

# Hospital Certification Programs Use Data to Improve Quality and Decrease Length of Stay- A Look at Stroke in Wisconsin



Michelle Gardner, MBA Kathleen O'Neill, MHA

## Background

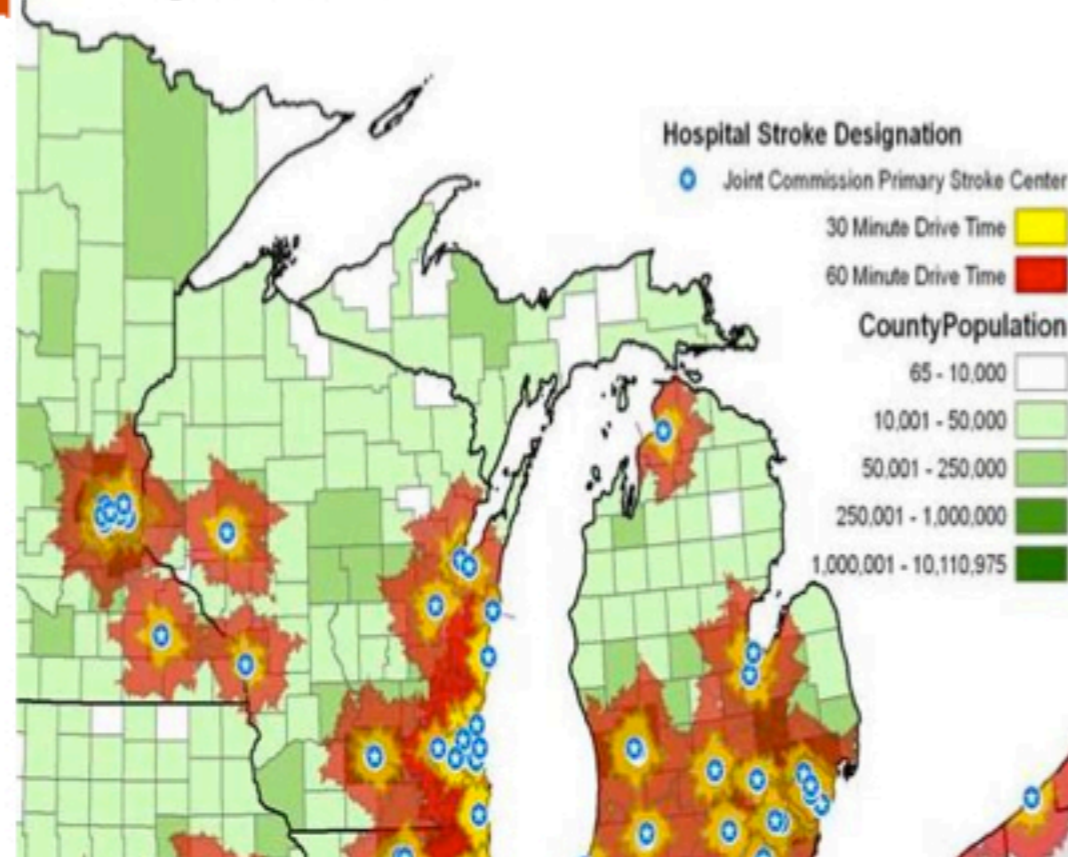
Stroke continues to be a significant cause of morbidity and mortality in the United States. Approximately 795 000 Americans have a new or recurrent stroke each year, and stroke remains the third leading cause of death in the United States when considered independently from other cardiovascular diseases. Despite successes in delivering effective new therapies, significant obstacles remain in ensuring that scientific advances are consistently translated into clinical practice.

## Objectives

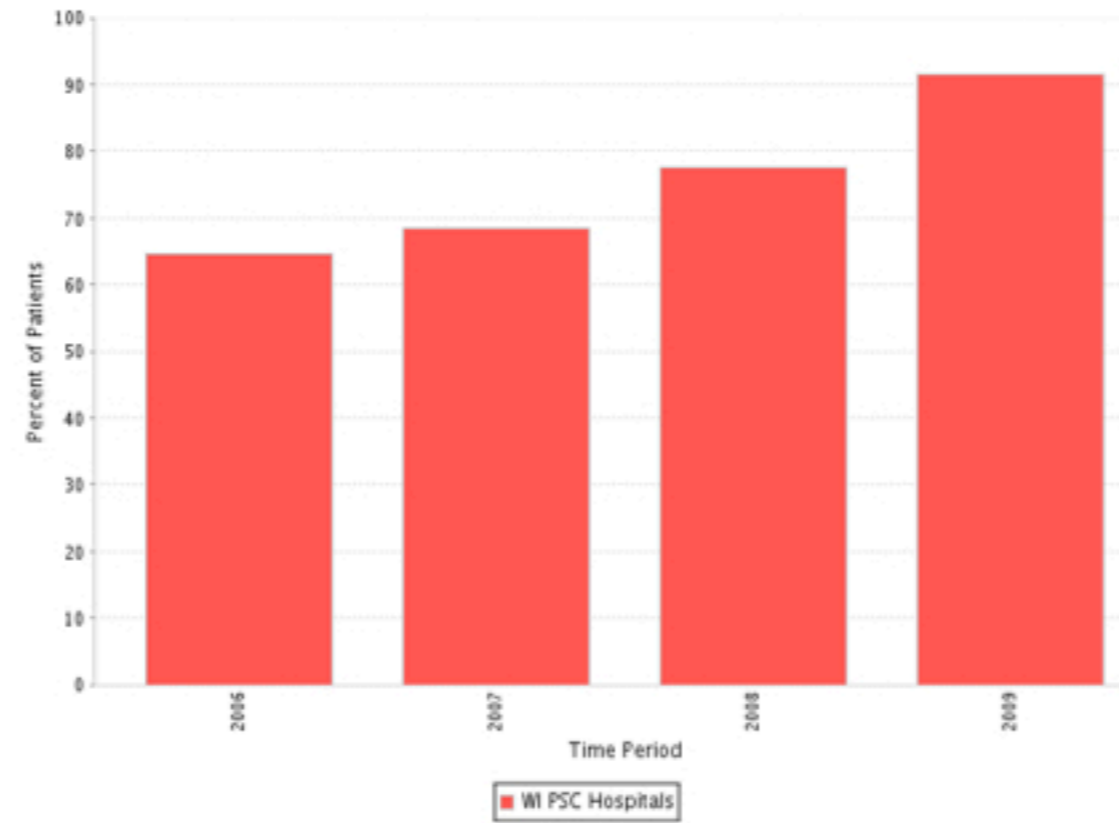
Hospital certification programs are increasingly available for multiple disease states by many nationally certifying organizations. Since 2004, 24 of the larger hospitals in the state have started collecting data on stroke patients and have completed a certification process to become a primary stroke center. Over time, the implementation of quality improvement efforts based on the data and the requirements of certification have made an impacts on both quality of care and length of stay. This abstract will look at aggregate trends of the 24 stroke certified Wisconsin hospitals which includes a total of 19,320 patients though 2006-2010

## Planning/Research Methods

Since 2004, hospitals across the country have made the decision to become certified as a stroke center, either through a state based certification process, The Joint Commission or other certifying bodies using the American Heart Association/ American Stroke Association (AHA/ASA) guidelines and recommendations. There are 24 certified stroke center hospitals in Wisconsin. These 24 hospitals enter stroke patient data using Get With The Guidelines (GWTG) Stroke's Patient Management Tool. A Wisconsin Stroke Center benchmark was created by the AHA/ASA to analyze trends.



## Defect Free Stroke Care



## Implementation Methods

Hospitals have created or enhanced treatment protocols according to American Stroke Association (ASA) guidelines and met requirements of the certifying body. As part of the requirements to be certified, outcome and performance measures must be collected and analyzed. Using Get With The Guidelines data is entered on every stroke and TIA patient, either concurrently or retrospectively. Each hospital has varying techniques to analyze data, report progress and implement change. All hospitals must have a quality improvement process and a stroke team in place. Hospitals must report their GWTG-Stroke data to the certifying body.

## Length of Stay for Ischemic Stroke

Benchmark Group	Time Period	Ischemic Stroke	Mean	Standard Deviation
WI PSC Hospitals	2006	5.16 (1339)	5.16	7.55
	2007	4.56 (1968)	4.56	5.1
	2008	4.44 (2053)	4.44	4.21
	2009	4.47 (2428)	4.47	4.38
	2010	4.24 (2620)	4.24	4.09

## Results

The collection and analysis of data among the Wisconsin certified stroke hospitals has made an impact over time. According to GWTG data from this benchmarked group, eligible patients receiving the clot busting drug, tPA has increased from 63.7% in 2006 to 86.3% in 2009. It has been proven that tPA can prevent or lesson the paralyzing effects of a stroke and can dramatically improve patient outcomes. Defect-free stroke care among this group was reported at 60.6% of patients in 2006. In 2009, Defect-free care had increased to 91.4% of patients. Length of Stay (LOS) in these same hospitals had a mean of 5.15 days for ischemic stroke patients in 2006 and a 2009 mean of 4.47 days. Currently, 2010 data is showing a mean of 4.24 days among Wisconsin certified stroke hospitals. These trends indicate a financial impact associated with adherence to evidence based care