TIME IS BRAIN & TEAM IS KEY

BACKGROUND/PURPOSE
The American Heart Association has set 60 minutes as the goal for “door to needle” time for the treatment of Acute Ischemic Stroke. In an effort to reduce the 120-minute “processing” time for stroke patients from the time of arrival in our Primary Stroke Center to the administration of t-PA, a quality assurance project using a multidisciplinary team approach was initiated in April 2012.

SETTING
The project was conducted in the WakeMed Raleigh Campus Adult Emergency Department. The department also includes a Primary Stroke Center and Level I Trauma Center.

PARTICIPANTS
All internal and external groups that play a role in the care of stroke patients were invited to participate in the project, including representatives from:
• Regional Emergency Medical System
• Laboratory
• Imaging Services
• Clinical Administrator
• Rapid Response Team
• Pharmacy
• Adult Emergency Department

METHODS
From the initiation of the 911 call to the administration of t-PA, each step in the process was carefully reviewed. As a result:
• “Time guzzlers” were identified and strategies were proposed to reduce them
• Internal and external partners were identified; champions included the directors of EMS and Laboratory
• Interdepartmental barriers discussed and reduced through collaborative problem solving (EMS now drawing labs in the field)
• Policies, procedures and education were developed and disseminated
• Supplies were standardized
• The Acute Stroke Timer App was created to manage and track all benchmark times

RESULTS
By creating a well-coordinated process that includes all disciplines involved in the care of stroke patients, we have seen dramatic decreases in door to treatment times. In fact, door to treatment with t-PA was reduced from 120 to 40 minutes within the first month and sustained at less than 60 minutes for six months. As a result, we have been recognized with the American Heart Association’s “Get with the Guidelines” Gold Plus Award for several years successively.