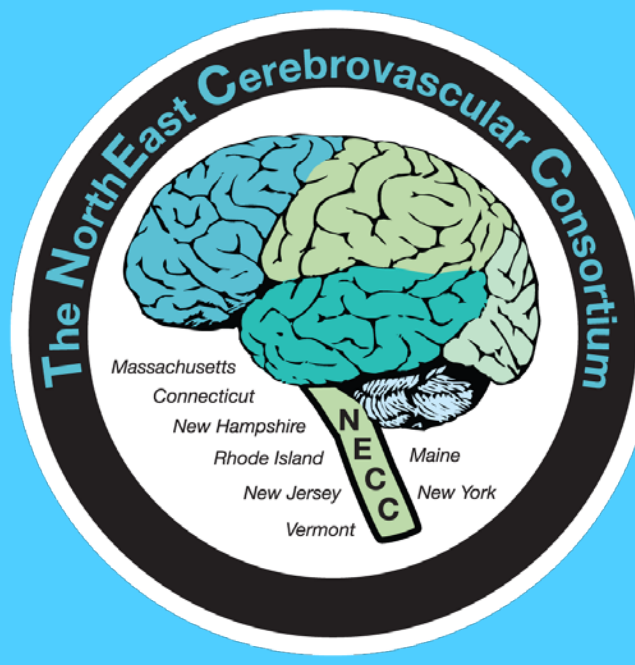


Regional Differences in Stroke Center Designation and Get with the Guidelines (GWTG-S) Participation and Performance - Results from The NorthEast Cerebrovascular Consortium (NECC)

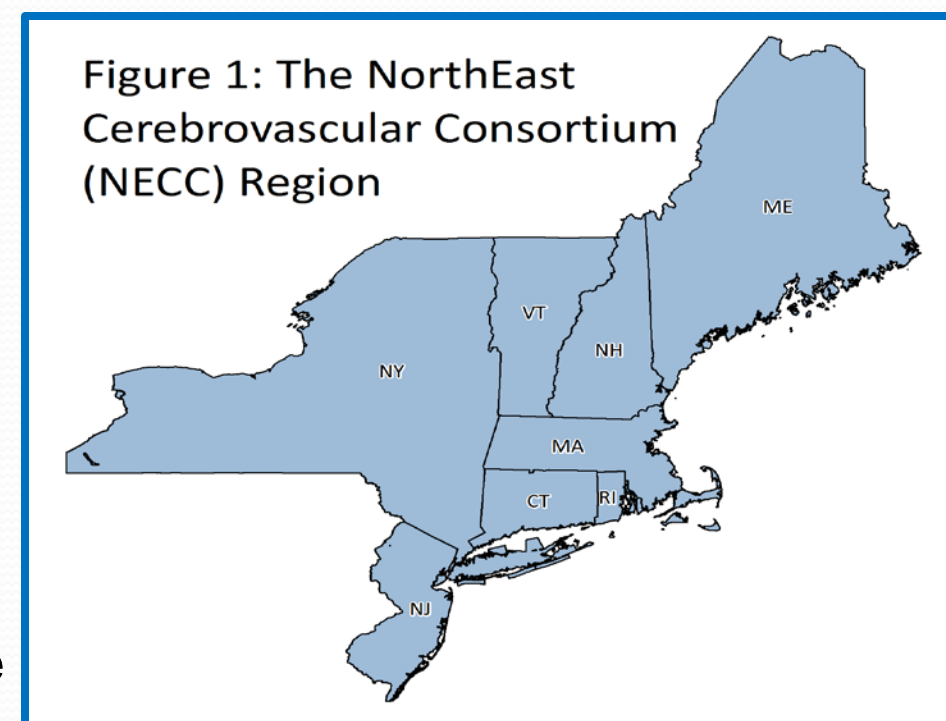
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Introduction

- Significant regional variations exist in the delivery of healthcare, including the delivery of care for acute ischemic stroke.
- The NorthEast Cerebrovascular Consortium (NECC) was created in 2006 to unite health care providers, public health officials, legislators and advocacy organizations to implement and assess a Stroke Systems of Care Model (SSCM)
- The NECC SSCM focuses on six stages: Primary and Primordial Prevention, Community Education, Notification and Response of EMS, Acute Stroke Treatment, Subacute Care and Secondary Prevention, and Rehabilitation.
- The 8 states comprising the NECC are Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont (Figure 1). Pennsylvania is the only state in CMS's "Northeast Region", that is not a member of the NECC
- Prior work suggests that JC PSC certification alone does not ensure performance-based achievement¹



Objective

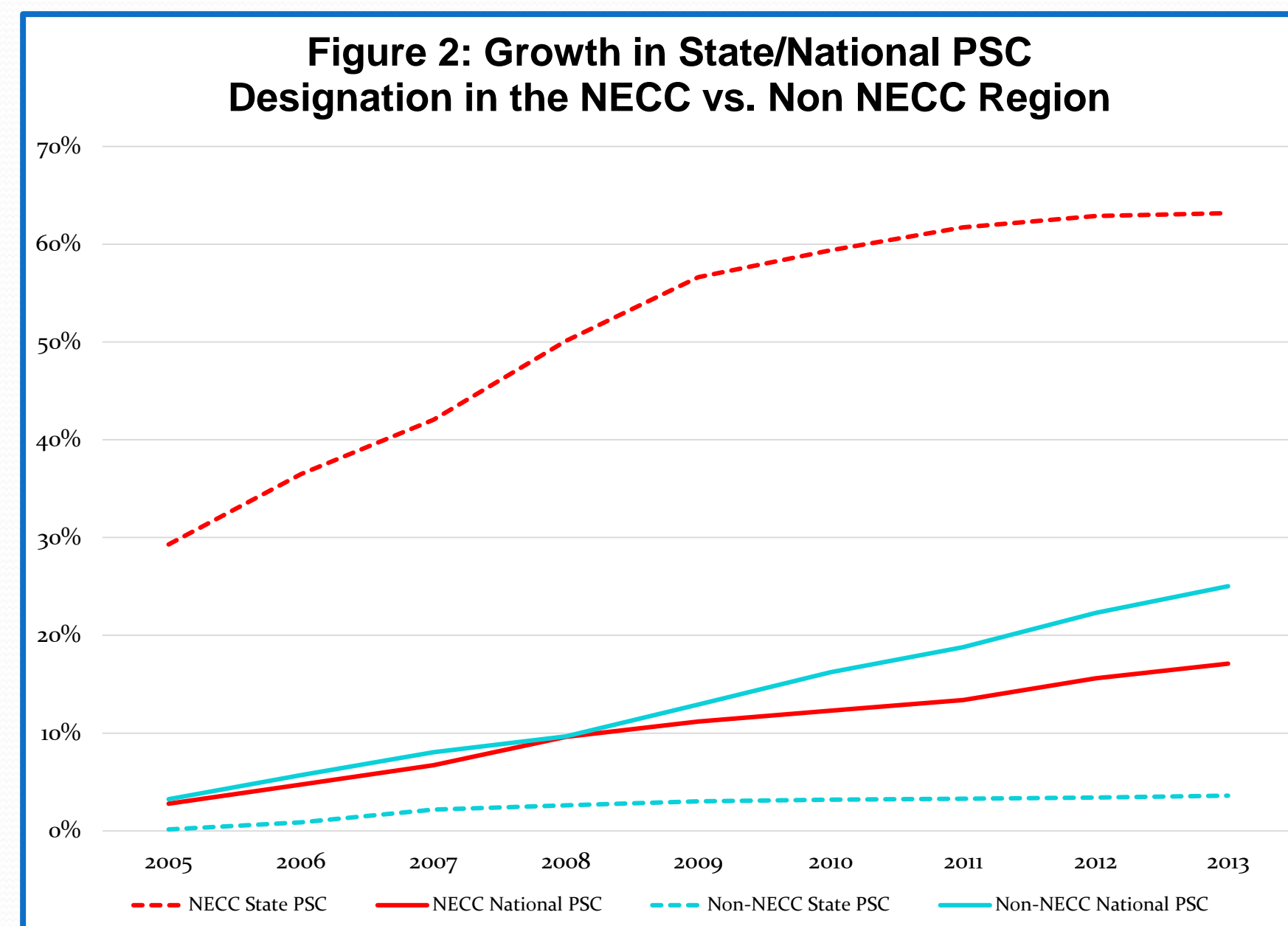
- To examine differences in Primary Stroke Center (PSC) designation, participation in GWTG-S and performance of acute care hospitals (ACH) and critical access hospitals (CAH) in the NECC region compared to non-NECC regions.

Methods

- We compared percentages of ACHs/CACs in the pre- (2005) and post-NECC (2006-13) time periods with:
 - State versus National PSC Designation
 - GWTG-S participation
 - Performance Achievement award trends over time
- State designation refers to states conducting designation themselves or a combination of their own designation/national designation (certified by JC, DNV or HFAP).
- Analysis used US census data regions stratified as The NECC region vs. Non-NECC regions (PA plus South, Midwest, West).
- ACH/CAH lists were obtained from CMS.
- GWTG-S data were used for GWTG-S participation and awards (silver or higher for >1 year).

Results

- From 2005 to 2013, the average number of ACH/CAHs per year in NECC vs. non-NECC region were 433 and 4420, respectively.
- State-based PSC designation existed in CT, MA, FL, MD, NJ, NY.



PSC Designation (Figure 2)

- In the NECC and non-NECC regions, both State and National PSC designation increased over time (both analyses $p < 0.0001$, Cochran Armitage Trend (CAT)).
- After adjusting for year, significantly more NECC ACH/CAHs received **State-based** PSC designation; whereas significantly more non-NECC ACH/CAHs received **National** PSC designation (both analyses $p < 0.0001$, Cochran-Mantel-Haenszel (CMH)).

GWTG-S Participation and Performance Achievement (Figure 3)

- In the NECC and non-NECC regions, both GWTG-S participation and GWTG-S awards increased over time (both analyses $p < 0.0001$, CAT).
- Significantly more NECC ACH/CAHs participated in GWTG-S and received GWTG-S awards than non-NECC ACH/CAHs (both analyses $p < 0.0001$, CMH).

Limitations

- Participation in a national stroke QI program like GWTG-S is just one method to evaluate the impact of a regional stroke network.
- Results may be influenced by unmeasured confounders such as hospital size, teaching status, differences in patient and hospital characteristics, and stroke systems of care and health policy factors unrelated to NECC.

Conclusions

- There has been more rapid growth of State-based over National PSC certification, and participation and achievement in GWTG-S in the Northeast from 2006 through 2013 compared to other US regions.
- The NECC may complement and enhance existing regulatory and policy initiatives by providing networking and education opportunities.
- Further investigation is merited to evaluate the influence of regional networks and State versus National PSC designation on hospital performance.

Contact Information

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