

Rehabilitation Pilot Project

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2008 NECC Rehabilitation Working Group: Identified Priorities

1. Develop a longitudinal measure of patient function following stroke
2. Ensure better communications between levels of care regarding the patients' medical status, education, and secondary prevention
3. Create a standardized assessment across the NECC region to determine the appropriate level of rehab services required



Rehabilitation Recommendations

- 1. All hospitalized stroke patients should be assessed for and referred to the appropriate level of post-stroke care.** Whether state-based, regional or national, primary stroke centers should require the provision of basic rehabilitation assessment and services (e.g. physical, occupational, or speech therapy) and comprehensive stroke centers should be required to provide these rehabilitation services on site, or as part of a formal stroke care network with pre-specified relationships.



Rehabilitation Recommendations

2. Every stroke patient's **functional status should be assessed during inpatient hospitalization with a standardized screening and assessment tool.** NECC states should collectively select a single instrument to be used by all states.



Rehabilitation Recommendations

- 3. States within NECC should develop a uniform set of stroke rehabilitation quality measures** to be piloted in all post-acute settings where rehabilitation settings, such as Skilled Nursing Facilities, Inpatient Rehabilitation Hospitals, and Long-Term Acute Care Facilities. These measurements should include rates of adherence to key guideline-based interventions in the treatment of stroke patients, and appropriate targets for adherence should be established at the institutional and regional level. Inpatient rehabilitation hospitals should obtain certification in stroke rehabilitation by external credentialing agencies or seek equivalent designation. Similar criteria should be developed for the other post acute settings to permit comparable certification.

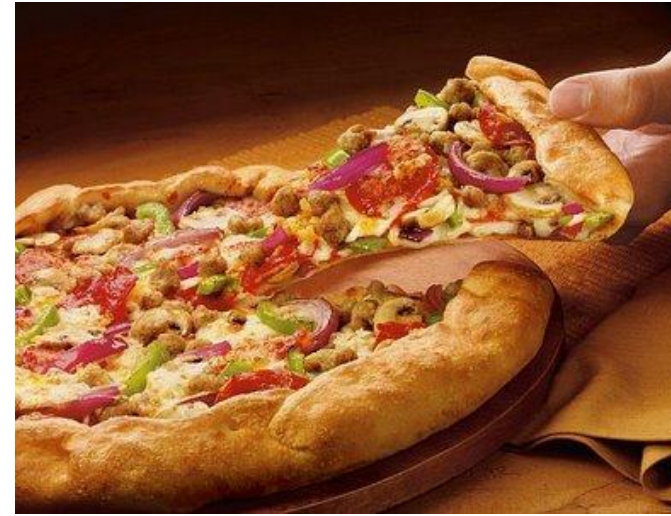
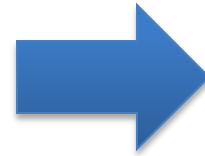


Rehabilitation Recommendations

- 4. Advocacy organizations should focus on ensuring that adequate rehabilitation resources exist within the NECC region, that adequate insurance benefits exist to fairly compensate for the cost of this post-acute care, and that these benefits are readily accessible to those patients who require services.**



Start with a small slice of the pie



Focus: Assess for Rehabilitation

- Multiple guidelines include “Assessment of Rehabilitation Needs”, but don’t define it
- The vast majority of GWTG hospital report compliance with this standard
- Anecdotally, there is considerable variation in the selection of patients for different levels of rehabilitation care
- Can we improve care by standardizing this assessment process?



NECC Rehab Project

- To conduct a pilot study on Rehab Assessment in Acute Care
- Approximately 20 acute care hospitals
- Collect data on factors that influence patients' rehabilitation discharge destination.



Intervention

- “Piggy-back” on the existing Get With The Guidelines-Stroke database to collect recommended data elements in the pilot hospitals.
- Collect data from a representative sample of hospitals in our NECC region.



Rehab Pilot Goals

- Determine overall feasibility of this type of data collection in the acute hospital
- Establish which data items are practical to collect, and which are not
- Explore mechanisms for collecting this data in a variety of hospitals throughout the region
- Preliminary analysis of factors that influence patients' discharge destination from an acute care hospital, and variation in practice



Methodology for Measurement of Outcomes

- The strength of the factors influencing patients' discharge destination will be determined by analyzing patients' discharge destination in relation to the patients':
 - age, race, gender
 - prior living environment
 - health insurance status
 - preadmission and discharge ambulatory status
 - initial NIH stroke score
 - functional assessment
 - socioeconomic status
 - caregiver availability in the home



Tools Used

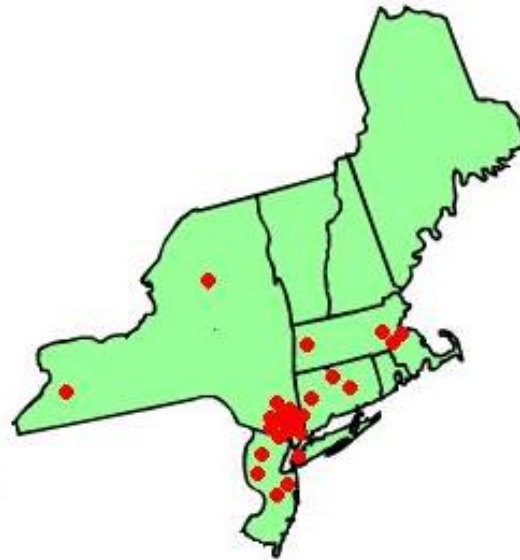
- Get With The Guidelines-Stroke Database
- Additional Fields added specifically for the Pilot:
 - Pre-morbid (pre-stroke) Modified Rankin
 - Barthel Index
 - Short Portable Mental Status Questionnaire (SPMSQ)
 - Caregiver Availability
 - Highest Level of Education

Sites committed to collect data for 3 months and share 3 months of baseline GWTG data prior to the project as well

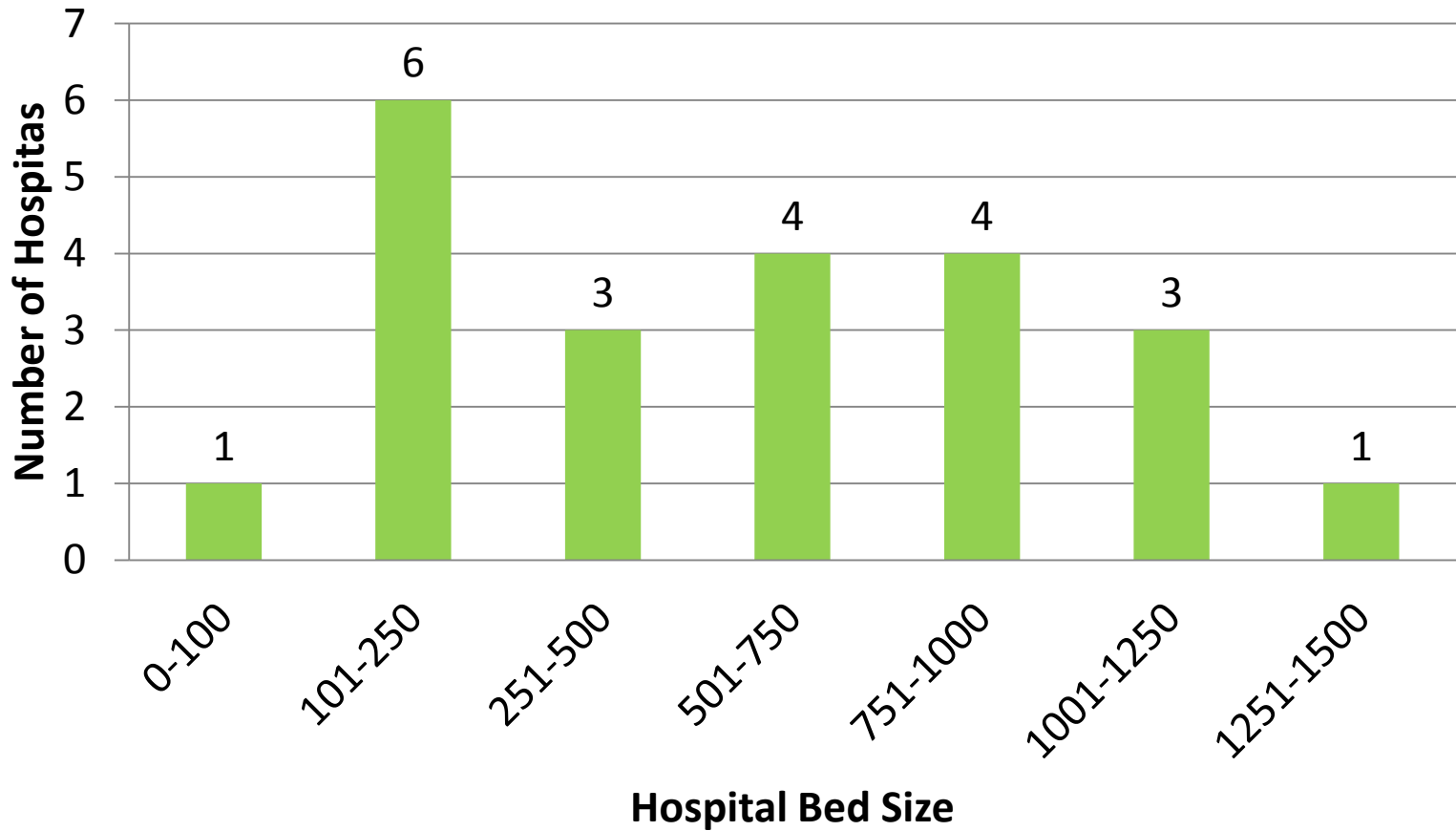


Participating Sites

- 22 Sites Total
 - Academic Medical Centers: 12
 - Community Hospitals (teaching & non-teaching): 10
- CT-3
- MA-4
- NJ-4
- NY (Downstate): 9
- NY (Upstate): 2



Site Participation By Bed Size

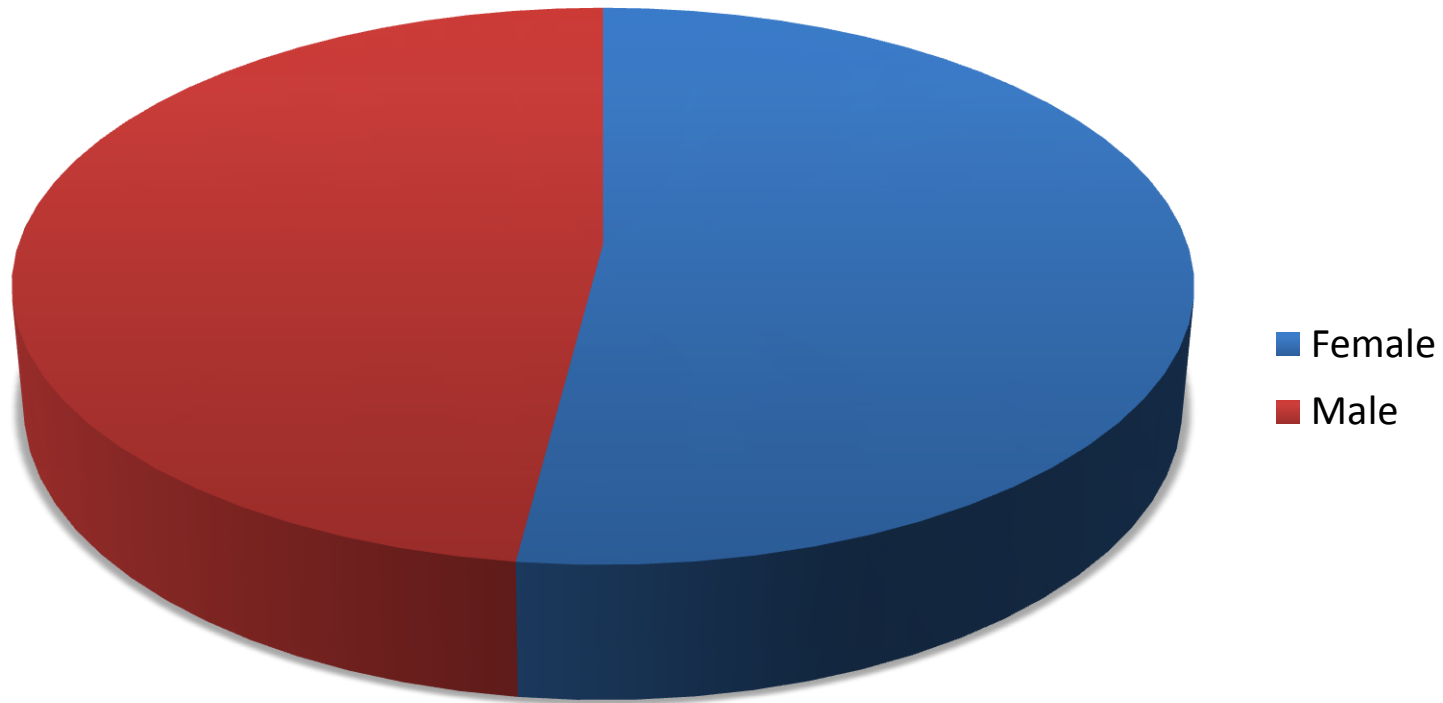


General Observations

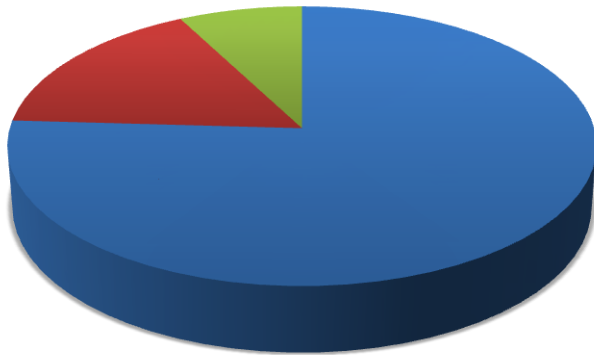
- Recruitment to a voluntary pilot project is challenging but possible!
 - Needed leadership buy-in at various levels (e.g. VP for Quality)
 - Resources at various institutions vary – the pilot is extra work for one or more staff members at each site
 - Several sites needed IRB review
- Coding Instructions and Data Collection Elements need to be clearly defined
 - We refined some of our data collection points based on site feedback
 - We refined our coding instructions several times
 - Valuable aspect of pilot project
- Who performs the data collection at each site?
 - PT/OT/Speech
 - Stroke Nurse Coordinators



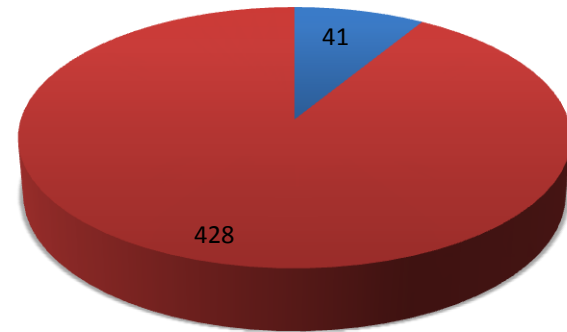
Preliminary Analysis of 469 Patients with Barthel Index recorded



Race & Ethnicity



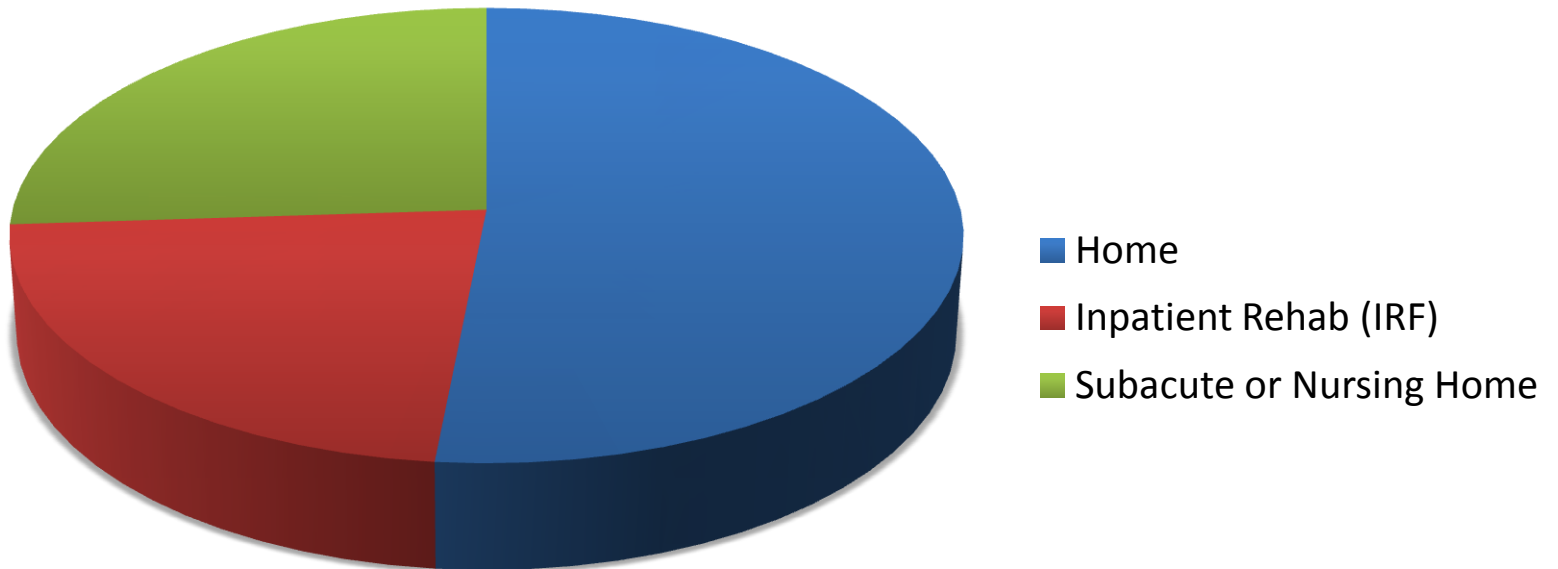
- White
- Black/African American
- Other or UTD



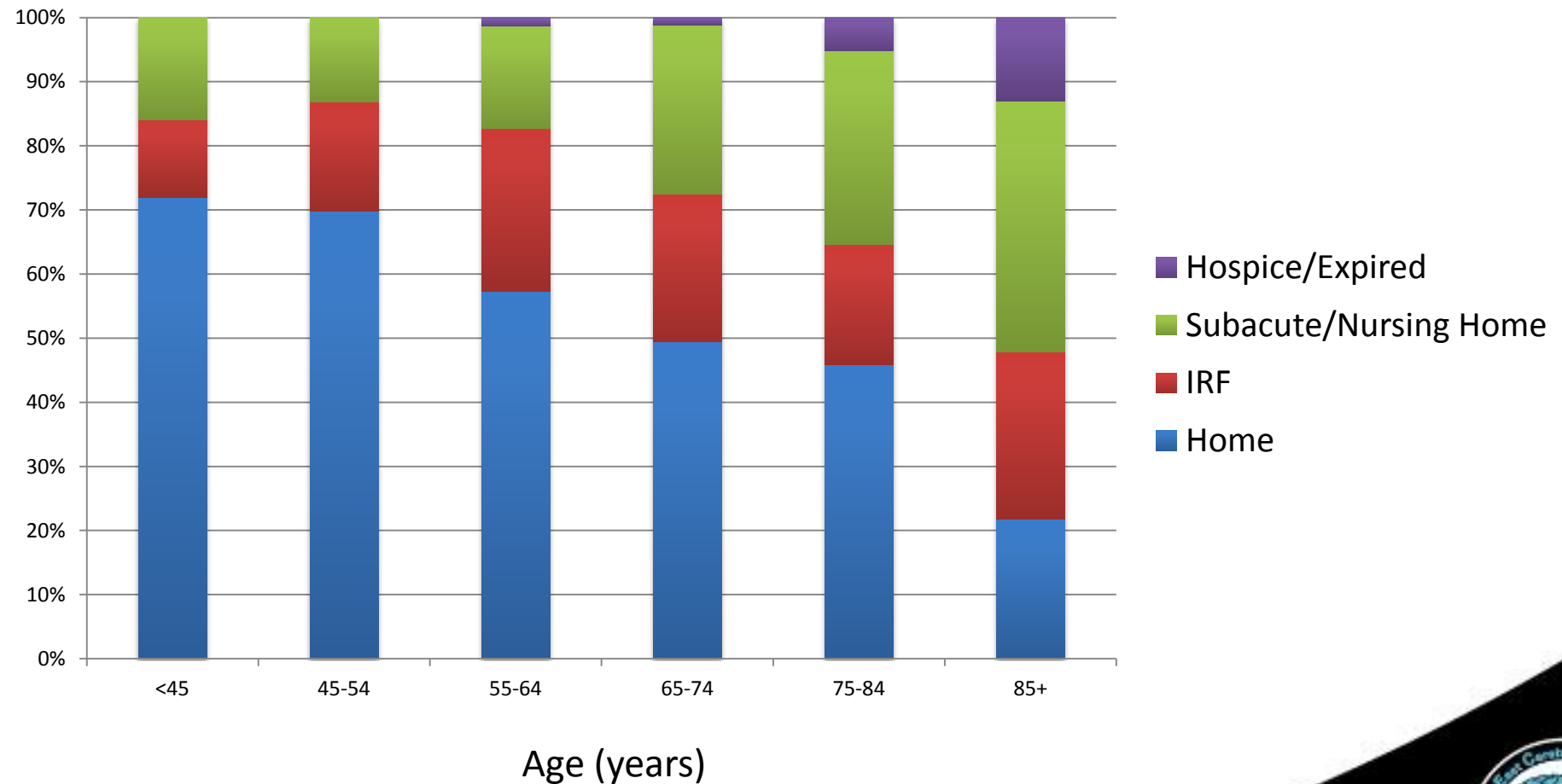
- Hispanic Ethnicity
- Other



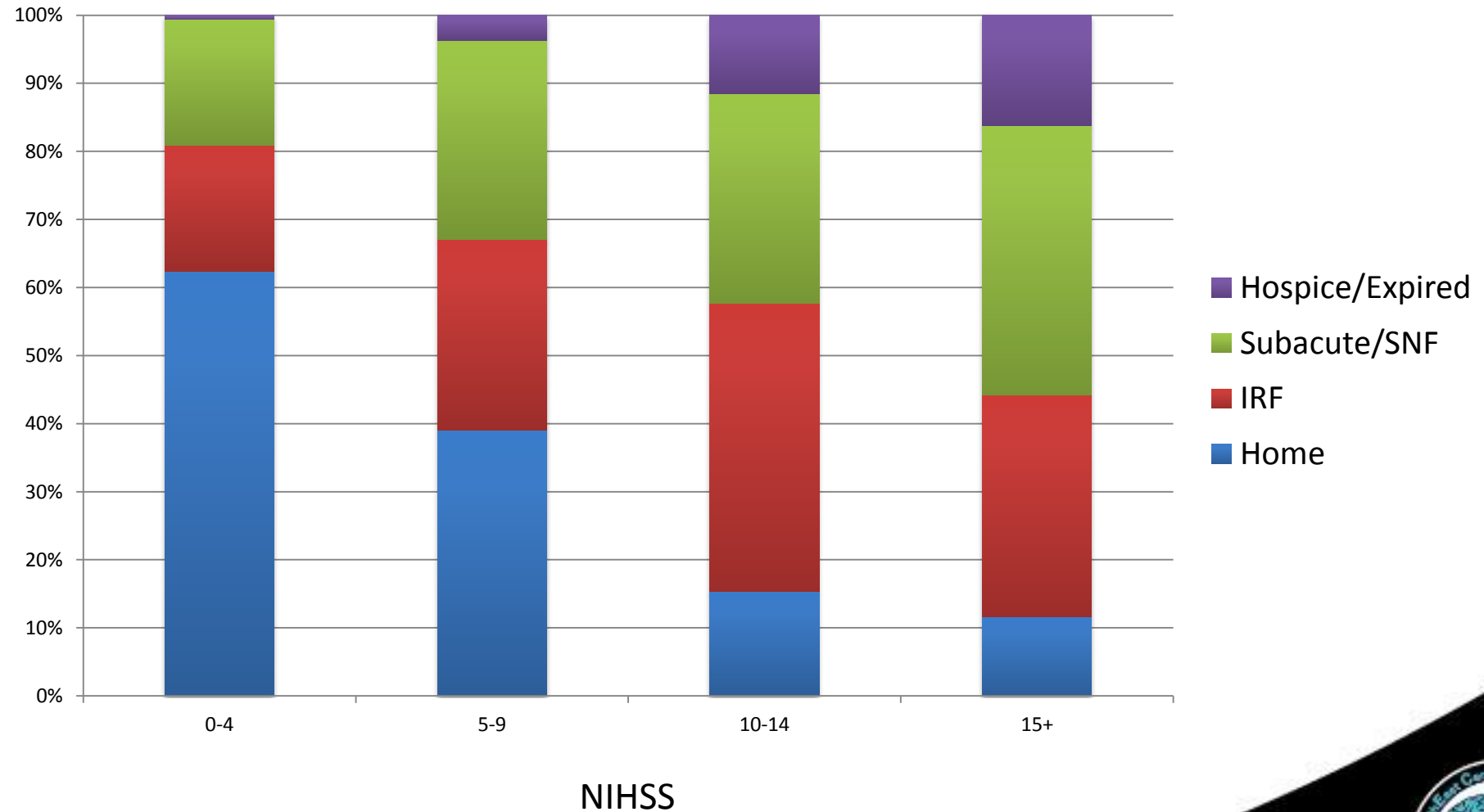
Discharge Location



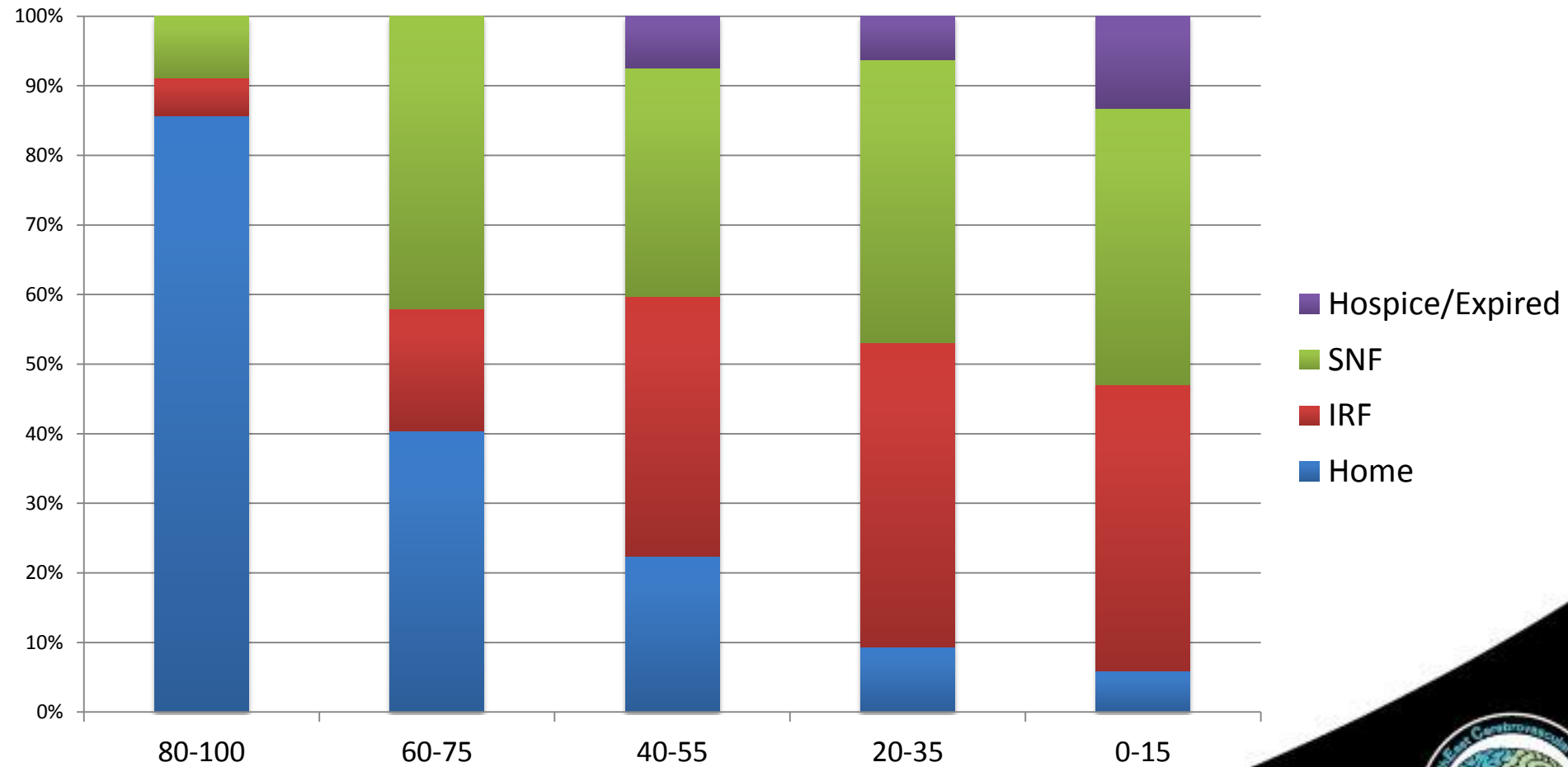
Discharge disposition by age



Discharge location by NIHSS



Discharge Destination by Barthel Index



Thank you to our Participating Sites!

The Allen Pavilion-NYP, NY
Bassett Hospital, NY
Berkshire Medical Center, MA
Boston Medical Center, MA
Capital Health, NJ
Columbia University Medical Center-NYP,
NY
Hackensack University Medical Center, NJ
Hartford Hospital, CT
Jersey Shore University Medical Ctr, NJ
Lutheran Medical Center, NY
Massachusetts General Hospital, MA
Millard Fillmore Suburban Hospital, NY

The Mt. Sinai Medical Center, NY
Newton-Wellesley Hospital, NY
Sharon Hospital, CT
St. Charles Hospital, NY
St. Joseph's Regional Medical Center, NJ
St. Luke's-Roosevelt Hospital, NY
Stony Brook University Medical Ctr, NY
University Hospital of Brooklyn at Long
Island College Hospital, NY
Weill Cornell Medical Center-NYP, NY
Yale New Haven Hospital, CT



Next Steps

1. Complete Data Collection (12/31/2011) & Analysis
2. Publish Results
3. Determine follow-up study. Options include:
 - a. Expansion of pilot to more hospitals in the region and longer duration
 - b. Inclusion of outcome data at 30 or 90 days (Modified Rankin, Barthel?, Re-hospitalization, Mortality, Recurrent Stroke, Living situation (home vs. institution))
 - c. Explore grant funding

