

Journey to Comprehensive: Developing a Stroke Center of Excellence

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Disclosure

- none

Objectives

- Discuss the goals for the development of comprehensive stroke centers
- Discuss steps to developing a stroke center of excellence
- Discuss common challenges of stroke centers in pursuit of CSC certification
- Provide effective solutions for meeting CSC standards

A Tale of Two Stroke Centers



What Does it Mean to be a Comprehensive Center of Excellence?



com·pre·hen·sive

/ˌkæmprəˈhensiv/

adjective

1. complete; including all or nearly all elements or aspects of something.
"a comprehensive list of sources"

ex·cel·lence

/ˈeks(ə)ləns/

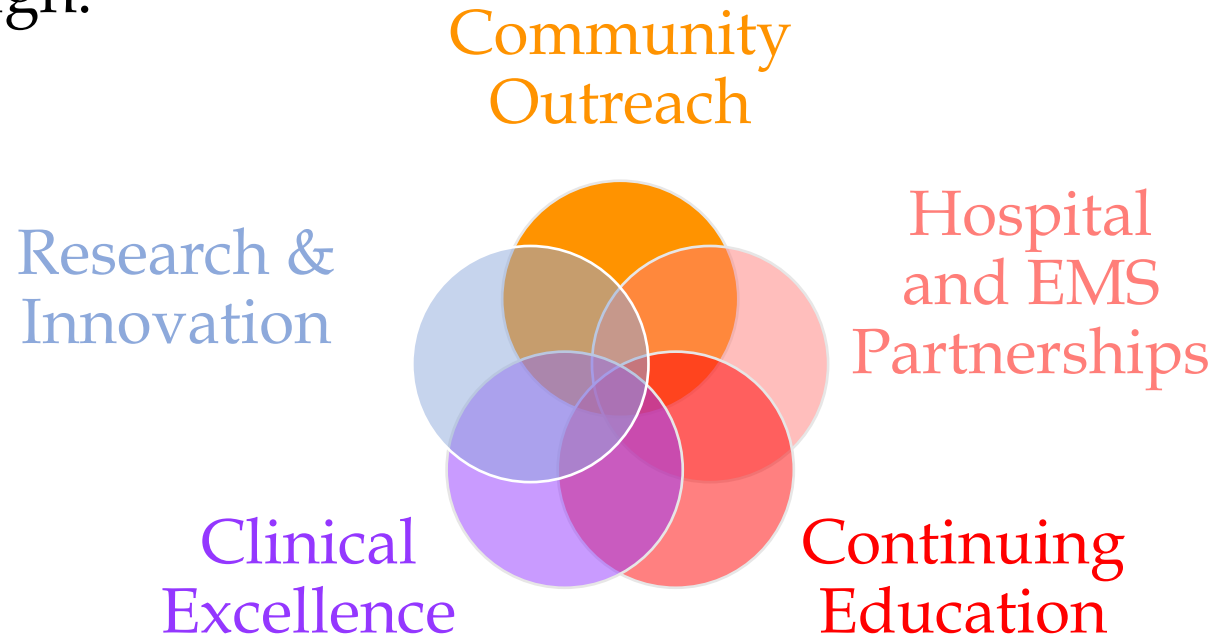
quality of being outstanding or extremely good.
enter of academic excellence"



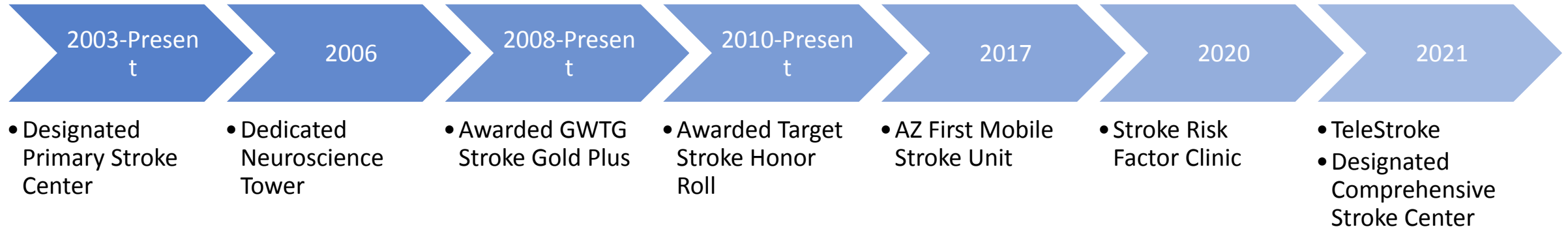
Stroke Program Mission

Lead in the provision of high-quality,
comprehensive, state-of-the-art stroke care

Dedicated to reducing the burden of cerebrovascular disease in our
community through:

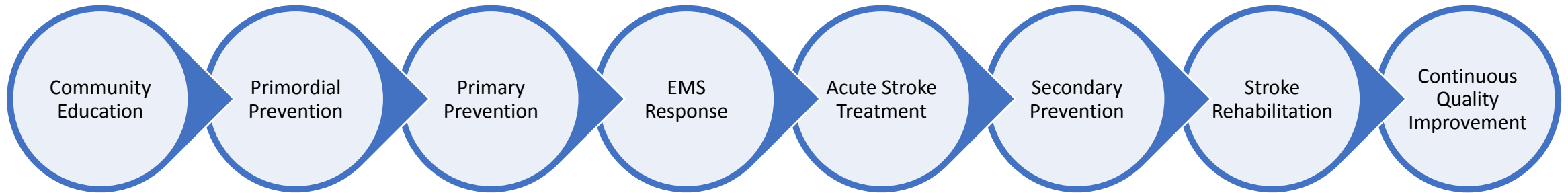


BNI-SJHMC Stroke Center Journey



Stroke Systems of Care: 8 Domains

“Organized, coordinated effort in a defined geographic area that delivers the full range of care to all patients”



(Alberts et al., 2005)

Stroke Systems of Care and Certification

Special Report

Revised and Updated Recommendations for Establishment of Primary Stroke Centers

A Summary Statement From the Brain Attack Coalition

Recommendations for Comprehensive Stroke Centers

A Consensus Statement From the Brain Attack Coalition

[See Editorial Comment, pg 1616](#)

Mark J. Alberts, MD; Richard E. Latchaw, MD; Andy Jagoda, MD; Lawrence R. W. Todd Crocco, MD; Mary G. George, MD; E.S. Connolly, MD; Barbara Mancini, MD; Stephen Prudhomme, MSc; Daryl Gress, MD; Mary E. Jensen, MD; Robert B. Robert Ruff, MD; Kathy Foell, MS; Rocco A. Armonda, MD; Marian Emr, BS; Margo Jim Baranski, BS; Michael D. Walker, MD; for the Brain Attack Coalition

Mark J. Alberts, MD, Richard E. Latchaw, MD, Warren R. Selman, MD, Timothy Shephard, RN, Mark N. Hadley, MD, Lawrence M. Brass, MD, Walter Koroshetz, MD, John R. Marler, MD, John Booss, MD, Richard D. Zorowitz, MD, Janet B. Croft, PhD, Ellen Magnis, MBA, Diane Mulligan, Andrew Jagoda, MD, Robert O'Connor, MD, C. Michael Cawley, MD, J.J. Marian Emr, Margo Warren, Michael D.

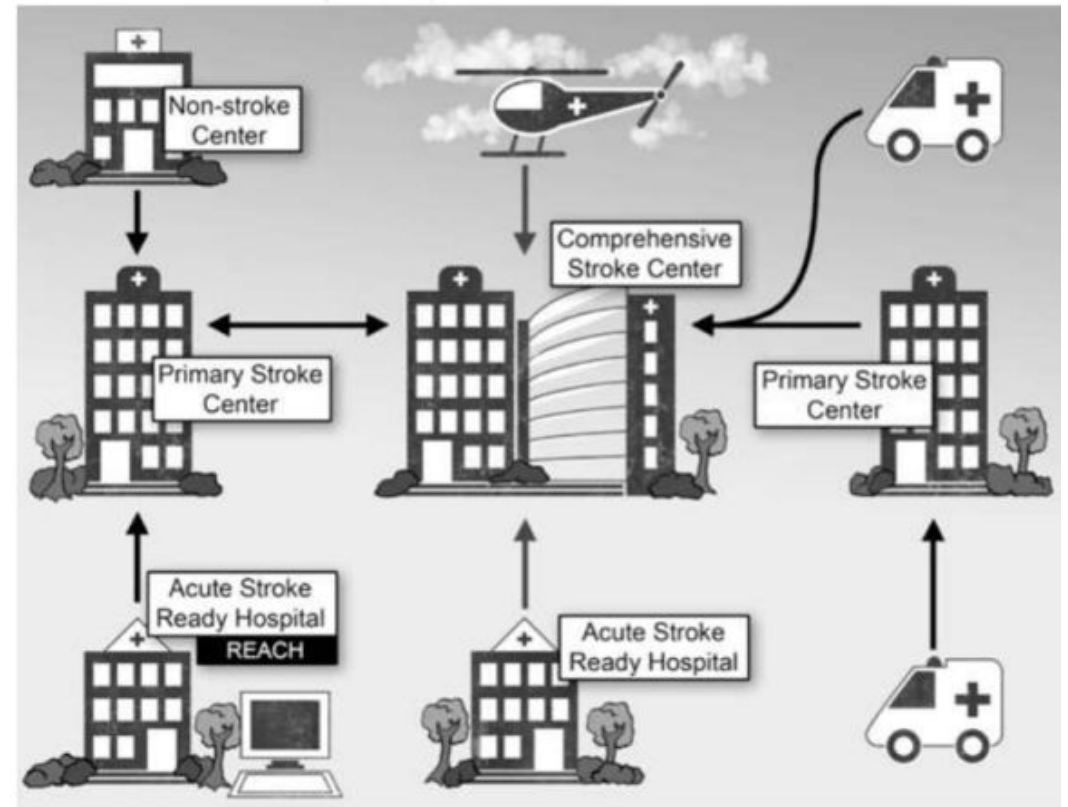
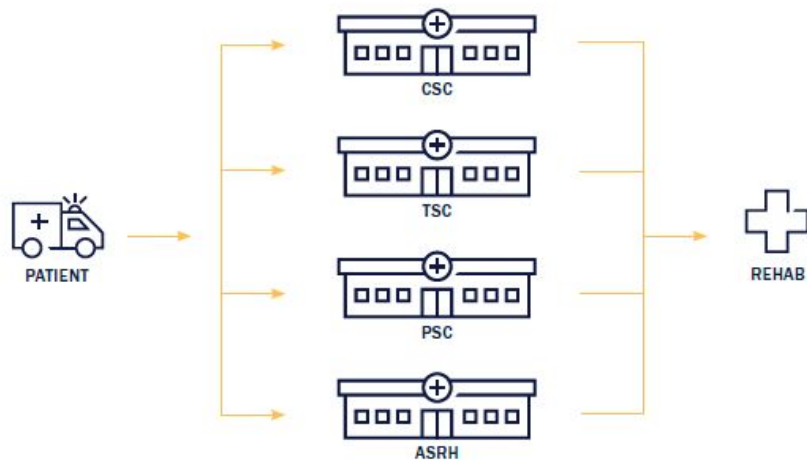
ASA POLICY STATEMENT

Recommendations for the Establishment of Stroke Systems of Care: A 2019 Update

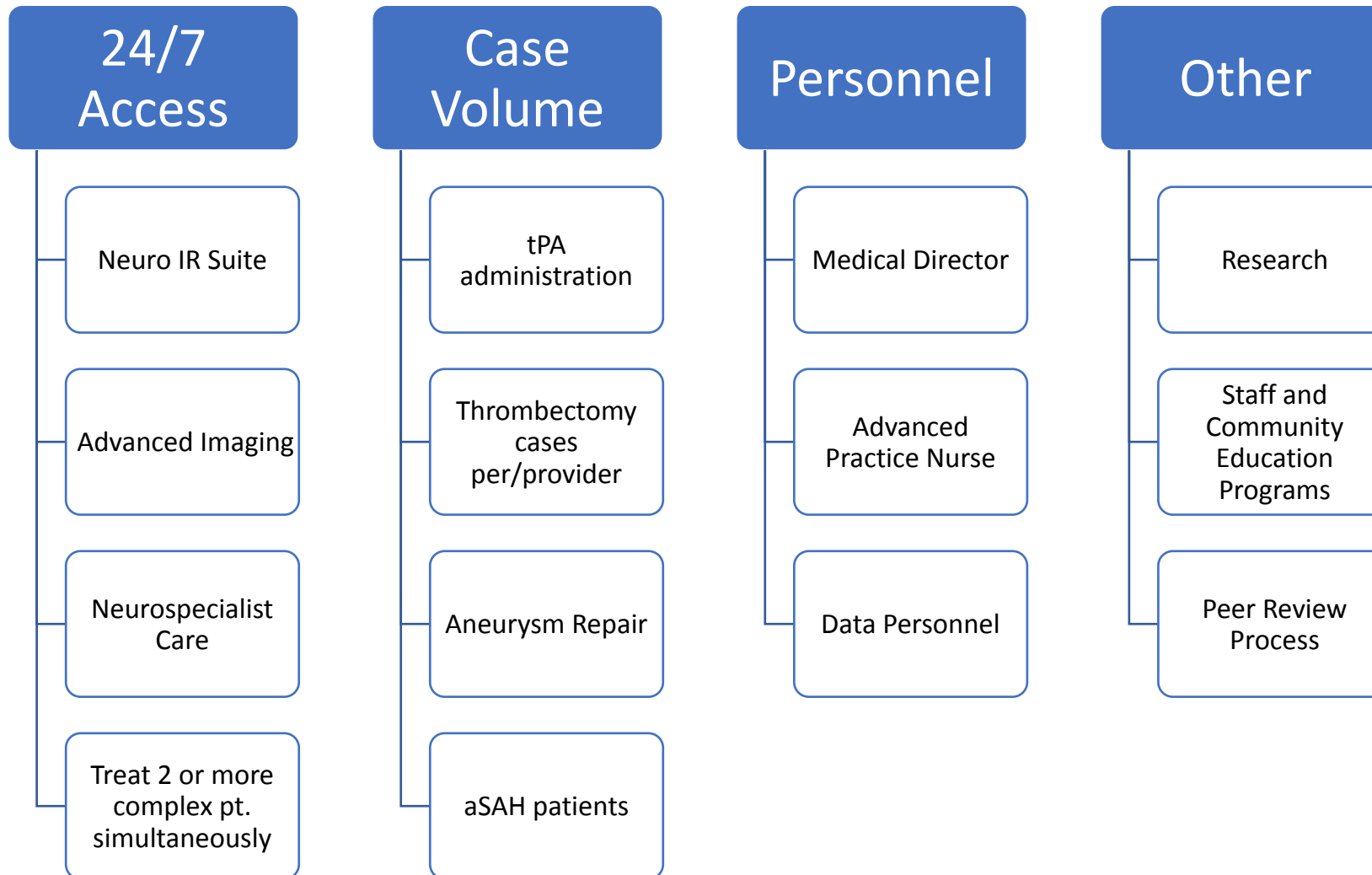
A Policy Statement From the American Stroke Association

Opeolu Adeoye, MD, MS, FAHA, Chair, Karin V. Nyström, RN, MSN, FAHA, Dileep R. Yavagal, MD, Jean Luciano, CRNP, Raul G. Nogueira, MD, Richard D. Zorowitz, MD, Alexander A. Khalessi, MD, MS, FAHA, Cheryl Bushnell, MD, MHS, FAHA, William G. Barsan, MD, Peter Panagos, MD, Mark J. Alberts, MD, FAHA, A. Colby Tiner, MA, Lee H. Schwamm, MD, FAHA, and Edward C. Jauch, MD, MS, FAHA

Stroke Center Characteristics



Comprehensive Resources Requirements



An iceberg floating in the ocean. The tip of the iceberg, which is visible above the water, is labeled 'Resource Requirements'. The much larger part of the iceberg, which is submerged below the water, represents the various clinical and operational requirements for complex stroke care. The background shows a blue sky with light clouds and a calm sea.

Resource Requirements

- Expanded Disease Population Focus
 - Endovascular therapy
 - Carotid Stenosis Management
 - Hemorrhagic Stroke
 - Aneurysm Repair
- Transitions of care
 - onset to return to home
- Clinical practice guidelines related to complex stroke care
- Primary (8) and Comprehensive (16) standardized quality metrics

Journey to Excellence

1. Identify the Core Team
2. Define the Scope of the Program
3. Identify Clinical Practice Guidelines
4. Complete a Gap Analysis
5. Develop a Data Management Plan
6. Identify multidisciplinary stakeholders
7. Develop a Meeting Structure
8. Quality Improvement



Step 1: Identify The Core Team

- Physician Leadership

- Vascular Neurology, Neurosurgery, Neuroradiology, Neurocritical Care, and Emergency Medicine, Rehab, Vascular Surgery, Outpatient clinic

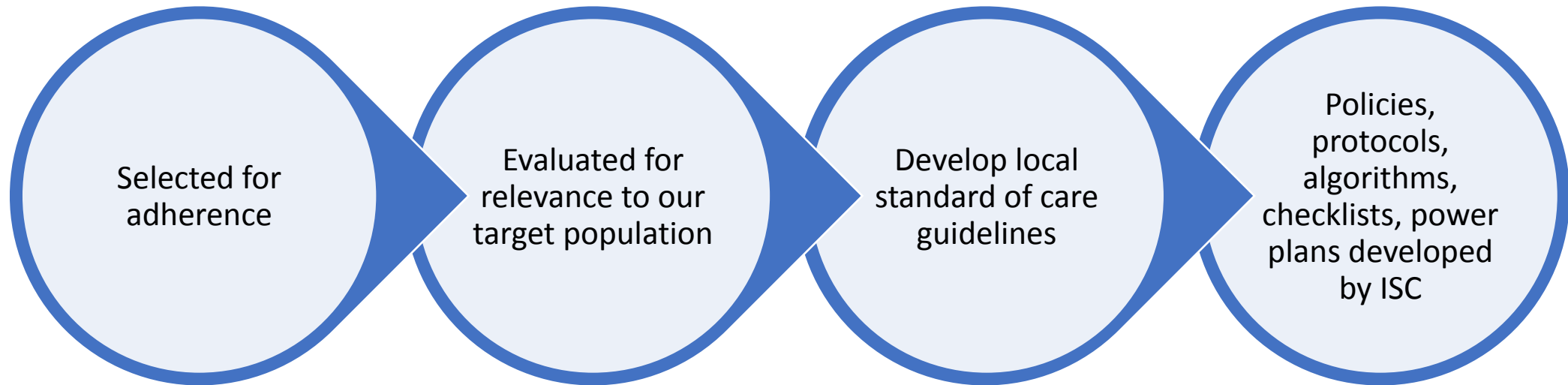
- Additional Leaders

- Director of Nursing, Advanced practice providers, Educators, Unit Managers and Supervisors, and Pharmacists

Step 2: Scope of the Program



Step 3: Clinical Practice Guidelines



Barrow
Neurological Institute



Dignity Health
St. Joseph's Hospital and
Medical Center

Step 4: Gap Analysis

- Evaluate current state
 - Selected CPGs
 - Certification Standards
- Protocols and Policy
- Evaluate the electronic medical record for clinical documentation gaps
- Develop an annual performance improvement plan
 - Detail Service line initiatives (e.g. telemedicine)
 - Define what resources are needed
 - Identify measurable quality improvements

Step 5: Identify Multidisciplinary Stakeholders



Step 6: Data Management Plan

- DSPM.3 The program collects measurement data to evaluate process and outcomes
 - Trended over time and compared to an external data source
- DSPM.5 The program collects data related to its target population to identify opportunities for performance improvement.
- DSPM.2 Data is collected in a timely, accurate, complete, and relevant to the program

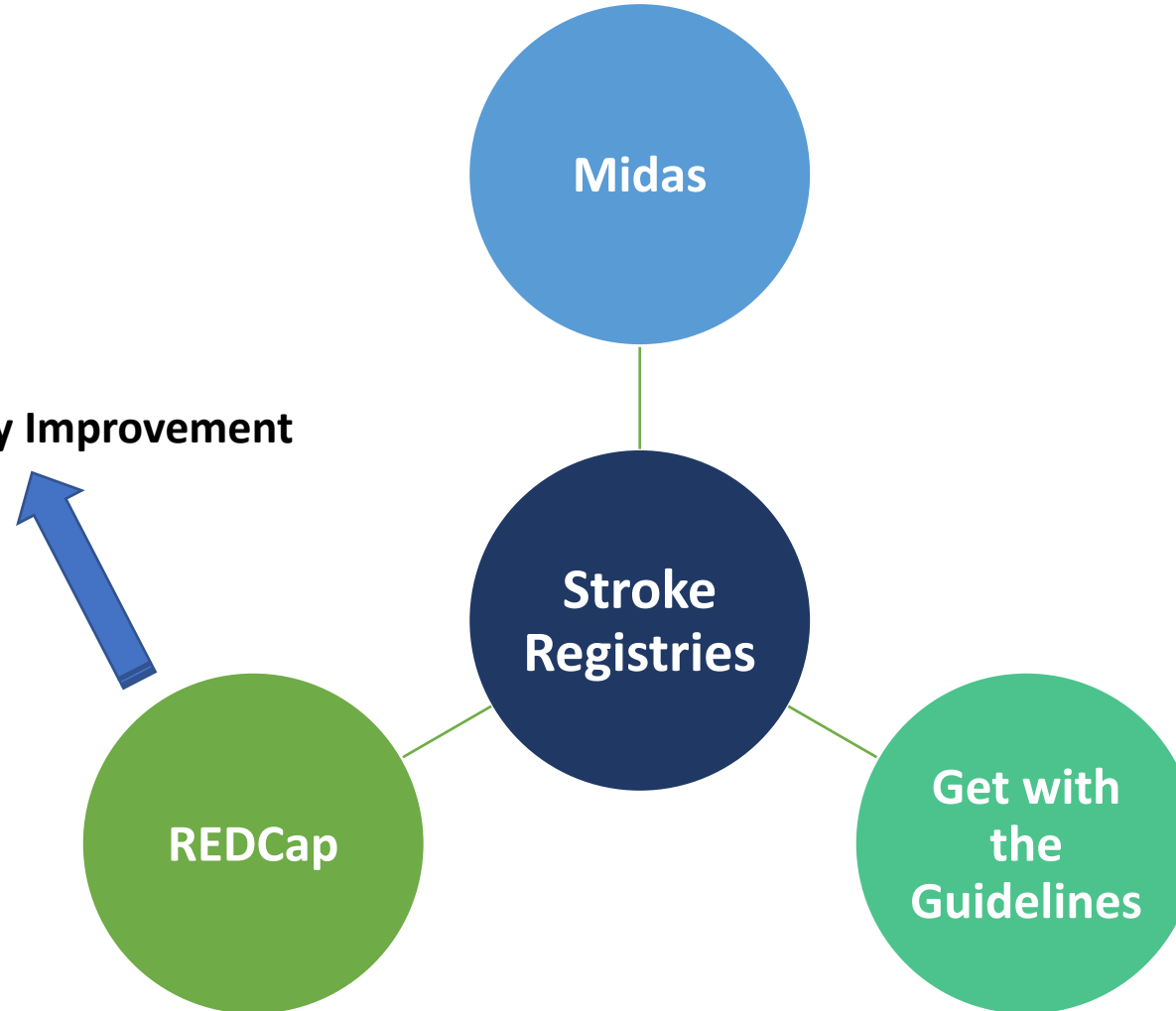
Step 6: National Stroke Quality Initiatives

- Get With The Guidelines
- American Heart and Stroke Association: Target Stroke Initiatives
 - Reduce time to treatment with IVtPA and or Thrombectomy



Step 6: Data Collection

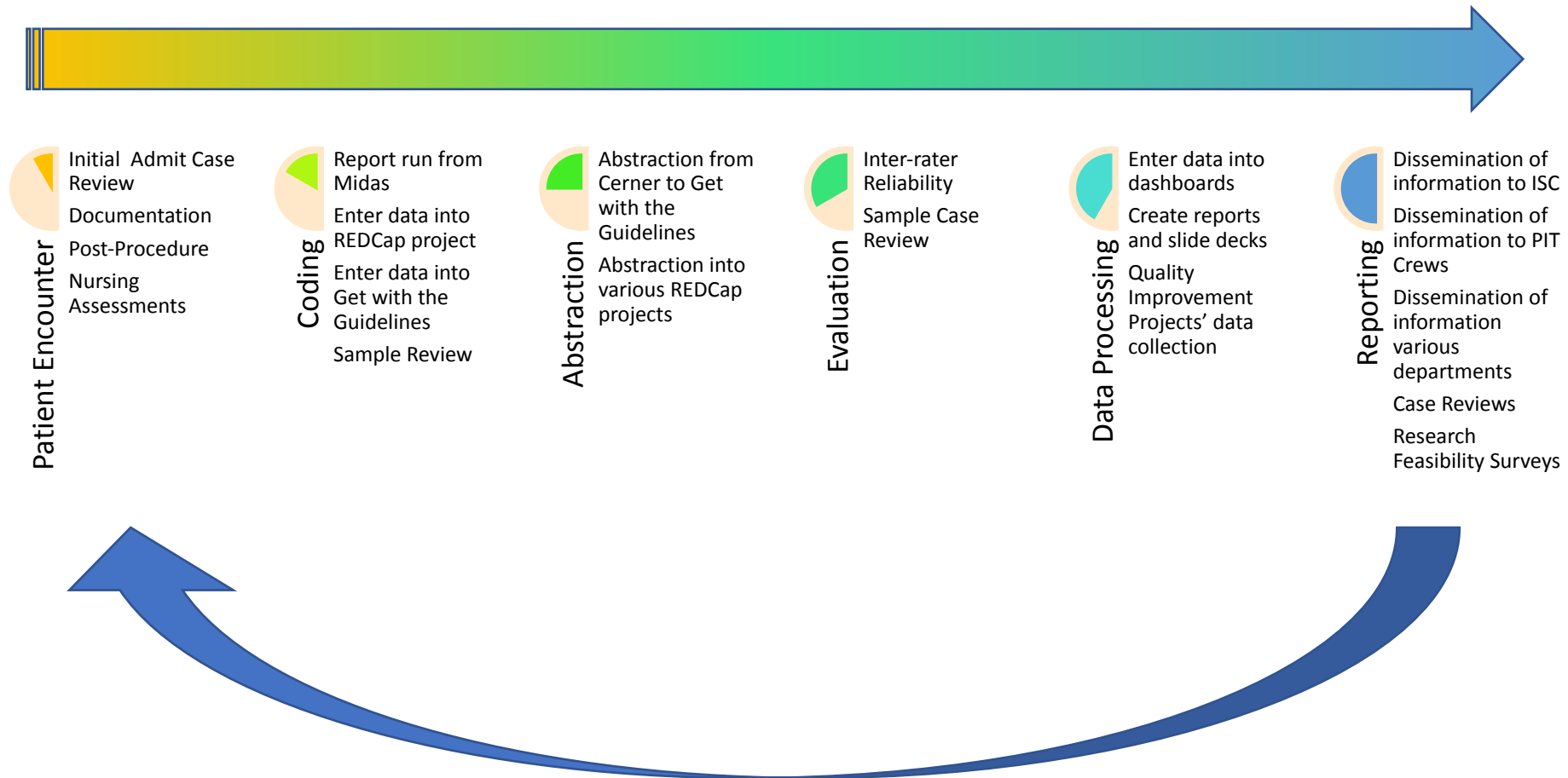
- **Process and Quality Improvement**
- **Outcomes**



Step 6: Outcomes

- Trend before and post program implementation:
 - mortality
 - length of stay
 - readmission rates
 - Peri-procedure complication rates
 - Discharge disposition
 - Functional Outcomes (e.g., Modified Rankin Scale)

Step 6: Data Management Cycle

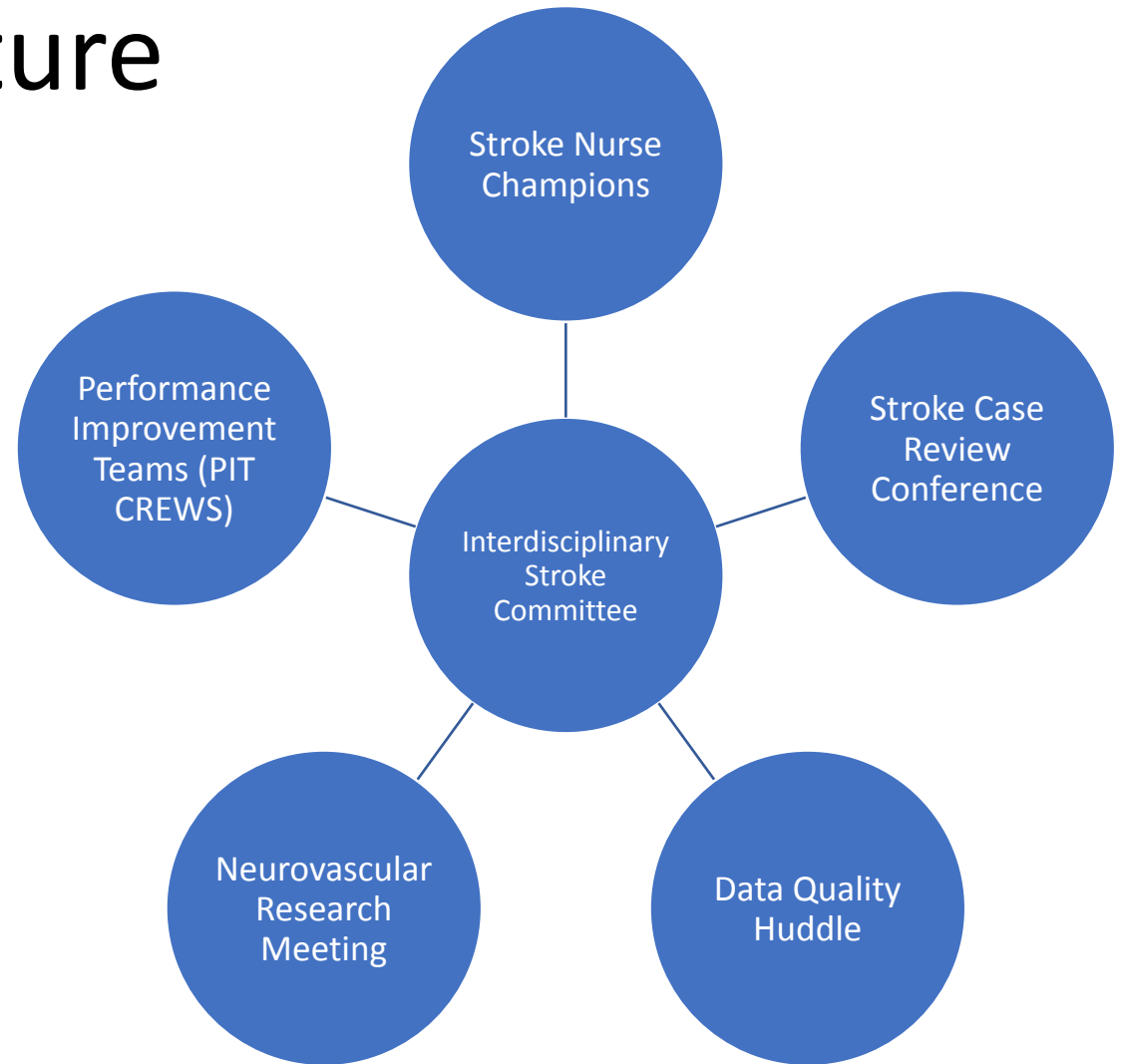


Step 7: Meeting Structure

- DSPM.1: The program leader(s) involves the interdisciplinary team and other practitioners across disciplines and/or settings in performance improvement planning and activities.
- DSPM.2a: Evidence of specific stroke performance measurement and review by the stroke team and through the hospital-wide performance improvement process exists.

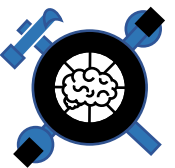
Step 7: Meeting Structure

- Goal(s)
 - Ensure program leader(s) participate in designing, implementing, and evaluating care, treatment, and services
 - Support system wide communication and collaboration of stroke initiatives and quality



Step 8: Performance Improvement Teams

- Multidisciplinary group of frontline personnel associated with a defined process
- Missions and goals are created, progress is assessed by defined metrics
 - What are we trying to accomplish?
 - How will we know that a change is an improvement?
 - What change can we make that will result in an improvement?
- Results are reported back to the interdisciplinary stroke committee

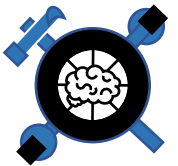
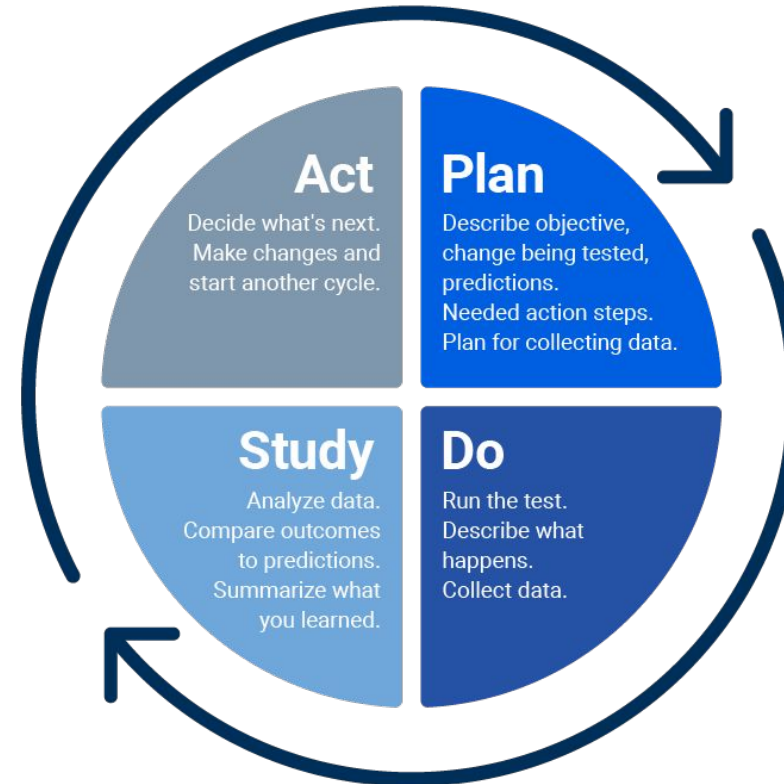


Step 8: Quality Improvement Methodology

SBAR

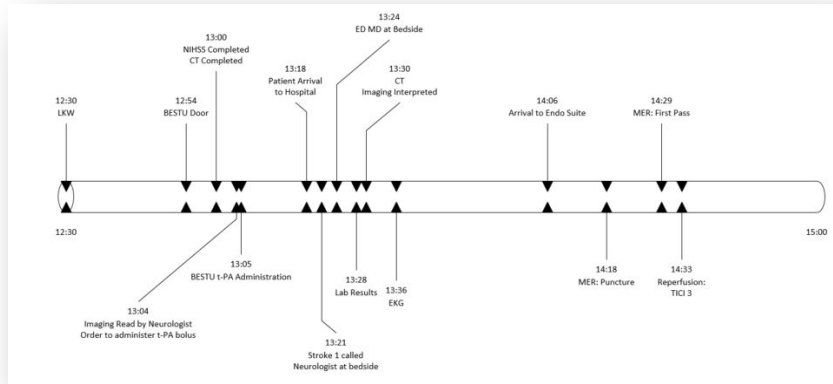


Iterative Project Process (PDSA)

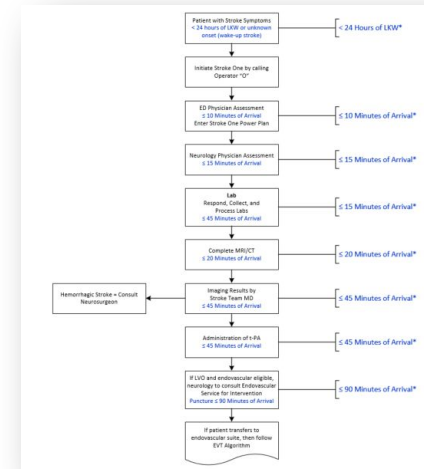


Step 8: Use of Effective Tools

Timelines and Case Reviews



Algorithms



REDCap Surveys

SharePoint® Site

Is a stroke-focused SharePoint site of interest to you?

* must provide value

☐ Yes
☐ No
☐ Maybe

☐ Evidence-Based Practices
☐ Joint Commission Preparation
☐ Protocols and Processes
☐ Standards, and Metrics
☐ Upcoming Stroke Education, Conferences, and Modules
☐ Tip sheets
☐ Research Protocols
☐ Communication about the Stroke Program
☐ Case Review
☐ Live Zoom Session Sign-up
☐ Other topic

What topics of interest would you like to see in the SharePoint? (Please select at least one)

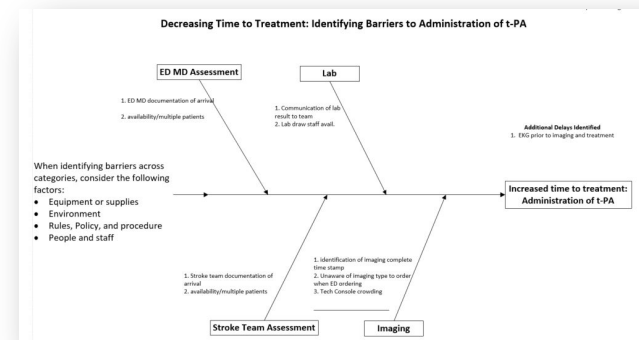
Other topic idea

What other comments or feedback would you like to share about a stroke-focused SharePoint?

Would you like to contribute or volunteer to help with the SharePoint site?

☐ Yes
☐ No

Activities and Analyses



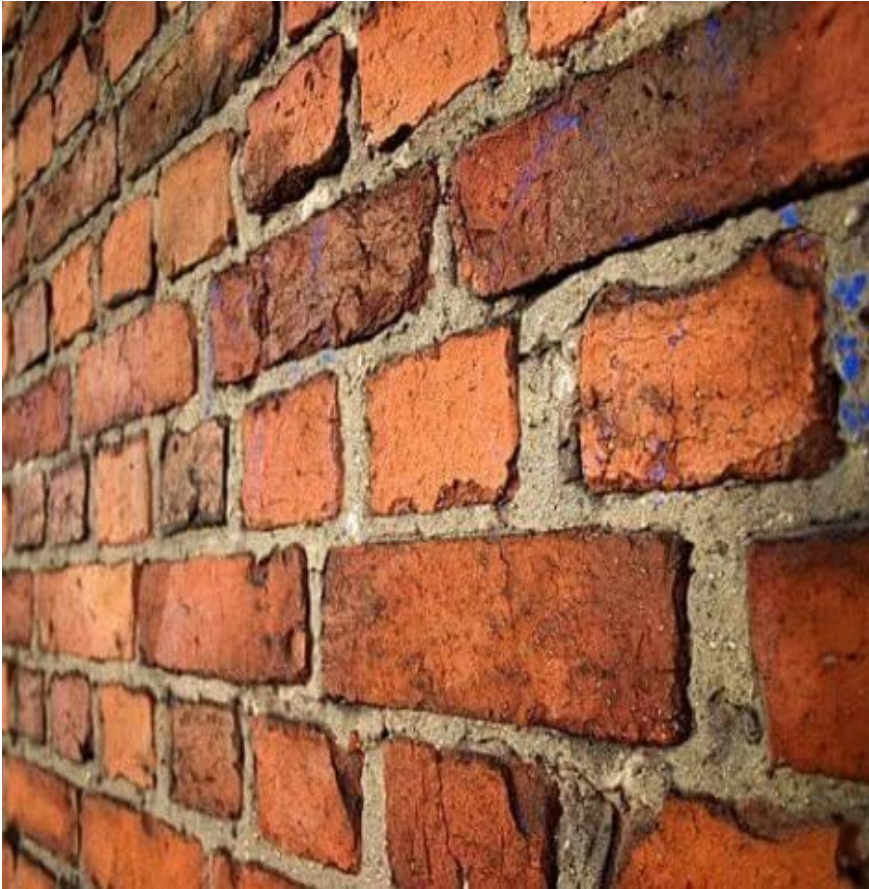
Common Challenges

- Staffing and resource to support program management
- Data Management to support expanding clinical practice guidelines and quality improvement (QI) focus
- Evolution of infrastructure to support communication and quality improvement across the continuum

CSC Staffing and Resource

- Brain Attack Coalition (2005)
 - Physician staff: center director, neurologist and neurosurgeons, surgeons performing CEA/CAS, neuroradiology, trained in rehabilitation
 - ED staff, radiology techs, nursing staff trained in the care of stroke patients, case managers and social workers

Program Management



- Vigilant of clinical practice guidelines and current practice
- Team builder
- Master Communicator/negotiator
- Multi-lingual in regulatory language, certification speak
- Database management
- Data analysis terminology
- Quality Improvement methodology
- Expertise in use of PPT, Visio, excel, Statistical Software

Program Management

- Stroke Program Coordinator/Managers(s)
- Coordinate efforts across the continuum
 - Data collection, performance Improvement teams, manage program outcomes
- Develop reports and charts to support overarching goals, core measures, and performance improvement
- Facilitate the dissemination of ongoing program initiatives and progress



Coming together
is a **beginning**
keeping together
is **progress**
working together
is **success.**

H E N R Y F O R D

www.quoteslyfe.com

Thank you!

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