PROGRAM OVERVIEW
- Funded by the Centers for Disease Control and Prevention (CDC) as part of the Paul Coverdell National Acute Stroke Registry
- Named in honor of the late Senator Paul Coverdell of Georgia who died of a massive stroke in 2000
- Partnership between Georgia Department of Community Health’s Division of Public Health, Emory University, American Heart Association/American Stroke Association, Georgia Medical Care Foundation, Georgia Hospital Association, CDC, and participating hospitals

GOALS
- Reduce fatalities and disability due to stroke and the incidence of recurrent stroke in Georgia by
  1. monitoring and improving the quality of acute stroke care in hospitals
  2. encouraging collaboration among hospitals and other institutions in Georgia concerned with stroke care quality improvement

HOSPITAL SAMPLING AND PARTICIPATION
- Hospitals recruited in four stages:
  - Cohort 1 started in November 2005
  - Cohort 2 started in October 2006
  - Cohort 3 started in March 2008
  - Cohort 4 started in May 2010
- Currently 61 hospitals participating, of which 27 are Joint Commission certified primary stroke centers, representing about 70% of stroke admissions in Georgia

QUALITY IMPROVEMENT ACTIVITIES
- Individualized stroke care quality improvement consultation for participating hospitals
- Monthly registry-wide telephone conference calls and bimonthly newsletters sharing best practices among hospitals
- Annual meetings and trainings to exchange best practices
- Acute Stroke Life Support training
- Special emphasis for quality improvement efforts initially was on deep vein thrombosis (DVT) prophylaxis, then on dysphagia screening, now on thrombolytic treatment

DATA COLLECTION
- Data on stroke patient characteristics and care received during hospital stay are collected by participating hospitals for patients admitted with acute stroke or transient ischemic attack
- The purpose of data collection is to monitor the quality of stroke care delivered at hospitals in Georgia and to guide quality improvement efforts

REGISTRY STROKE CASE DATA
- Analysis included data from 18,984 patients admitted from November 2007 to October 2009
- The majority (57%) had a discharge diagnosis of ischemic stroke, followed by hemorrhagic stroke and transient ischemic attack, at 19% each
- For ischemic stroke, prompt treatment (thrombolysis) is critical for good recovery
  — Of patients admitted with a diagnosis of ischemic stroke, 20% arrived at the emergency department within 2 hours from the last time they were known to be well
    • Among these, only 47% of eligible patients received thrombolytic treatment within 3 hours after symptom onset
    • Twenty-seven percent of treated patients received intravenous tissue plasminogen activator (tPA) within an hour after arrival at the emergency department. The median door to needle time was 76 minutes
QUALITY INDICATORS

- Care received by patients is compared with quality indicators that identify care processes that have been shown to be beneficial to stroke patients, and have been included in clinical recommendations.
- Quality indicator calculations include identification of patients for whom a care process would have been recommended, and a determination of how many of those patients received the recommended care.
- The 10 registry quality indicators are:
  1. Administration of tissue plasminogen activator (tPA)
  2. Dysphagia screening
  3. Administration of antithrombotic medication within 48 hours
  4. Deep Vein Thrombosis (DVT) prophylaxis
  5. Lipid profile measurement
  6. Delivery of stroke education
  7. Smoking cessation counseling or treatment
  8. Rehabilitation assessment
  9. Prescription of antithrombotic medication at discharge
  10. Prescription of anticoagulant medication for patients with atrial fibrillation
- Defect-free care is defined as the delivery of care meeting all quality indicators for which a patient is eligible.

DEFINITIONS

- Stroke: brain tissue death; can be the result of a thrombus (blocked artery) or a hemorrhage (ruptured artery) which prevents blood flow to the brain.
- Transient ischemic attack: temporary blockage of cerebral blood flow that causes a short-lived neurological deficit.
- Deep Vein Thrombosis (DVT): blood clot located in a large vein; a potential complication of stroke.
- Dysphagia: problems swallowing; a potential complication of stroke that can lead to pneumonia.
- Antithrombotic: medication administered to prevent platelets or clotting factors in the blood from forming a blood clot.
- Anticoagulation: administration of medications to prevent clotting of the blood.
- Tissue plasminogen activator (tPA): a thrombolytic medication administered to eligible acute ischemic stroke patients to reestablish blood supply to the brain.

INFORMATION

- Visit http://health.state.ga.us/epi/cdiee/strokeregistry for more information about the Georgia Coverdell Acute Stroke Registry.

TRENDS IN SELECTED QUALITY INDICATORS

- t-PA Administration
- Deep Vein Thrombosis (DVT) Prophylaxis
- Dysphagia Screening
- Defect Free care