Comprehensive Stroke Center (CSC) certification, the highest level of stroke center certification, represents a hospital’s ability to provide excellence in the care of complex stroke patients. Hospitals, like Ascension Columbia Saint Mary’s Milwaukee (ACSMM), volunteer to become certified. The certifying body provides a framework for CSC-certified hospitals to decrease the rate of premature death and disability. This certification helps to organize teams across the continuum of care, and strengthens the community’s confidence in the safety of care, treatments, and services the CSC provides, knowing the stringent requirements under which they perform.

This journey, part of a global hospital initiative, was inspired by ACSMM’s Stroke Program Medical Director and Neurointerventional Surgeon, Dan Gibson, MD. In 2006, ACSMM became a Primary Stroke Center through the Joint Commission (TJC). Primary Stroke Centers can provide intravenous (IV) thrombolytics (clot buster) and medical management of stroke. As a CSC, ACSMM has more treatment capabilities, including IV thrombolytics, endovascular therapy, clipping and coiling of aneurysms, stenting of extracranial carotid arteries, and carotid endarterectomies. ACSMM’s status as a CSC gives them a competitive edge in the healthcare marketplace, and provides an additional CSC to the greater Milwaukee area. Having an additional CSC in the Milwaukee area lessens the burden on other similar facilities. It is ACSMM’s duty to the community to provide this level of stroke care.

Implementation of CSC measures at ACSMM was a three-year, multifaceted journey requiring many meetings and extensive planning. Executive sponsors were identified as Vice President of Medical Affairs Richard Shimp, MD (emergency department provider), Nurse Executive Heidi Ziemendorf, and Vice President of Nursing Sharon Baughman. Key stakeholders gathered financial support to attain the needed personnel and equipment. Susan Godersky, DNP, RN, SCRN, the stroke coordinator and project lead at ACSMM, ensured that protocols were developed and implemented to meet the CSC standards through best practice and evidence-based care.

Education was critical to this process. Staff at all levels had to be trained and taught new protocols. Ensuring staff knew the “why” for implementation of new policies or protocols was key to the success of the education provided. Dan Gibson, MD was instrumental in attaining artificial intelligence technologies and getting the most up-to-date equipment to diagnose stroke. Staff were trained in the new protocols by neurosurgeons, nursing informatics professionals, and nurse practitioners. Furthermore, the quality team had to learn new comprehensive stroke measures, how to abstract the measures, and how to make dashboards utilizing the data entered into the stroke registry.

CSC certification at ACSMM is sustained through continual review of changing standards and best practices. ACSMM staff are required to attend conferences and participate in Hemispheres® Stroke Competency Series to ensure they are educated in the most current practices. Additionally, ACSMM promotes stroke certification for nurses. Continued success as a CSC requires two hours of stroke education annually for nurses and other emergency department staff, and eight hours annually for stroke nurses and the core team. Susan Godersky, DNP, RN, SCRN commented that, “Advanced certification is a long-term commitment for staff and resources at ACSMM.”

ACSMM has seen much improvement since CSC certification. ACSMM’s thrombolysis in cerebral infarction (TICI) reperfusion score, a score that measures the flow of blood through the affected artery, has outperformed other CSC’s nationwide, month to month. This validates that ACSMM is performing mechanical thrombolysis on the appropriate patients, striving for the best possible outcomes, and decreasing disability after stroke. Notably, over 50% of ACSMM stroke patients are discharged to home after a stroke. Furthermore, within the first year of CSC certification, ACSMM’s Intervention Radiology Team went from performing six thrombectomies a year to over 100 a year. Compliance with TJC stroke and comprehensive stroke measures, along with selecting eligible patients helps to ensure the best stroke outcomes.

Lessons Learned

**Identify the certification that fits the hospital best.** It is important to review the standards and your hospital’s performance to find the level of certification that is right for your facility.

**Prepare and document measures.** This ensures that your hospital meets the standards to apply for CSC through TJC. This documentation also helps when being reviewed by TJC.

**Maintain relationships with TJC account executives.** This support is crucial because ACSMM’s representative from TJC verified they had met CSC standards and were ready for official review.

Success Factors

**Ascension National Stroke Systems of Care** enabled nationwide collaboration and helped validate that ACSMM was ready for the two-day CSC review process.

**Coverdell pilot programs and post-discharge projects** are instrumental. “Coverdell allows for people to remove their titles and organizational names; we are all stroke champions. It is all about improving stroke systems of care.” —Susan Godersky, DNP, RN, SCRN

**Engagement from bedside staff** is crucial to successful implementation of CSC-aligned protocols. Continued buy-in from bedside staff relies on keeping end users up to date and letting them know why changes are taking place.

**Stroke Coordinators of Wisconsin (SCOW)** responded to ACSMM’s stroke query, which assisted in decisions made for ACSMM’s stroke program. SCOW is a venue for ACSMM to be able to connect with and learn from others in the areas of data collection, quality improvement initiatives, and stroke systems of care.

Barriers and Challenges

**Becoming a CSC requires a lot of time and resources.** People and institutions have multiple priorities and commitments making it important to get buy-in from all levels in the stroke care continuum.

**Stroke Volume Requirements** is one of the most challenging aspects of CSC certification because you cannot control what patients come in the door.

**Adjust to the stroke registry’s additional comprehensive data metrics.** TJC requires four months of data entry of these additional metrics before CSC certification can be attained.

Maintaining Success

**Advocate for more resources.** This is done through collaboration across internal and external facilities for more staff and patient education.

**Review of changing standards and best practices** through continued education and attending local, regional, national, and international conferences allows ACSMM to successfully engage as a CSC.

Wisconsin Coverdell Stroke Program

The Wisconsin Coverdell Stroke Program works with hospitals, emergency medical services, and professional organizations across the state to support a healthier Wisconsin by improving community awareness and the quality of stroke care. Wisconsin EMS agencies and hospitals of all types and sizes are invited to be part of the Wisconsin Coverdell Stroke Program. For more information, please visit the Wisconsin Coverdell Stroke Program’s website.

"Everybody plays a role in stroke care at a Comprehensive Stroke Center."

-Susan Godersky, DPN, BSN, SCRN