The Georgia Hospital Hub as a QI Tool

Angie Rios, GCASR Hospital Hub Coordinator

The Georgia Coverdell Acute Stroke Registry (GCASR) collects stroke patient records from participating Coverdell hospitals and Emergency Medical Services (EMS) agencies. It 1) links EMS Patient Care Reports (PCR) from the Georgia EMS Information System (GEMSIS), death records from the Georgia Office of Vital Records, and hospital discharge data; 2) stores collected data in the Registry’s database; and 3) analyzes and reports data on stroke care to guide quality improvement activities for stroke care.

The Georgia Hospital Hub (the Hub) allows hospitals access to the PCRs and is a tool to provide patient outcome information back to EMS. For the first time we have an electronic flow of vital information between the hospital and EMS databases and the first step to an integrated data collection system. This information sharing is key in developing partnerships and improving patient care.

However the Hub is not just a tool to provide information exchange between the hospital and EMS agencies. The Hub is also a valuable tool for improving data quality. It helps collect accurate, timely and complete data that is essential to improving stroke care.

Accuracy: The Hub enables hospitals’ stroke coordinators to electronically view and copy data from the PCR. This not only saves time but reduces data entry errors. Access to the Hub also prevents inconsistencies in patient information by having a written account from the patient care report.

Timeliness: Without the Hub, it can take weeks for hospitals to obtain PCRs.

Completeness of Patient Data: The PCR contains patient information which are not available to hospitals (e.g., patient’s initial presentation to EMS). Without the information from the PCR, patient’s data will be incomplete.

Each Hub user has found improvement in data quality.

The following are testimonials from two stroke coordinators.
The Georgia Hospital Hub as a QI Tool
Continued...

“As the stroke coordinator at Clearview Regional Medical Center, I have found the quick access to my PCRs through the Hospital Hub extremely valuable. Since I started in my position in April 2016, I have battled the inconsistency of EMR charting in regards to our stroke patients. Sometimes, I am on hand when a possible stroke patient comes in, but often I am not and when I begin to research the patient chart to assess if we have given the patient the best possible care, I am met with nurse’s notes that documents one last known well and symptoms and a physician’s note that may document something else.” I often rely on the PCR to get a clearer picture of the patient’s condition. Before the Hub, I had to wait days, if not weeks to obtain the PCR in order to have a complete clinical picture of the patient including the first contact made by EMS. Now I can access the PCR within hours of patient arrival to confirm accurate last known well time as well as patient clinical pictures. This assists me with timely assessment of the patients and helps me compare, “Is this stroke evolving? Is this patient back to baseline? Does the patient look better or worse than initial EMS assessment?” It also allows me the opportunity to quickly follow up with healthcare providers, if their assessment or last known well does not correlate with the PCR. Having almost immediate access to the PCRs is definitely an important part of “painting the picture” of a patient’s condition and providing the best possible outcomes for our patients.”

- Melanie Cox, Clearview Regional Medical Center

“I was excited when I first learned about the Hospital Hub by Image Trend. Since the first webinar to the first time logging on and viewing the system I can honestly say I use this tool weekly in reviewing and abstracting charts. It has made my life easier in that now I don’t have to track down individual EMS companies to fax a copy of their PCRs. I get a better picture of the patient’s initial presentation to EMS and timelines by having the reports readily available. Often the patient or family’s recollection of timelines are skewed when an emergency occurs. It is a great benefit to have the written report by EMS to corroborate timelines and aid in immediate decision making. Hospital Hub has improved data collection and quality of reports that we use in our stroke program. It has helped us identify outliers that we may not have noticed otherwise. We have updated our protocols to reflect that and have had great success in reducing door to CT times and thus door to needle times. I think Hospital Hub is an invaluable asset in improving quality care of patients through the sharing of information between hospitals and EMS agencies.”

- Karrie Page, Meadows Regional Medical Center

Spotlight

We’d like to welcome our newest Coverdell Hospital, Coliseum Northside Hospital!

Coliseum Northside is a Primary Stroke Center and we are looking forward to working with them.
Clayton County Fire and Emergency Services (CCFES) Continuous Quality Improvement (CQI) began a concerted effort this year of addressing stroke care within the community it serves. Our revamped CQI has been established to maintain a department wide process and provide an effective tool for evaluating and improving the quality of pre-hospital Stroke Care within Clayton County. The program focuses on identifying root causes of problems and developing interventions to provide the most appropriate pre-hospital treatment of stroke patients. While striving to improve the system, the CQI program also recognizes excellence in performance and service to stakeholders to whom we provide care.

CCFES CQI Stroke Care is an ongoing process in which all levels of health care are encouraged to participate in developing and enhancing the emergency medical services (EMS) system in this area. Based on EMS's sense of community and a shared commitment to excellence, CCFES and Southern Regional Medical Center (SRMC) have collaborated to improve the EMS system by training and educating citizens during public affairs events. CCFES, along with SRMC, recognizes outstanding clinical performance, and audits compliance of Stroke Care. This program contributes to the continued success of our emergency medical services system through a systematic process of review, analysis, and improvement.

CQI implements the principles of quality improvement by defining standards, monitoring the standards, and evaluating their effectiveness. It places increased emphasis on the processes of care and service rather than solely on the performance of individuals. It also emphasizes the role of leadership in continuous quality improvement rather than restricting the goals to solving identified problems and maintaining improvement over time.

The by-product of the program is the alliance of CCFES internally and externally with the surrounding emergency medical facilities to whom we transport patients. This provides all participants in patient care the opportunity to provide optimal service and to provide input and support to an EMS system with which they directly work.

Electronic Communication Utilization: Closing the Loop for Emergency Medical Services and the Hospital with GEMSIS and the Hospital Hub

Catherine Whitworth RN, SCRN, Stroke Coordinator, Quality Analyst, WellStar-Spalding Regional Hospital

**Purpose:** Establish an effective means for the hospital to provide feedback to Emergency Medical Service (EMS). Due to time constraints attempts at utilizing a paper EMS Outcomes form resulted in low compliance in request for outcomes. The hospital and the primary EMS provider for the area explored the use of the Georgia Emergency Medical Services Information System (GEMSIS) and the Hospital Hub, an electronic communication tool, to increase communication.

**Method:** The EMS patient care reports (PCRs) were entered into GEMSIS. Authorized members of the hospital healthcare team could access and review the PCR for a case if needed for additional details pertaining to pre-hospital care. The designated hospital team member used the Hospital Hub to enter the patient outcomes. Each case is identified by its unique code called the “Georgia LONGID” created from the first 2 letters of the patient’s first name, the first 2 letters and last 2 letters of the last name, 8-digit date of birth, and single letter identifying gender. This serves to link the registry data with the EMS records.

**Results:** GEMSIS proved to be an effective and beneficial tool. Without the GEMSIS-Hospital Hub the hospital had limited access to pre-hospital records and was only able to share the outcomes on 6 out of 171 cases (less than 5%). With GEMSIS-Hospital Hub process, outcomes were provided on 84 out of 122 cases (69%). Limitations: “No match” or cases without a final Stroke related diagnosis. The current GEMSIS outcomes form will not allow the hospital designee the option to enter the final diagnosis or primary treatments utilized in a case. A request was made to system support team and these options will be included in the next upgrade.
Frequently Asked Questions

Stroke Awareness/Education

Q: What are some examples of ways to increase Stroke Awareness in my community?
A: FAST education materials can be obtained from the National Stroke Association. NSA is currently working with Georgia sites to collaborate on their “Fast Program in a Box” initiative. Once you sign up to be a site, a package of materials (presentation, posters, wallet cards, brochures, etc.) will be mailed directly to you within a week. These materials can be used during community health fairs, events or in a designated space in the lobby. For more information or to sign up to become a site, contact Denys Fluitt by email at Denys.Fluitt@dph.ga.gov.

Georgia Coverdell Acute Stroke Registry

Q: What does the Georgia Coverdell Acute Stroke Registry (GCASR) do?
A: GCASR is funded by the Centers for Disease Control and Prevention to:

1. Recruit Emergency Medical Services (EMS) agencies and acute-care hospitals to participate in the collection of data on stroke care in Georgia
2. Establish Georgia’s data system infrastructure to measure, track, and assess quality of stroke care among the participating EMS agencies and hospitals
3. Analyze and use data to guide efforts to improve acute stroke care in Georgia
4. Increase workforce capacity and scientific knowledge for stroke care within stroke systems of care
5. Establish partnership with stroke care professionals and stakeholders
6. Increase public awareness of stroke
7. Coordinate post-hospital discharge procedures with hospitals and rehabilitation facilities

Data

Q: How are GCASR data collected?
A: Using Quintile’s Get With The Guidelines (GWTG) Patient Management Tool® (PMT®), the GCASR participating hospitals input their patient records into the GWTG stroke database. GCASR accesses the database and uses the LONGID created for each patient, links the patient records with electronic patient care report (ePCR) from the Georgia Emergency Medical Services Information System (GEMSIS), death records from the Georgia Office of Vital Records, and hospital discharge data from the Georgia Hospital Association.

Q: What is the purpose of GCASR’s Hospital Data Quality Report?
A: Distributed twice a year, it documents agreements between data abstractors as a way to gauge the accuracy and completeness of the hospital data. In order to utilize data for improving stroke care, the data first must be accurate and complete!

Post-Hospital

Q: Who do I contact about improving post-hospital transitions of care?
A: Patricia Hashima, Quality Improvement Consultant, is available to provide technical assistance for improving post-hospital transitions of care. She can be reached by email at Patricia.Hashima@dph.ga.gov or 404-463-4630.
Updates

GCASR welcomes new QI Coordinator, Teri Newsome

It is with pleasure to announce Teri Newsome, RN formally of Habersham Medical Center, has joined the Georgia Department of Public Health as the Quality Improvement Consultant for the Georgia Coverdell Acute Stroke Registry. Teri has served as the Stroke Coordinator during her 37 hears of employment at Habersham. Teri has a strong quality background; obtaining her Black Belt in Lean Six Sigma from the Institute of Industrial and Systems Engineers; works with Georgia’s Care Coordination Council and is currently the Georgia Stroke Professional Alliance Treasurer. In addition, Teri is an ASLS instructor. She is committed to stroke prevention and optimizing stroke care through networking and education.

You can contact Teri at (706) 892-9573 or Terri.Newsome@dph.ga.gov

Announcements

SAVE THE DATE: Coverdell EMS/Hospital Collaboration Workshop

We are excited to announce that on Thursday, February 22, 2018 we are planning our next Coverdell EMS/Hospital collaboration workshop at the Georgia Public Safety Training Center, 1000 Indian Springs Drive, Forsyth, Georgia 31029.

Please Note: We would like all participating EMS and hospitals to invite your ED department to attend the workshop. All of us at GCASR are so proud to be working with you as we continue to improve stroke care throughout the state. An invitation will be sent via email in January. It’s important for all hospitals and EMS agencies invited to attend the workshop

December Coverdell Call

We would like to thank Dr. Moges Ido, GCASR Lead Epidemiologist, for presenting on “Georgia Coverdell Acute Stroke Registry: Progress and Gaps”.

February Coverdell Call

Our next Georgia Coverdell Conference Call is scheduled for Monday, February 19th at 12 noon. Please note there will be no call on Monday, February 5th. Dr. Michael Frankel, the lead neurologist for the Georgia Coverdell Acute Stroke Registry, will present: “Highlights from the 2018 International Stroke Conference”.

2017 Georgia Stroke Conference

Thank you to everyone who attended the 1st Annual Georgia Stroke Conference! We had 120 participants. If you would like to get access to presentation slides from the conference, please contact Denys Fluit at denys.fluit@dph.ga.gov.