologist on call at South Georgia Medical Center, which is a primary stroke center, was notified there was a 47 year old female state employee who was brought to the emergency department with dense left-sided weakness, heart rate of 190 and a blood pressure of 76. The patient was treated with adenosine 6 mg IV bolus followed with an additional two doses of 12 mg IV bolus. At this point the cardiologist had arrived to the patient's bedside and cardio-verted the patient back into a sinus rhythm of 68. Within five minutes of cardio version the patient's systolic blood pressure was 105. Ten minutes after the cardioversion was completed the patient's blood pressure was up to 150. At this point the patient continued to have left sided weakness and a NIHSS of 16. Primary deficits were left neglect and a dense left-sided hemiplegia with relative sparing of the left leg. The patient had undergone a stat CT which revealed no evidence of bleeding. There were indications for alteplase. The patient was administered intravenously alteplase with the door to needle time of 37 minutes. Approximately 30 minutes after the alteplase bolus and infusion, the patient's symptoms had significantly improved. The NIH stroke scale of 16 now decreased down to a 6. At this point CT angiogram images of the head had been obtained. The following imaging was available:

Reformatted CT angiogram images revealing a significant occlusion of the right M1 segment of the middle cerebral artery.



Although the patient had clinically improved at this point, there was a concern that the patient might be at risk for further ischemia and she was transferred to a comprehensive stroke center. The neurologist recommended to initially undergo a CT perfusion/diffusion study with RAPID software, and to be monitored in the event of clinical deterioration due to ischemia that might require a catheter-based intervention.

During her stay at the comprehensive stroke center the patient's CTA perfusion/diffusion imaging using RAPID software revealed no additional tissue at risk. MRI confirmed a small infarct in the medical MCA distribution. At discharge the NIH stroke scale was 3. After two days the patient was discharged for outpatient rehabilitation on medical therapy for stroke prophylaxis and heart rate control.

Submitted by: Jay Kelly, RN, Stroke Coordinator, South Georgia Medical Center

GCASR Soon to Relaunch Website

Georgia Coverdell Rocks!! New and exciting updates are on the horizon for the Georgia Coverdell Acute Stroke Registry website. We will be making our page more user friendly as well as providing you all with the most recent trends in the world of stroke care. We welcome you to visit our page in **June** for the latest updates from our Coverdell staff, lead neurologist and other stroke partners. In addition, you will find a current roster of Coverdell facilities with links to their organization's website. Can't keep up with Coverdell trainings and meeting dates? We will also have a Calendar of Events that will take care of that for you!
Thank you for taking the time to visit our site and we look forward to your feedback.

Website Link:
http://dph.georgia.gov/georgia-coverdell-acute-stroke-registry

GCASR – Door to Needle Abstract

Introductory Note

The Georgia Coverdell Acute Stroke Registry and its participating hospitals have been striving to shorten the time from hospital arrival to treatment with intravenous alteplase. From 2007 to 2015 the median door-to-treatment time was shortened from 81 minutes to 47 minutes. The registry has analyzed the impact of reducing door-to-treatment time on hospital length of stay and patients' outcome. Here below is the abstract of an article recently published on Journal of Stroke & Cerebrovascular Diseases (*J Stroke Cerebrovasc Dis.* **2016 Apr;25(4):866-71**). (Submitted by: Dr. Moges Ido, Epidemiologist, GCASR)

Actual Abstract

Door to Intravenous Tissue Plasminogen Activator Time and Hospital Length of Stay in Acute Ischemic Stroke Patients, Georgia, 2007-2013.

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[2]Division of Epidemiology & Biostatistics, School of Public Health, Georgia State University, Atlanta, Georgia.
[3]Georgia Department of Public Health, Atlanta, Georgia.
[4]Marcus Stroke and Neuroscience Center, Grady Memorial Hospital, School of Medicine, Emory University, Atlanta, Georgia.

BACKGROUND:
Ischemic stroke patients benefit most from intravenous thrombolysis when they receive the treatment as quickly as possible after symptom onset. Hospitals participating in the Georgia Coverdell Acute Stroke Registry reduced the time from patient arrival to administration of intravenous tissue plasminogen activator. This study evaluates the benefit of reducing door-to-treatment (DTT) time as measured by hospital length of stay (LOS).

METHODS:
Data from 3154 ischemic stroke patients treated with intravenous thrombolysis from 2007 to 2013 were analyzed. The impact of door-to-treatment time on patients' length of hospital stay, discharge disposition, ambulatory status at discharge, and bleeding complications was assessed, controlling for patient-, hospital- and event-related characteristics.

RESULTS:
Patients who received intravenous thrombolysis within 30 minutes of hospital arrival had a 19% shorter (95% confidence interval [CI]: 2%-32%, P value = .04) hospital LOS than those treated for more than 120 minutes after arrival. Patients treated within 60 minutes of arrival were 27% more likely (odds ratio = 1.28, 95% CI: 1.06-1.56, P = .01) to have a better discharge disposition than patients treated after 60 minutes of arrival while having a similar rate of bleeding complications.

CONCLUSIONS:
Shortening the door-to-treatment time is associated with a decrease in patient LOS and better patient outcomes. Hospitals should be encouraged to measure, monitor, and reduce DTT time progressively for a better patient outcome.

Coverdell Highlights

March Abstraction Training Workshop

Our March abstraction training workshop was a big success and we couldn't have done it without the support and help from Debbie Camp, Stroke Program Manager at Piedmont Newnan Hospital and Lisa Jackson, Stroke Program Manager at Piedmont Fayette Hospital who facilitated and taught the workshop. In addition, Teri Newsome, Director Quality/Patient Safety Officer at Habersham Medical Center gave a wonderful presentation on ICD-10 codes which helped to answer many of the participant's questions. Thanks to all three of you for making the day the success that it was. All of us at Coverdell appreciate all the time you volunteer and give to the Georgia Coverdell Acute Stroke Registry.

April Conference Call

Thank you to Michael Frankel, MD, Lead Neurologist for the Georgia Coverdell Acute Stroke Registry, for presenting some of the highlights from the International Stroke Conference which took place in Los Angeles, CA, February 2016. In addition, a big thank you to Katja Bryant, Neuroscience Clinical Specialist-Stroke Program Coordinator at Northside Hospital who presented her poster which was accepted at ISC on the GA SPA and to Shelley Nichols, Stroke Coordinator and Outcomes Analyst at the Marcus Stroke & Neuroscience Center at Grady Memorial Hospital who reviewed two posters which were accepted on dysphasia screening and Remote Treatment Stroke Centers.