# EMS ARRIVAL TO CT SCAN TRIAL

#### **Overview**

The American Heart Association/American Stroke Association (AHA/ASA) currently recommends a door-to-Computed Tomography (CT) time of ≤ 25 minutes for suspected CVA or TIA. The ultimate goal for ischemic stroke care is to achieve door-to-thrombolytic (tPA) time of  $\leq$  60 minutes. Historical data showed that Beth Israel Deaconess Hospital – Needham (BID-N) had a door-to-CT time of ≥ 25 minutes. In response, a pilot program was created to facilitate immediate CT scanning for patients with suspected stroke. .

## Aim/Goal

To reduce door-to-CT time in accordance with current AHA/ASA guidelines using an interdisciplinary model of BID-N ED and EMS care coordination.

# The Team

Team Leaders: Adam Houk, RN (BID-N ED); Edward Ullman, MD (BID-N ED); Jason Pierce, EMT-P (Needham Fire Department)

#### **Team Members:**

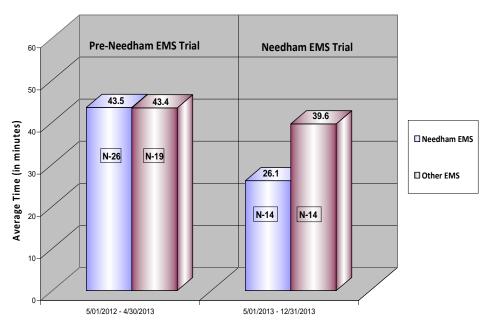
- Gerry Bushey (Manager, Lab)
- Gay Calo, RN (Stroke Committee Liaison/Data Analyst)
- Katie Davis, RN (Interim Resource RN, ED)
- Barbara Doherty (Interim Manager, ED)
- William Hallett (Director, Radiology)
- Christopher McKay, RN (Staff, ED)

### Methods

- Retrospective collection of historical Stroke performance data
- Collaborated with Needham Fire/EMS for:
  - o Implementation of "Direct to CT" for all suspected stroke patients
- Interdisciplinary training with Radiology Team to develop new Code Stroke pathway
- Inclusion criteria: all patients entered into the ASA data base, categorized by arrival modality

# The Results/Progress to Date

#### **EMS Arrival to CT Scan Trial**



# Results

The stroke trial with Needham Fire Paramedics resulted in a 40% reduction in door-to-CT time.

#### **Future Directions**

- Incorporate protocol to all EMS services
- Identify effects on door-to-tPA time

