



# Georgia Coverdell Acute Stroke Registry Quarterly Newsletter

Georgia Coverdell Acute Stroke Registry  
Participating Hospitals



SPRING 2014

## 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 Krompf  
[kkrompf@emory.edu](mailto:kkrompf@emory.edu)

or

770-380-8998



## Champion Hospital of the Year" Award Winners



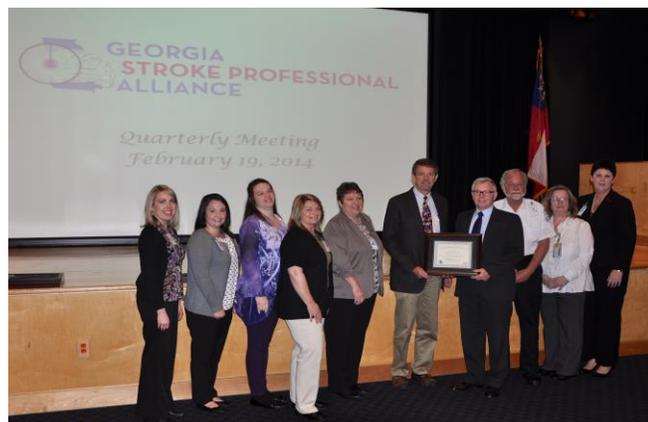
**Putnam General Hospital**



**South Georgia Medical Center**



**Atlanta Medical Center**



**Habersham Medical Center**

## Thank You to Our Heroes

A message from our PI and QI Director – James Lugtu



In 1974 Ulrich and Eleonore Maschwitz published an article in *Oecologia*, a peer-reviewed publication dedicated to the study of plant and animal ecology, entitled *Platzende Arbeiterinnen: Eine neue Art der Feindabwehr bei sozialen Hautflüglern* or once translated “Bursting employees inside: a new kind of enemy defense in social Hymenoptera.” The article describes a newly observed defense mechanism of the Carpenter Ant. In an effort to thwart the attack of an invasive species, Maschwitz and Maschwitz observed soldier carpenter ants would actually rupture a fluid filled sack just below their skin. The rupture would immediately kill the ant but a yellowish sticky fluid would be secreted from the dead ant’s body. The secretion formed a last ditch defense. Once invading species made contact with the fluid it would immobilize their attack, thus saving the carpenter ant colony from invasion and destruction. Maschwitz proposed a new term to describe this form of suicidal altruism. They called it *Autothysis*. *Autothysis* is derived from two Greek terms *auto* which means self and *thysis* which means sacrifice which combined means self-sacrifice.

Stroke is an invasive and destructive disease. In the battle against stroke, an army of stroke professionals have formed to combat the debilitating and at time deadly effects of stroke. These soldiers are from differing backgrounds, some are EMTs, some are nurses, some are physicians, others are from various fields such as research, pharmaceuticals, healthcare organizations and many more too numerous to list. Many of these people share the same attitude as the carpenter ants, often sacrificing themselves in the war against stroke. Though not to the extreme of the carpenter ant, many have devoted their lives and careers to the goal of eradicating stroke and sharing best practice. Many more fight the battle in the trenches caring for stroke victims in their ambulances, ERs, stroke units and rehab facilities. These unsung heroes are truly dedicated to their work and take pride in their skills. Often the work of these people goes unnoticed and underappreciated. I know there have been many times when lives have been saved and serious life altering disabilities have been avoided due to the diligent efforts of our stroke heroes. Whether your role is at beginning of the stroke chain of survival or at the end, we would like to thank you for your hard work and dedication. Our communities and our neighbors are safer because of your self-sacrificing spirit.

In our last newsletter we announced the recipients of two very special awards the Star Awards. These two awards are the result of your peer’s nominations recognizing an individual and a hospital. This is a great opportunity for you to recognize the unsung heroes that you work and collaborate with. Have you taken the time to recognize your peer’s self-sacrificing spirit? Have you taken the time to write a short letter recognizing the high level of care being provided at our hospitals? Your actions could help give these people a well-deserved recognition. As the days and months go by, take note of each other’s self-sacrificing efforts and take the time to share with us the stories of these people. Who knows you might just be our next Star. With that said...

## Our Third Annual Star Award Winners!

### Hospital



**Grady Memorial Hospital**

### Individual



**Susan Zimmermann  
Wellstar Kennestone Hospital**

## **"Time Is Brain: CCFES and Southern Regional Medical Center Partner to Prevent Strokes"**

Clayton County Fire & Emergency Services (CCFES) has been chosen as one of only nine emergency service providers in the state to participate in a pilot program for the Coverdell Stroke Initiative to educate the community and ensure faster, more effective treatment to those experiencing a stroke. Partnering with Southern Regional Medical Center, the pair will play a vital role collecting data in the early treatment of stroke victims.

"This is a great honor for Clayton County Fire & Emergency Services, and one that our elected officials and citizens can be proud of. Clayton County employs the best firefighters, EMT's, and paramedics in the state and this is indicative of their hard work and dedication to the citizens of this county" said Fire Chief Landry Merkison.

The initiative, named in honor of the late Senator Paul Coverdell of Georgia, who died from a massive stroke in 2000, hopes to improve the care of acute stroke patients in the hospital setting. Southern Regional Medical Center is one of the first hospitals in the southern crescent to be named a Joint Commission primary stroke center due in part to its "unique ability to manage stroke care" according to Southern Regional's Manager of Stroke Care, Kim Anda. The hospital's stroke program staffs one neurosurgeon and three neurologist and additionally they have two community neurosurgeon and three community neurologists. Together with a highly trained nursing staff and well integrated emergency medical providers, the facility's stroke care capabilities thrive, which is why Southern Regional has consecutively been awarded the American Heart/American Stroke Association's Gold Plus Award for the past four years.

For CCFES' part, participation started some years back educating First Responders, EMT's and paramedics to rapidly identify early signs of a stroke in patients calling 911. The department was the first EMS agency to partner with the hospital in an effort to recognize and treat strokes as quickly as possible, efforts that led to a change in protocols practiced by both the department and the hospital. Knowing that getting patients treatment by administering lifesaving t-PA, drugs used to treat blood clots in the critical three hour window from the onset of a stroke, EMS personnel in the field are able to work with hospital personnel in determining the proper course of action needed to treat stroke patients. By expediting their time spent in the ER and getting them to CT scan faster, patients have a better chance of survival.

"The synchronicity that exists between Southern Regional Medical Center and Clayton County Fire & Emergency Services allows us to treat more patients with thrombolytics (medicine used to dissolve blood clots) than many larger facilities that on average see more patients." Kim Anda, SRMC Manager of Stroke Care.

Rapid treatment of stroke is paramount when attempting to reduce the adverse effects of a stroke event in patients and to ensuring a positive quality of life after recovery. A partnership such as this between hospitals and pre-hospital emergency medical providers is essential to making sure rapid treatment occurs. The data collected in this initiative will be used to better educate the community not only here in Clayton County, but throughout the metro area and the state of Georgia.

"Clayton County Fire and EMS was selected because of its' exemplary training program, dedication to improving stroke care to its residents, excellent relationships with area hospitals, and the commitment of the fire department's senior leadership to local, regional and state EMS systems. Not only will Clayton County Fire Department's participation in this pilot improve the stroke care system for the residents of Clayton County, but also will serve as a role model for other EMS agencies across the state." Said Keith Wages, Director of the State Office of EMS and Trauma.

For more information on Clayton County Fire & Emergency Services, please visit our website at [www.ccfes.org](http://www.ccfes.org) or contact Clayton County Fire & Emergency Services Public Affairs at (770) 472-8170.

Submitted by Captain Walter L. Barber, Public Information Officer, Clayton County Fire and Emergency Services

## Coverdell EMS Pilot Workshop

"Quality is more than just whether you live or die," challenged Cleveland Clinic CEO Toby Cosgrove at a Nashville Health Care Council briefing. The Institute of Medicine defines healthcare quality as the extent to which health services provided to individuals and patient populations improve desired health outcomes.

On Thursday, February 20, 2014 a group consisting of the Georgia Coverdell Acute Stroke Registry (GCASR) Team, Hospital Stakeholders, and Emergency Medical Services (EMS) Stakeholders came together to make a difference for stroke patients across Georgia. The GCASR team would like thank Southern Regional Medical Center for providing a conference room and great hospitality!

Keith Wages, Director of the Office of EMS and Trauma for the Georgia Department of Public Health, chose nine Pilot EMS agencies to work with Coverdell and the hospital's the agencies service, on Quality Improvement effort. The anticipated successful results will eventually be rolled out throughout the state. These nine agencies represent about 1/3 of all EMS stroke admissions in Georgia. In addition, they have good record systems along with quality data and have served as champions on past EMS initiatives in Georgia.

During the meeting breakout groups were formed with an effort to place EMS agencies with their respective partner hospitals. There were discussions around barriers and solutions to strengthening the EMS/Hospital relationship. The idea that came forth was that it was best to standardize stroke related information given to the hospital. There was fruitful dialogue around what vital information was needed. Participants decided there was a need for a standard or universal form related to stroke patients which should include:

- ❖ Last Known Well Time
- ❖ Stroke Scales
- ❖ Reliable family contact information- multiple numbers (cell, work, home). It was agreed that having witness contact numbers (preferably cellphones) was extremely important. It was noted that the family and those who witnessed the event may not be the same person.
- ❖ Blood Glucose
- ❖ EMS Run Number

Stakeholders echoed EMS wanted feedback from facilities and recognized that EMS needed to give enhanced feedback in return. It was a consensus that there was a need to have a standard definition for last known well time. Various administrative issues were described related to printing the Pre-hospital Care Reports (PCR) by EMS staff at the hospital and retrieving the PCR by the appropriate hospital staff.

Challenges documented consist of the following:

- ❖ Different Electronic Medical Record (EMR) Systems at each hospital
- ❖ EMS systems are often not interchangeable and do not interface with facility's EMR
- ❖ Unable to print PCRs in the ED
- ❖ Pressure for EMS to get back to the field

This collaboration proved to be successful and we look forward to our continued work with the EMS-hospital connection. Next steps include:

- ❖ Regional meetings
- ❖ Facility/agency specific EMS based interventions
- ❖ Development and dissemination of not just best practice but "better practice"

If we are to genuinely improve quality in the future, we need to confront some fundamental truths about the state of quality in health care today.

This is particularly evident in the area of clinical quality: how we talk about quality, how we measure it, how we present it, and what we believe about our own performance and that of our peers.

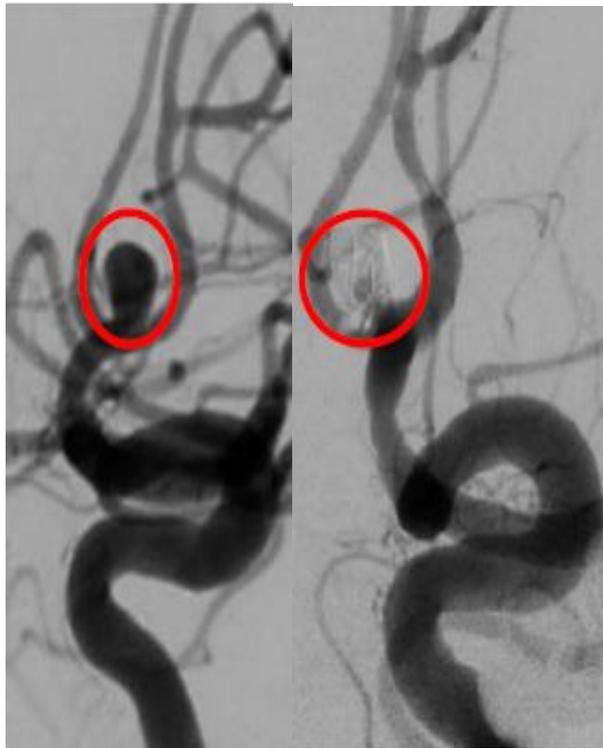
Submitted by: Sanita Floyd, Georgia Coverdell Acute Stroke Registry, QI Consultant



## Subarachnoid Hemorrhage Patient Benefits from Endovascular Treatment

Puckett EMS crew Paramedic Anthony / Buttram and EMT Jennifer Maduro transported a suspected stroke patient to Well Star Kennestone Hospital. The patient was a 68 year old male that presented with confusion and altered mental status.

### Time is Brain!



Pre-Treatment Angiogram    Post-Treatment Angiogram

*The patient was diagnosed with a Hunt-Hess III, Fisher IV bleed. Patient was taken to the angiography lab for endovascular treatment of the aneurysm. He was treated with placement of an EVD followed by coil embolization of the ruptured aneurysm. The patient did well in the neurological ICU.*

*Great job to the Puckett crew from rapid identification of a suspected stroke and transport to the most appropriate facility!*

## The Georgia Stroke Professional Alliance (GASPA)

The next GASPA meeting is scheduled for Tuesday, May 20th at The Wyndham Hotel, 6345 Powers Ferry Road, NW, Atlanta, Georgia. The American Heart Association is sponsoring the day and the guest presenters will be: Dr. Antonio Gandia, Emergency Medicine Physician at Palmetto General in Florida, Keith Wages, Director of the Georgia Office of EMS and Trauma and Dr. Todd Burgbacher from Georgia Regents in Augusta. If you plan on attending please rsvp to either Katja Bryant ([katja.bryant@wellstar.org](mailto:katja.bryant@wellstar.org)) or Holly Hula ([hhula@gru.edu](mailto:hhula@gru.edu)).

## **Georgia Coverdell Introduces New Long ID Data Element**

The Georgia Coverdell Acute Stroke Registry (GCASR) was conceived by clinicians who were interested in sharing information, adopting the best practice available, standardizing the process and improving the quality of stroke patient care. Their idea led not only to the inception but to the birth and growth of a strong collaboration between hospitals and other stakeholders.

Besides the collaboration, the registry has become a powerful tool for understanding what works best in stroke patient care; it helps hospitals in monitoring the quality of their care and identifying areas of improvement. However, the impact of hospital care on patient outcome is not entirely determined by what the hospitals do but the whole continuum of care. The continuum includes the quality of care patients receive before they arrive at the hospital and after they get discharged.

Invaluable information is available at different data sources. Integrating multiple source information for the benefit of our patients and the general public is a key problem we face both in clinical care delivery and public health. When different data sources are linked, we will be able to have multiple datasets collected at different times and at different places; this longitudinal description of patient care when viewed as a whole has a greater value than viewing each dataset separately.

By linking datasets from various sources we increase our capacity to learn about the course of stroke patient care, analyze the impact of every intervention we undertake and provide answers to several questions related to the quality of stroke care. The lack of a unique identifier that enables data sources to be linked is the main hurdle we need to overcome to achieve our objective. To address this hurdle GCASR's Governing Body in collaboration with key partners including EMS and hospitals have developed and approved the creation of a Georgia Long ID. This new 15 digit alphanumeric data element – "LONG ID" – is adjacent to the "Patient ID" field. The "Long ID" is created just for hospitals in Georgia and would solve this problem. This data element is part of Outcome Science's PMT updates that took place on April 7, 2014. We look forward to your ongoing support with this endeavor by asking you to consistently include this data element on every one of your stroke charts. For your reference the key contact at each facility received the procedure for creating the LONG ID data element. If you have any questions, contact Dr. Moges Ido at (404) 463 8918 or [Moges.Ido@dph.ga.gov](mailto:Moges.Ido@dph.ga.gov) and he will be glad to assist you. Thank you for your continued support.

## **2014 International Stroke Conference (ISC)**

The ISC covers the latest in stroke research. Here is a sample of a few of the highlights.

New research in the area of cryptogenic stroke, which is a stroke due to unknown causes, suggested that prolonged monitoring with an implantable device can pick-up atrial fibrillation (AF) in up to 30% of patients over a 3 year period. Since AF greatly increases stroke risk and treatment with anticoagulation for AF has been shown to drastically reduce the risk of stroke, this is an important finding.

Another interesting trial showed that Transcranial Doppler (TCD) is better at detecting and determining risk from Patent Foramen Ovale (PFO) than transesophageal. Approximately 25% of the population have a PFO, but paradoxical embolism only accounts for 4-5.5% of cryptogenic stroke. TCD technology can help clinicians decide who needs PFO closure or anticoagulation because both treatments have significant risks.

The CLEAR III study gave a preliminary report on the first 250 intraventricular hemorrhage patients randomized to receive tPA versus saline via an external ventricular device over a course of 12 doses. So far the results show safety, outcomes have not yet been reported. The investigators hope to report their final results in early 2016. If this proves positive, it may change the Spontaneous Intracerebral Hemorrhage Guidelines in the future.

Two new therapeutic hypothermia trials using intravascular cooling for stroke are recruiting to determine feasibility, safety and whether it improves outcomes. Issues such as how best to prevent shivering, how long to cool, how quickly after stroke onset to cool, and what temperature is needed to be effective and safe are still being worked out. Previous trials have shown a significant increase in pneumonia and a few problems with increased ICP with re-warming. One trial at Emory University used pharmaceutically induced hypothermia for stroke in rats with very positive outcomes.

Submitted by: Susan Gaunt, Stroke Coordinator, Gwinnett Hospital

## **FAST Magnet Makes an Impact**

The following is an email sent from Diane Stockhoff, Resource Nurse/ ED Nurse Educator at Atlanta Medical Center South Campus to Lisa Weaver, the Stroke Coordinator at that campus. This is a wonderful personal experience reinforcing how Stroke Outreach Education can impact patients, staff, family and the community.

"I just wanted to drop you a note to let you know how your class and the information you gave me helped me on a personal note.

You gave us some magnets after class, I don't remember exactly when it was but I think it was during the skills fair. The magnets were the FAST anagram. I gave some to my daughter, Nicole, to put on her refrigerator. I gave them to her because I wanted her to recognize stroke symptoms in the event my elderly in-laws ever exhibited these symptoms (My father-in-law had had a stroke the year before).

Nicole's 42 yr old mother-in-law, Kim, woke up with stroke symptoms last year and went to the hospital. She indeed had a stroke but because it was a wake-up stroke (although she had only been asleep 3 hours) they did no intervention. She refused rehab and was sent home 2 days later. On Sunday my daughter and her husband were visiting Kim when my daughter noticed that Kim didn't seem to be doing as well as she was the day before. The first thing that she noticed was that her speech was slurred and because Nicole had seen those magnets nearly every day since I had given them to her, she looked at her mouth and realized that she had a droop. Kim refused an ambulance but they were able to convince her to go back to the hospital. Kim did suffer a second stroke and again they did no intervention but she was released to therapy the 2<sup>nd</sup> time.

I was very excited that my daughter was able to recognize that her mother-in-law was having a stroke although a bit frustrated that no interventions were done. Just an FYI, they live in southern Indiana."

Do you have a story to share? If so, please contact Kerrie Krompf at: [kkrompf@gmail.com](mailto:kkrompf@gmail.com) or 770-380-8998

## **Coverdell Highlights and Events**

### **April Conference Call**

Our guest speaker on our April 7<sup>th</sup> call was Dr. Khaldi, who is the director of the cerebrovascular and endovascular program at Wellstar Kennestone Hospital. Dr. Khaldi presented on the care and treatment of Cerebral aneurysm, arteriovenous malformation (AVM's) Carotid and intracranial atherosclerosis, the Acute Stroke and Subarachnoid hemorrhage. We would like to thank Dr. Khaldi for his very informative presentation.

### **Abstraction Training Workshop**

On Tuesday, March 18<sup>th</sup>, the GCASR had an abstraction training workshop at Southern Regional Medical Center in Riverdale, GA. The workshop was for Coverdell Abstractors, both New and Current, who wanted additional clarification and training on the Stroke Patient Management Tool. We'd like to thank Kim Anda for making the arrangements for us to use the conference room at her facility and Debbie Camp for helping James Lugtu, our QI Director, facilitate the workshop. These workshops are offered periodically, so be on the lookout for more to come.

### **ASLS Instructor Class**

Wednesday, May 7<sup>th</sup>, the GCASR offered an ASLS Instructor Class at Floyd EMS in Rome, GA. The class was limited to 24 participants and was full within a week of registration. We'd like to thank Randy Pierson of Floyd EMS for offering to host the class and Denise Goings, Debbie Camp and David Loftin for taking time out of their busy schedules to teach the class. Of course, we'd also like to thank our QI Director, James Lugtu for teaching too.