



# ADVANCING STROKE CARE IN CONNECTICUT

## Continuous Quality Improvement (CQI) Initiatives

Linda Cooney, MPH, BSN, RN  
Connecticut Department of Public Health – Public Health Initiatives  
Heart Disease and Stroke Prevention Program



### Background

- ♥ 2004 - Commissioner's Stroke Care Initiative
- ♥ 2006 - DPH Stroke Survey - Conducted by the UCONN Department of Public Policy to identify available stroke care services in Connecticut's adult acute care hospitals. High survey response – 29 of 30 adult licensed hospitals responded
- ♥ 2007 - DPH hired an RN to provide oversight for the Primary Stroke Center (PSC) designation program
- ♥ 2007 - DPH initiated statewide process of developing a Stroke Plan to design an integrated stroke system of care and prevention.

### Stroke Survey Findings

- ♥ 66 percent have a formal stroke protocol
- ♥ 52 percent have an acute stroke team able to evaluate the patient within 15 minutes
- ♥ All hospitals have the capacity to administer t-PA , perform MR angiography and carotid doppler tests
- ♥ There was widespread support for a PSC designation program

### Mission

To assure all Connecticut hospitals have the capacity to provide optimal stroke care by meeting a minimum set of criteria established by the American Stroke Association and the Brain Attack Coalition

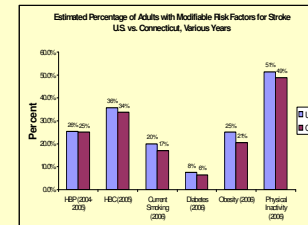
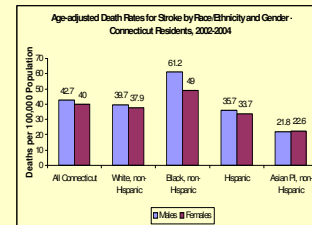
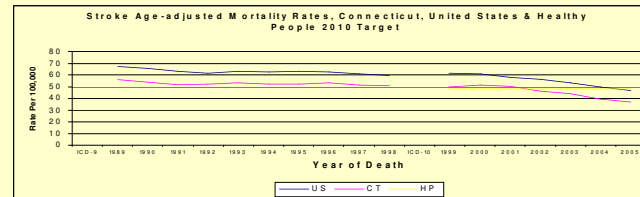
### Objectives

- ♥ To collaborate with NECC telemedicine partners for mentorship in advancing the use of telemedicine in rural areas of Connecticut with limited stroke care resources
- ♥ To foster Primary Stroke Centers (PSC) and Non-PSC partnerships
- ♥ To maintain a continuous quality improvement (CQI) mechanism to evaluate the success of the PSC designation program

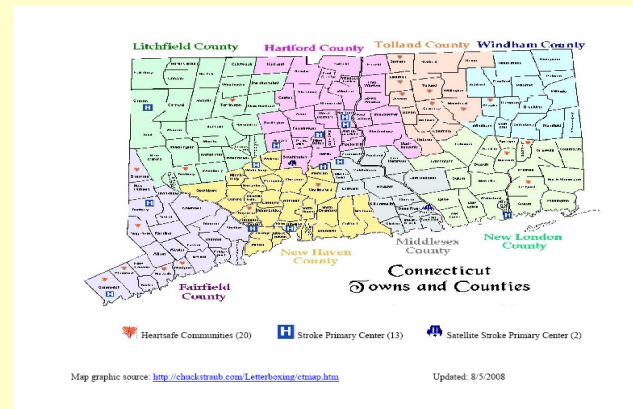
### Methodology

- ♥ Application protocol developed and posted on DPH web site
- ♥ PSC designation criteria used to measure hospital performance
- ♥ Structured site visits made to validate stroke services
- ♥ Technical assistance provided to assist hospitals in meeting PSC criteria

### Burden of Stroke In Connecticut



### Primary Stroke Centers/HEARTSafe Communities Within Connecticut



HEARTSafe Community - Based in the AHA "Chain of Survival" which is comprised of four vital links: early access to emergency care; early cardiopulmonary resuscitation (CPR); early defibrillation and early advanced care.

### Primary Stroke Center Designation Criteria

- ♥ Acute Stroke Team
- ♥ Written Care Protocols
- ♥ Emergency Medical Services
- ♥ Emergency Department
- ♥ Stroke Unit
- ♥ Neurological Services
- ♥ Neuroimaging Services
- ♥ Laboratory Services
- ♥ Outcome/Quality Improvement
- ♥ Support of Medical Organization
- ♥ Educational Programs

### Outcome Measurements

- ♥ All CT hospitals will have the capacity to provide rapid high-quality care
  - Number of PSC Hospitals
  - Number of hospitals using telemedicine
  - Re-survey hospitals in 2009
  - Number of PSC-related technical assistance consultations
- ♥ All PSC hospitals will maintain designation status
- ♥ Reduce stroke deaths in CT
  - CT DPH Vital Record review
- ♥ Reduce stroke associated morbidities
  - CT DPH hospital discharge data

### Continuous Quality Improvement

- ♥ Systematic monitoring of PSC hospitals
- ♥ Establish statewide stroke care database (GWTG, CHIME database, EMS database)
- ♥ Integrated Stroke Care Conference
- ♥ Implement & monitor CT Plan for Stroke Care & Prevention
- ♥ Repeat DPH Stroke Survey
- ♥ Review and improve PSC designation process

### Progress To Date

- ♥ 11 Hospitals have achieved PSC designation
- ♥ 8 Hospitals are pending DPH review for PSC designation
- ♥ Videoconference held 10/17/08 with statewide stakeholders to discuss status of stroke care in CT and the establishment of a telemedicine network to improve access to stroke care

For More Information:  
<http://www.ct.gov/dph/site/default.asp>