



# Speakers



**Therese Poland, RN, BSN, MSN** Therese (Tess) Poland is the Quality and Certification Specialist at the Healthcare Facilities Accreditation Program. In this role, she facilitates the development of certification activities related to disease / condition management services, including the development of standards and review processes. Tess has 20 years of nursing, management and consulting experience in the healthcare industry. She most recently worked at Ramsay Health Care in Sydney Australia as a Quality and Risk Manager and Project Manager for the clinical set-up of new hospitals. Tess earned her Master's degree in Nursing at the University of Western Sydney and a Bachelor's degree in Nursing from Avondale College, Sydney Australia.



**Susan Lautner, RN, BSN, MSHL, CPHQ,**

Susan Lautner is the Quality and Patient Safety Specialist at the Healthcare Facilities Accreditation Program in Chicago. In this role, she facilitates the development of certification activities related to patient safety and performance measures, including the development of standards and review processes. Susan has 25 years of nursing, management and consulting experience in the health care industry. She previously has served as Director of Quality and Risk Management at Hills and Dales General Hospital and Marlette Medical Center in Michigan. Susan is a certified professional in healthcare quality. She earned her master's degree in Science Health Law from Nova Southeastern University, in Florida and her bachelor's degree in Nursing from Saginaw Valley State University, in Michigan.



**Jeanne M. Robinson, MSN, APRN, A-CNS, CNRN, BSN, RN**

Jeanne is the Stroke Advanced Practice Nurse at Kettering Medical Center in Dayton, Ohio where she is a member of, and coordinates the Stroke Response and Neurology Teams. Recently she directed her team in the initiative to earn the distinction of Comprehensive Stroke Center Certification. For the past 12 years she was the Stroke Program Coordinator and led Kettering and Sycamore Medical Centers to achieve multiple Primary Stroke Center certifications and awards. Jeanne has 27 years of Neuroscience Nursing experience with an extensive background in Neuro-Critical Care, Clinical Neurology, and has served as a consultant and speaker for advisory boards in Epilepsy and Multiple Sclerosis, in addition to research. She earned her Master's of Science degree in Nursing from Wright State University and bachelor's degree in Nursing from Capital University. She is certified as an Adult Clinical Nurse Specialist and Neuroscience RN. Her interests and expertise include stroke, seizure disorders, neuro-degenerative diseases and headaches.

# Overview



- Stroke System & Advantages
- Stroke Ready Center
- Primary Stroke Center
- Comprehensive Stroke Center
- Clinical Data
- Collaboration

# Stroke System of Care



“Stroke systems of care provide a comprehensive, diverse, longitudinal system that addresses all aspects of stroke care in an organized and coordinated manner. Characteristics of different stroke centers include, Acute Stroke Ready Hospitals, Primary Stroke Centers and Comprehensive Stroke Centers.”

*AHA/ASA Focus on: Stroke Systems of Care*

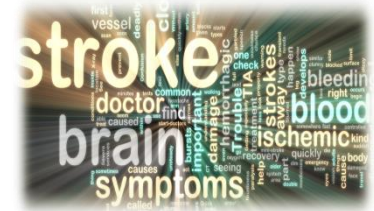


# Webinar Outcomes

Following this webinar, clinicians will be able to:

- Identify the difference between three levels of stroke care
- Recognize which level your organization fits into
- Connect with neighboring organizations to elevate stroke care region-wide

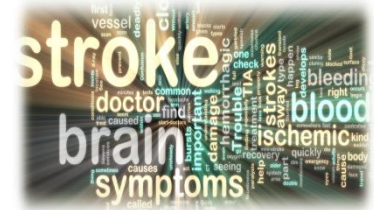
# Advantages of Care Levels



- Levels of stroke care help to organize hospital delivery structures through objective assessment, thus improving quality of care, identified quality (evidence based) outcomes and reducing clinical risk
- Knowing which level of care your organization meets and working safely towards recognized standards, can facilitate a culture and a drive towards excellence. This provides staff with an opportunity to build skills, and providing the organization with recognition for achievement



# Advantages of Care Levels



- Building partnerships with other organizations elevates stroke care
- This ensures that all patients have timely access to the right level of care at the right time
- Disability outcomes are minimized and optimal recovery is more attainable





# Stroke Ready Centers



# Stroke Ready Centers



- Stroke Ready also known as Emergent Stroke Centers, provide timely access to stroke care but may not be able to meet all the criteria specified in Primary and Comprehensive levels
- However, SRC serves as a notice to the community emergency medical service that the hospital is prepared to meet the initial needs of stroke patients
- Examples include rural hospitals, basic care, use of telemedicine... 'drip and ship'

# Features of SRC's



- Provides community recognition and information about stroke to small urban /suburban /rural areas
- Provides access to stroke care for patients who do not have access to larger hospitals
- Working agreements with Primary /Comprehensive Stroke Centers to facilitate ease of transition of a higher level of care
- Working and transfer agreements with EMS to provide immediate care at a close proximity
- Administrative support and clinical leadership!

# Clinical Elements of SRC's



- Collect and submit Stroke data to monitor outcomes of clinical care
- Stroke protocols for management of stroke patients
- An ED Physician may be the Director of the stroke program
- Stroke code team arrival within 20 minutes
- Lab testing and diagnostic capabilities
- May provide IV thrombolytic therapy
- Telemedicine



# Primary Stroke Centers



- Primary Stroke Centers have the capacity to stabilize and treat acute stroke patients
- They provide initial, acute care and administer tPA and other acute therapies safely and efficiently
- Examples include acute care hospitals, stroke units, use of tPA



# Features of PSC's



- Educates the community on stroke
- Working agreements with Stroke Ready and Comprehensive Stroke Centers
- Working and transfer agreements with EMS
- Provides stroke education to staff and EMS
- Stroke data and performance improvement on at least 2 benchmarks each year
- Administrative support and clinical leadership!





# Comprehensive Stroke Centers



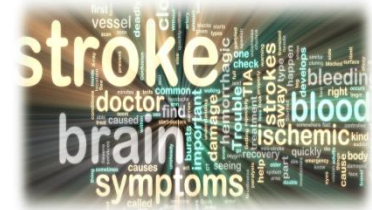
- Comprehensive Stroke Centers provide care for complex stroke patients
- Their infrastructure includes advanced treatments, necessary staffing and trained specialists in key areas, such as neurology, neurosurgery and neuroradiology
- Examples include academic medical centers and tertiary care hospitals

# Features of CSC's



- All the components of PSC, plus:
- Working agreements with Stroke Ready and Primary Stroke Centers
- Advanced interventional capabilities
- Comprehensive rehabilitation assessments and care
- Discharge follow-up protocols
- Has a continuous research plan and participates in patient oriented research activities

# Clinical Elements of CSC's



- All the components of PSC, plus:
- Program Director is specialty qualified
- Lab testing and Advanced imaging capabilities: CTA, DSA, MRA/MRI & TCD available 24/7
- Must provide IV thrombolytic therapy
- Neurology, neurosurgical, neuroradiology, endovascular experts, neurointensivist available 24/7
- OR available & ready to operate within 2hrs 24/7
- Must have dedicated ICU beds and a stroke unit with specialty trained staff
- Must have rehabilitation staff e.g. speech therapist, occupational therapist and Physical therapist









# Data Collection - CMS



Thrombolytic Therapy 0-3 hr

Antithrombotic Therapy By End of Hospital Day 2

Discharged on Antithrombotic Therapy

Anticoagulation Therapy for Atrial Fibrillation/Flutter

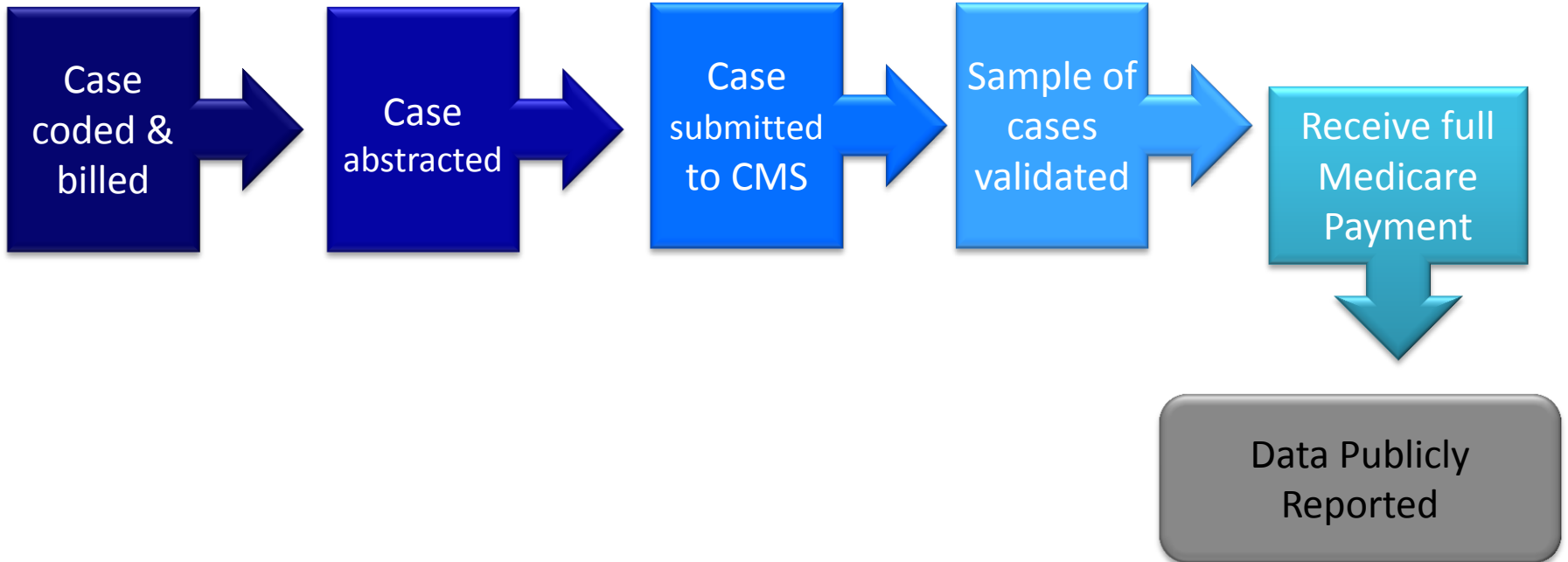
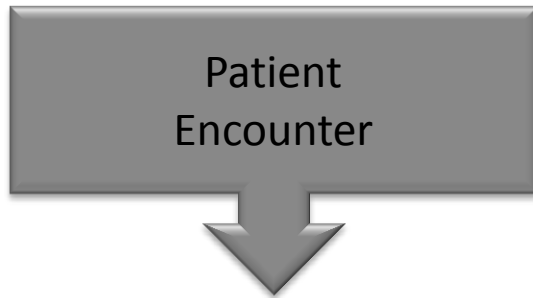
Venous Thromboembolism (VTE) Prophylaxis

Discharged on Statin Medication

Stroke Education

Assessed for Rehabilitation

# Validating Accuracy



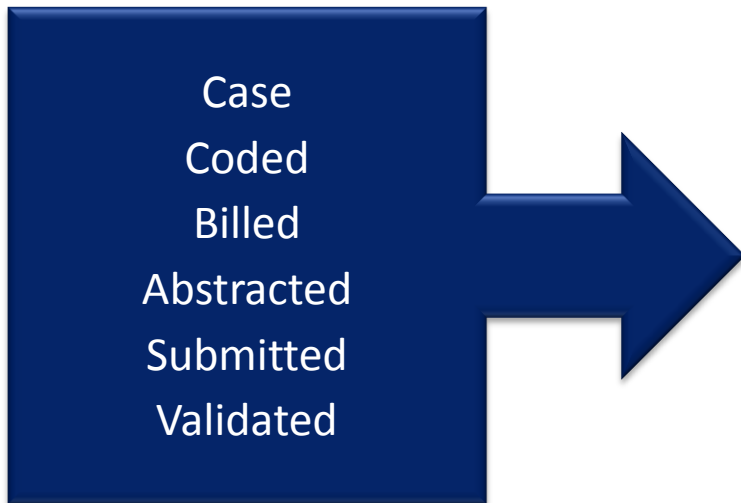
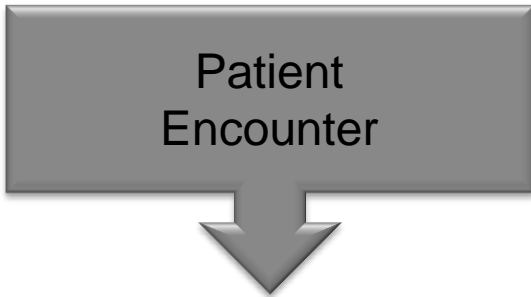
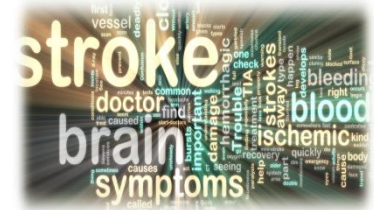
# Direction Forward



- In the future, it is possible that the Value-Based Purchasing Program will penalize hospitals for not meeting performance standards for certain IQR measures.
- This means that hospitals should start now to work towards improving outcomes in the measurable areas.



# Value Based Purchasing





# Bringing it all Together



“Effective stroke care requires coordination of the activities and resources of a broad range of individuals, facilities, and organizations...to ensure that the appropriate patients are receiving care from the appropriate providers in the appropriate amount of time.”

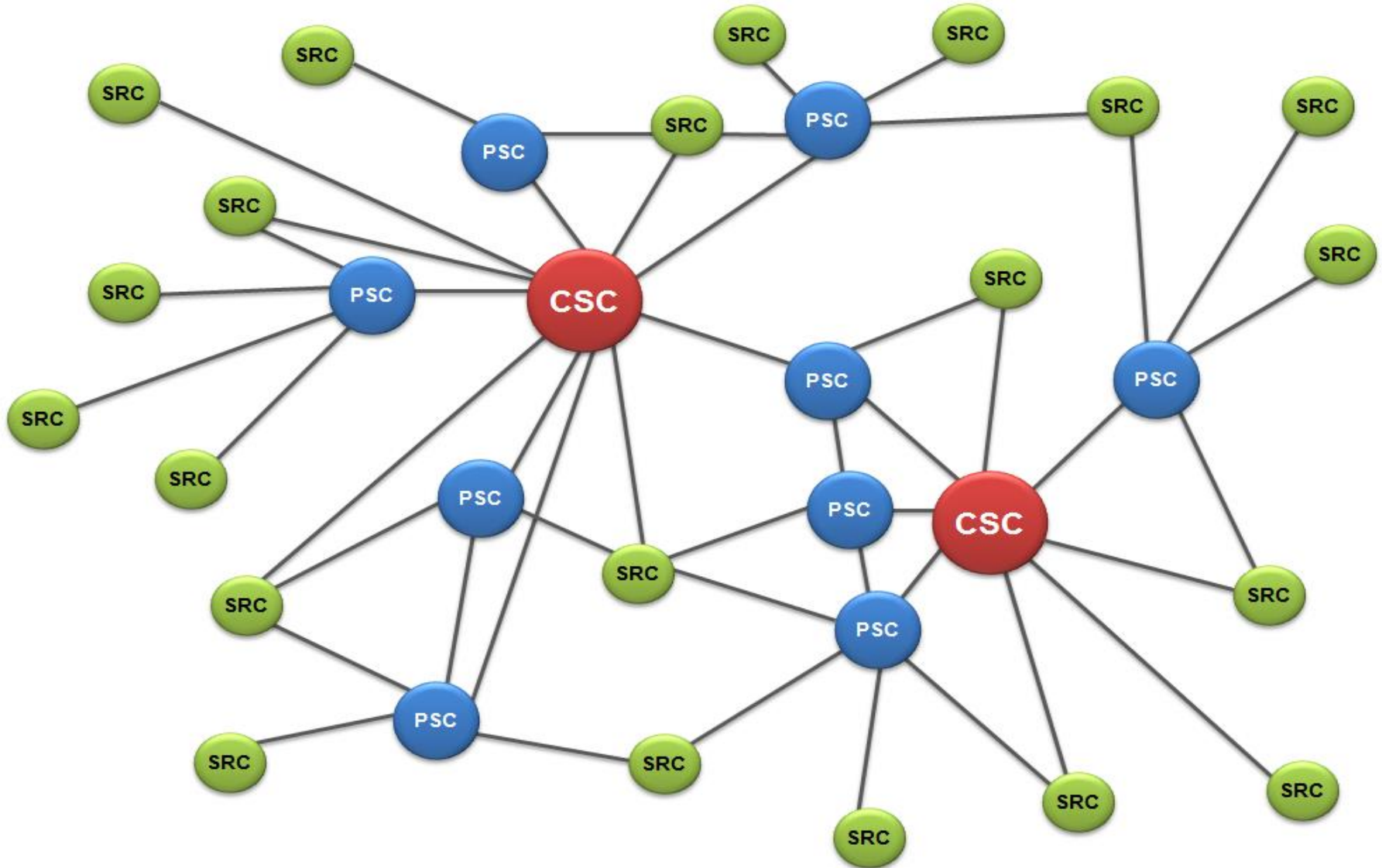
*Schwamm, L.H., Pancioli, A., Acker III, J.E., Goldstein, L.B., Zorowitz, R., Shephard, T., Moyer, P., Gorman, M., Johnston, S., Duncan, P., Gorelick, P., Frank, J., Stranne, S., Smith, R., Federspiel, W., Horton, K., Magnis, E., Adams, R. (2005). Recommendations for the Establishment of Stroke System of Care – Recommendations From the American Stroke Association’s Task Force on the Development of Stroke Systems. Stroke. 1 – 14.*

# Knowing your Neighbor



- Perform a search on the hospitals (small and large) in your area
- Identify what level of stroke care they provide through their emergency department
- Go beyond metropolitan hospitals and consider what access neighboring rural hospitals have – extend partnership
- Partnership can overcome treatment inequities in remote regions and ensure the best possible care is disseminated throughout regions
- Telemedicine plays an integral role in regional stroke care networks

# Hub and Spoke Model











# References

- Alberts, M.J & Baranski, J. (2007) *Building the case for a primary stroke center: A resource guide*. Experience: New York.
- Alberts MJ, Latchaw RE, Jagoda A, Wechsler L, Crocco T, George MG, Connolly ES, Mancini B, Prudhomme S, Gress D, Jensen ME, Bass R, Ruff R, Foell K, Armonda RA, Emr M, Warren M, Baranski J, Walker MD. (2011). *Updated Recommendations for Primary Stroke Centers by the Brain Attack Coalition*. *Stroke*. 42: 2651-2665.
- Alberts, M.J., Latchaw, R.E., Selman, W.R., Shephard, T., Hadley, T.N., Brass, L.M., Koroshetz, W., Marler, J.R., Booss, J., Zorowitz, R.D., Croft, J.B., Magnis, E., Mulligan, D., Jagoda, A., O'Connor, R., Cawley, C.M., Connors, J.J, Rose-DeRenzy, J.A., Emr, M., Warren, M., & Walker, M.D. (2005). *Stroke: Recommendations for Comprehensive Stroke Centers. A Consensus Statement From the Brain Attack Coalition*. American Heart Association; American Stroke Association. 36: 1597-1616.
- Centers for Medicare & Medicaid Services. (2013). *Specifications Manual for National Hospital Inpatient Quality Measures*. Baltimore: Maryland.



# References

- Jauch, E.C., Saver, J.L., Adams, H.P., Bruno, A., Connors, J.J., Demaerschalk, B.M., Khatri, P., McMullan, P.W., Qureshi, A.I., Rosenfield, K., Scott, P.A., Summers, D.R., Wang, D.Z., Wintermark, M., & Yonas, H. (2013) Guidelines for the early management of patients with acute ischemic stroke: a guideline for healthcare professionals from the American Heart Association / American Stroke Association. The American Heart Association.
- Leifer, D., Bravata, D.M., Connors III, J.J., Hinchey, J.A., Jauch, E., Johnston, S.C., Latchaw, R., Likosky, W., Ogilvy, C., Qureshi, A.I., Summers, D., Sung, G.Y., Williams, L.S., & Zorowitz, R. (2011). *Metrics for Measuring Quality of Care in Comprehensive Stroke Centers: Detailed Follow-Up to Brain Attack Coalition Comprehensive Stroke Center Recommendations: A Statement for Healthcare Professionals from the American Heart Association/American Stroke Association*. American Heart Association/American Stroke Association: Dallas.
- Schwamm, L.H., Pancioli, A., Acker III, J.E., Goldstein, L.B., Zorowitz, R., Shephard, T., Moyer, P., Gorman, M., Johnston, S., Duncan, P., Gorelick, P., Frank, J., Stranne, S., Smith, R., Federspiel, W., Horton, K., Magnis, E., Adams, R. (2005). *Recommendations for the Establishment of Stroke System of Care – Recommendations From the American Stroke Association’s Task Force on the Development of Stroke Systems*. *Stroke*. 1 – 14.

