Stroke Centers: Creation, Criteria and Classification: Are we there yet?

Oregon Stroke Network Conference
September 9, 2011

The Joint Commission Disclaimer

These slides are current as of August 2011. The Joint Commission reserves the right to change the content of the information, as appropriate.
Objectives:

- Understand the potential impact of certified stroke centers on the standardization of care
- How to implement best practices in stroke care
Why focus on stroke?

Stroke death rates have also been declining in Oregon and nationally, although Oregon stroke death rates consistently have been higher than the national average. In 2007, more than 1,800 Oregonians died from stroke, representing 6% of all deaths in the state.

Source: “Heart Disease and Stroke in Oregon: Update – 2010,” Public Health Division, Oregon Health Authority, Office of Disease Prevention and Epidemiology (p. 4)
Are we getting better?

According to the 2011 Heart Disease and Stroke Statistics Update (1997-2007):

- Annual stroke death rate decreased 34.3%
- Actual number of stroke deaths declined 18.8%
- Stroke Center implementation may have contributed to these improvements

Source: "Stroke centers and Quality of stroke care: How are we doing? Neurology 2011; 76; 1956"

Certification requirements address three areas:

- Compliance with consensus-based national standards.
- Effective use of evidence-based clinical practice guidelines to manage and optimize care.
- An organized approach to performance measurement and improvement activities.

Source: The Joint Commission website (www.jointcommission.org)
Benefits of certification

Disease-specific care programs seek certification because it:

- Demonstrates commitment to a higher standard of service
- Provides a framework for organizational structure and management
- Provides a competitive edge in the marketplace
- Enhances staff recruitment and development
- Is recognized by insurers and other third parties

Source: The Joint Commission website (www.jointcommission.org)
Joint Commission offered certification in 2003. Currently there are 853 certified Primary Stroke Centers

- 17 in Washington
- 11 Oregon
- 1 Idaho

(as of August 2011)

Source: The Joint Commission 2011

Levels of Certification

- Acute Stroke Ready – deferred until there is evidence to support (some states offer this level)
- Primary Stroke Certification
- Comprehensive Stroke Certification
Comprehensive Stroke Certification

- Identified members of a Technical Advisory Panel
- Panel will focus on assessment of the state of evidence on comprehensive stroke care and identify major aspects of care that might be evaluated through certification standards and performance measures (first meeting was in June)

Source: The Joint Commission

Comprehensive Stroke Certification

- Product development will include public comment, pilot testing
- Target date for roll-out: 4th quarter 2013
Resource manual

Review process manual
Standards List

- Delivering or Facilitating Clinical Care (DF) – 4 standards
- Performance Measurement and Improvement (PM) – 4 standards
- Supporting Self-Management (SE) – 3 standards
- Program Management (PR) – 11 standards
- Clinical Information Management (CT) – 5 standards

Most Challenging Requirements
Top Standards Compliance Issues for 2010
Source: Joint Commission Perspectives, May 2011, page 12.

<table>
<thead>
<tr>
<th>% Not Compliant</th>
<th>Standard Number</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>23% DSDF.2</td>
<td>The program develops a standardized process originating in clinical practice guidelines or evidence-based practice to deliver or facilitate the delivery of care.</td>
<td></td>
</tr>
<tr>
<td>7% DSDF.1</td>
<td>Practitioners are qualified and competent.</td>
<td></td>
</tr>
<tr>
<td>5% DSSE.3</td>
<td>The program addresses patients' education needs.</td>
<td></td>
</tr>
<tr>
<td>5% DSPM.6</td>
<td>The program evaluates patient perception of care quality.</td>
<td></td>
</tr>
<tr>
<td>4% DSDF.3</td>
<td>The program is designed to meet the participant's needs.</td>
<td></td>
</tr>
</tbody>
</table>
**Guidelines for the Early Management of Adults With Ischemic Stroke**

A Guideline From the American Heart Association/American Stroke Association Stroke Council, Clinical Cardiology Council, Cardiovascular Radiology and Intervention Council, and the Atherosclerotic Peripheral Vascular Disease and Quality of Care Outcomes in Research Interdisciplinary Working Groups

The American Academy of Neurology offers the value of this guideline as an educational tool for instruction.

- Harold F. Goldstein, MD, PhD, FANNA, Chair
- William C. Boden, MD, FANNA, Chair-elect
- Mark J. Albers, MD, FANNA
- Gregg C. Davis, MD, FANNA
- Lawrence Rosenthal, MD, FANNA
- Anthony Fisher, MD, FANNA
- Robert L. Gold, MD, FANNA
- Paula Tohill, MD, FANNA
- Richard E. Lohr, MD, FANNA
- Cheryl G. Niewoehner, MD, FANNA
- Fred C. Louis, MD
- Lewis B. Bauman, MD, PhD, FANNA
- Arvind C. Goyal, MD, FANNA
- Robert P. Wiggans, MD, FANNA

**Purpose:** This policy provides an overview of the current evidence base regarding the use of traditional treatments for stroke, with a focus on early management. The policy outlines the treatment and other emergency department procedures that should be assessed within the first 6 hours after stroke in individuals who present with signs and symptoms suggestive of stroke. The policy addresses patients for whom there were delays in treatment, and those who may have been treated in a different manner than the current policy. The recommendations are intended for health care providers who care for patients with stroke, and are based on the best available evidence from systematic reviews and clinical trials. The policy is intended to provide guidance for the treatment of stroke, and is updated annually to reflect the latest research and clinical practice.

**Method:** The recommendations are developed by the American Heart Association/American Stroke Association Stroke Council and the Atherosclerotic Peripheral Vascular Disease and Quality of Care Outcomes in Research Interdisciplinary Working Groups. The recommendations are updated annually to reflect the latest research and clinical practice.

**Recommendations:** The recommendations are intended for health care providers who care for patients with stroke, and are based on the best available evidence from systematic reviews and clinical trials. The policy is updated annually to reflect the latest research and clinical practice.

**Key Words:** Acute ischemic stroke • emergency medical services • stroke • acute care setting

---

**The Joint Commission Connect**

**Sacred Heart Medical Center at Riverbend**

3333 Riverbend Drive • Springfield, OR 97477

**9/26/2011**

**Table:** Includes Closed Measures

<table>
<thead>
<tr>
<th>Disease/Prognosis Scale</th>
<th>APCG</th>
<th>FCIS</th>
<th>ORIS</th>
<th>Performance Measure Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>APCG</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FCIS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ORIS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Performance Measure Information</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure 1: Performance Measure</td>
<td>Data Submission</td>
<td>Approve</td>
<td>Accept</td>
<td>9/26/2011</td>
</tr>
<tr>
<td>Measure 2: Performance Measure</td>
<td>Data Submission</td>
<td>Approve</td>
<td>Accept</td>
<td>9/26/2011</td>
</tr>
<tr>
<td>Measure 3: Performance Measure</td>
<td>Data Submission</td>
<td>Approve</td>
<td>Accept</td>
<td>9/26/2011</td>
</tr>
<tr>
<td>Measure 4: Performance Measure</td>
<td>Data Submission</td>
<td>Approve</td>
<td>Accept</td>
<td>9/26/2011</td>
</tr>
<tr>
<td>Measure 5: Performance Measure</td>
<td>Data Submission</td>
<td>Approve</td>
<td>Accept</td>
<td>9/26/2011</td>
</tr>
</tbody>
</table>
Most cited standard: DSDF 2.4 The program’s assessment activities are consistent with clinical practice guidelines. **Requirements:**

- Use of the protocol is reflected in the order sets, pathways, or medical records
- Evidence-based order sets (CPG)

### Table: Clinical Practice Guidelines Summary

<table>
<thead>
<tr>
<th>% Not Compliant</th>
<th>Standard Number</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>23%</td>
<td>DSDF.2</td>
<td>The program develops a standardized process originating in clinical practice guidelines or evidence-based practice to deliver or facilitate the delivery of care.</td>
</tr>
</tbody>
</table>

Source: The Joint Commission
| Date       | 9/26/2011 | Page: 12 | Document Type: Medical Record |

**Medical Record Details**

**Patient Information**

- **Name:** [Redacted]
- **DOB:** [Redacted]
- **Gender:** [Redacted]
- **ALL Plan:** [Redacted]
- **Address:** [Redacted]
- **Phone:** [Redacted]
- **Insurance:** [Redacted]
- **Allergies:** [Redacted]
- **Medications:** [Redacted]

**Problem List**

| Diagnosis | [Redacted] |

**Medication History**

| Medication | [Redacted] |

**Diagnostic Studies**

- **EKG:** [Redacted]
- **CXR:** [Redacted]
- **CT Scan:** [Redacted]
- **Laboratory Tests:** [Redacted]

**Procedures**

- **Procedure:** [Redacted]
- **Date:** 9/26/2011

**Plan of Care**

- **Plan:** [Redacted]
- **Goals:** [Redacted]

**Progress Notes**

- **Nursing Notes:** [Redacted]
- **Medical Notes:** [Redacted]
<table>
<thead>
<tr>
<th>CONSULT (VCM)</th>
<th>Progress Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>CONSULT: VCM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical findings</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete and total</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall harmony</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete examination</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete history</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Currently end</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnosis</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Signature</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Week Of 12/15/11
% Not Compliant | Standard Number | Standard
---|---|---
23% | DSDF:2 | The program develops a standardized process originating in clinical practice guidelines or evidence-based practice to deliver or facilitate the delivery of care.

**Most cited standard:**

DSDF 2.4 The program’s assessment activities are consistent with clinical practice guidelines.

**Requirements:**
- Time parameters for stroke workup are included in the protocol or the emergency department

Source: The Joint Commission
Following Clinical Practice Guidelines:

- Post tPA vital signs:
  - Every 15 minutes x 1 hour (watch transport to ICU – Print from monitor in ED?)
  - Every 30 minutes x 6 hours
  - Every hour x 18 hours
  - Neuro checks in the ED are usually an issue
<table>
<thead>
<tr>
<th>Date</th>
<th>Infusion Start Time</th>
<th>Infusion Site</th>
<th>Neurologist</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/26/2011</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Stoke I.P.A. Administration Flowsheet**

**Neuro Site**
1. Change in mental status
2. Signs of bleeding
3. BP greater than 180 systolic or 90 diastolic

**VITAL SITES**

<table>
<thead>
<tr>
<th>Infusion I.P.A. Sites every 15 minutes for one hour</th>
<th>Post I.P.A. Vital Signs every 30 minutes for the next 6 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Post I.P.A. Vital Signs every 30 minutes for the next 6 hours**

<table>
<thead>
<tr>
<th>Blood pressure</th>
<th>Heart rate</th>
<th>Respiration</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Neurologist**

<table>
<thead>
<tr>
<th>Neurologist</th>
<th>Neurologist Signature</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Code Stroke Vital Sign / Neurologic Check Documentation Record**

<table>
<thead>
<tr>
<th>Vital Signs</th>
<th>Neurological Features</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Missions Hospital**

<table>
<thead>
<tr>
<th>Code Stroke Critical Times</th>
<th>Neurologist Logos Royce</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Code Stroke - Critical Times, V.C. & N.C.**

<table>
<thead>
<tr>
<th>Time of Event</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**The Joint Commission**

- No signature
- No date
- No time

**Post I.P.A. Vital Signs every 30 minutes for the next 6 hours**

<table>
<thead>
<tr>
<th>Blood pressure</th>
<th>Heart rate</th>
<th>Respiration</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Neurologist**

<table>
<thead>
<tr>
<th>Neurologist</th>
<th>Neurologist Signature</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Code Stroke Vital Sign / Neurologic Check Documentation Record**

<table>
<thead>
<tr>
<th>Vital Signs</th>
<th>Neurological Features</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Missions Hospital**

<table>
<thead>
<tr>
<th>Code Stroke Critical Times</th>
<th>Neurologist Logos Royce</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Code Stroke - Critical Times, V.C. & N.C.**

<table>
<thead>
<tr>
<th>Time of Event</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**The Joint Commission**

- No signature
- No date
- No time
Delivering or Facilitating Clinical Care (DF)

**DSDF 1. Practitioners are qualified and competent**

- The program evaluates practitioners for current licensure and current competence
- Annual competencies to show staff are competent to perform job requirements

Source: Disease-Specific Certification Manual, January 2011
Stroke Program Educational Plan

Contributed by
Methodist Hospital of Sacramento
Sacramento, CA

Methodist Hospital of Sacramento

Stroke Program Educational Plan

1. The need for Stroke Education

Patients with both acute and hemorrhagic strokes have been the subject of much
prominent literature, clinical guidelines and recommendations, which are the aim of
this plan. The Joint Commission on Accreditation of Healthcare Organizations
(JCAHO) (Joint Commission, 2001). The goal for choosing the best evidence-based
practice is to share this plan to evaluate stroke care and improve the symptom
examinations and death of the stroke. As to this, health systems need to address
specific areas for care, with an emphasis on improving patients identified in the
literature. These specific areas may include the following:

I. Measures for Stroke Education

The specific components of stroke care are highlighted in both the recommendation
from the Joint Commission (JCAHO) for primary stroke centers and the plan for
creating a primary stroke center within the Joint Commission-Led Commission,
2006. The Nursing and Advisory Group for Primary Stroke Centers have
identified the need for a comprehensive plan for stroke education. The key
components and the elements of a successful implementation of early
intervention programs at the local hospital and community level to ensure that
effective interventions are in place.

The key assumptions in the implementation of the hospital based plans are driven by
these key elements which translate into performance measures. Care for long-term
adherence to these performance measures improve patient outcome and it is
manifest from the studies for development of performance measures and standards
for staff education at the hospital and program level. When applied specifically to the
stroke population, the units of intervention on the basis of the evaluation of any
associated prophylactic drug therapy.

1. The need for ongoing education is to reduce the burden of stroke, injury, and
depth and to all patients without bias.

2. To change nurses that address improvements in care processes, particularly in
this hypothesis of care, to result in an increased number of stroke patients
requiring the appropriate recommended acute treatments.

3. To evaluate effectiveness of care with systematic use of evidence-based
practice guidelines for diagnostic tests and treatment, and therapy in patients
without evidence-based use of effective care and outcome of ineffective care.

4. To ensure that our care focus of patient-centeredness by introducing methods
to better inform and involve patients and their families in the care provided and
decisions made.
Accepted

5. To provide accurate information that facilitates patient outcomes. Patients in care
    including feedback from hospital staff to nurses at the bedside, ensuring overall
    patient satisfaction and adherence to the patient care plan.

6. To promote patient safety by achieving the appropriate pain levels and maintaining
    standards of care. Staff must ensure that appropriate actions are taken with all eligible patients.

II. Nursing Staff Development and Competency Assessment

Ongoing education is the key to excellence inSafe Staff Care. It is a prerequisite to positive outcomes (Kehoe et al., 2003). The development of a

The development of a network of individual and interprofessional education programs that are responsive to the needs of the professional and the organization is essential to the success of professional nursing practice as it relates to the care of the patient.

Nursing staff development is the process of assessment, development, and evaluation. The following principles and guidelines are provided to guide the implementation of the Staff Development Program (SDP) for Nursing Staff Development:

1. Establishing Nursing Professional Development as an integral part of the organization's strategic plan.
2. Developing and implementing a comprehensive plan that includes opportunities for self-directed learning, outside the organization, and continuing education credits.
3. Ensuring that staff development activities are aligned with the organization's goals and objectives.
4. Establishing a system for evaluating the effectiveness of staff development programs.

The focus of staff development is on providing ongoing support to nurses to enhance their knowledge, skills, and abilities. This support is provided in a variety of formats, including in-service education, workshops, and conferences. The Staff Development Program is designed to meet the needs of nurses at all levels of the organization and to promote a culture of continuous learning.

I. Role of the Staff Development Coordinator

The Staff Development Coordinator is responsible for the overall coordination of the Staff Development Program. This includes developing and implementing a plan for staff development, ensuring that the program meets the needs of the organization, and evaluating the effectiveness of the program.

The Coordinator is responsible for:

1. Developing and implementing a comprehensive plan for staff development.
2. Identifying the needs of nurses and designing educational programs to meet those needs.
3. Coordinating the delivery of educational programs, including in-service education, workshops, and conferences.
4. Evaluating the effectiveness of the Staff Development Program.

The Coordinator works closely with the nursing staff to ensure that the Staff Development Program meets the needs of the organization.

II. Program Components

The components of the Staff Development Program include:

A. Orientation

Orientation is designed to orient new employees to the culture, policies, and procedures of the organization. The program is structured to provide a comprehensive overview of the organization, including its mission, goals, and values. The program is designed to help new employees feel comfortable and confident in their new role.

The key components of the Orientation Program include:

1. Introduction to the organization and its mission.
2. Overview of the organization's policies and procedures.
3. Introduction to the organization's culture and values.
4. Review of the organization's safety and quality standards.

The Orientation Program is delivered through a combination of classroom instruction, practical experience, and on-the-job training.

B. Inservice Education

Inservice Education is designed to provide ongoing support to nurses in their role and to enhance their knowledge, skills, and abilities. The program is designed to meet the needs of nurses at all levels of the organization and to promote a culture of continuous learning.

The key components of the Inservice Education Program include:

1. Development of a comprehensive plan for ongoing support.
2. Identification of the needs of nurses and the design of educational programs to meet those needs.
3. Delivery of educational programs, including in-service education, workshops, and conferences.

The Inservice Education Program is delivered through a combination of classroom instruction, practical experience, and on-the-job training.

C. Continuing Education Programs

These programs are designed to keep staff up to date with new knowledge and skills and to enhance the overall quality of care provided by the organization. The programs are designed to meet the needs of nurses at all levels of the organization and to promote a culture of continuous learning.

The key components of the Continuing Education Program include:

1. Development of a comprehensive plan for continuing education.
2. Identification of the needs of nurses and the design of educational programs to meet those needs.
3. Delivery of educational programs, including in-service education, workshops, and conferences.
4. Evaluation of the effectiveness of the Continuing Education Program.

The Continuing Education Program is delivered through a combination of classroom instruction, practical experience, and on-the-job training.

D. Staff Development Policies and Procedures

The Staff Development Program is governed by a set of policies and procedures that guide the implementation of the program. These policies and procedures are designed to ensure that the program meets the needs of the organization and to promote a culture of continuous learning.

The key components of the Staff Development Policies and Procedures include:

1. Development of a comprehensive set of policies and procedures for the Staff Development Program.
2. Identification of the needs of nurses and the design of educational programs to meet those needs.
3. Delivery of educational programs, including in-service education, workshops, and conferences.
4. Evaluation of the effectiveness of the Staff Development Program.

The Staff Development Policies and Procedures are delivered through a combination of classroom instruction, practical experience, and on-the-job training.

The Staff Development Coordinator is responsible for the overall coordination of the Staff Development Program. This includes developing and implementing a plan for staff development, ensuring that the program meets the needs of the organization, and evaluating the effectiveness of the program.

The Coordinator works closely with the nursing staff to ensure that the Staff Development Program meets the needs of the organization.

Room B, 9/26/2011 Educational Plan (Redacted Report)
Most Challenging Requirements
Top Standards Compliance Issues for 2010
Source: Joint Commission Perspectives, May 2011, page 12.

<table>
<thead>
<tr>
<th>% Not Compliant</th>
<th>Standard Number</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>23%</td>
<td>DSDF.2</td>
<td>The program develops a standardized process originating in clinical practice guidelines or evidence-based practice to deliver or facilitate the delivery of care.</td>
</tr>
<tr>
<td>7%</td>
<td>DSDF.1</td>
<td>Practitioners are qualified and competent.</td>
</tr>
<tr>
<td>5%</td>
<td>DSSE.3</td>
<td>The program addresses patients’ education needs.</td>
</tr>
<tr>
<td>5%</td>
<td>DSPM.6</td>
<td>The program evaluates patient perception of care quality.</td>
</tr>
<tr>
<td>4%</td>
<td>DSDF.3</td>
<td>The program is designed to meet the participant’s needs.</td>
</tr>
</tbody>
</table>
The program addresses participants’ education needs

1. The program’s materials comply with recommended elements of intervention supported by the literature and promoted through the clinical practice guidelines (order sets)

2. The program presents content in a manner that is culturally sensitive

3. The program presents content in an understandable manner relevant to the participants’ level of literacy

4. The program makes initial and ongoing assessments of the participants’ comprehension of program-specific information
The program addresses participants’ education needs

5. The program addresses the participants’ education needs related to lifestyle changes that support self-management regimens
(Listing the patient’s modifiable individual risk factors)
“After Care” program that partners with Rehab for managing risk factors (Texas)

The program addresses participants’ education needs

6. The program addresses the education needs of the participant regarding health promotion
(Requirement: Documentation shows at least one stroke public education activity per year)
Community Stroke Education

Wellness clinics (Know Your Numbers, Blood Pressure checks)
- Malls: Community
- At the Hospital: Staff/Visitors
- Physician offices at designated times
- Employers

Community Stroke Education

Educational seminars (signs/symptoms of stroke)
- Nursing Homes as staff meetings
- Assisted Living
- Community Centers
- Service clubs (Lions, Kiwanis, etc.)
- Schools
Community Stroke Education

- Public Service Announcements at all movie theaters
- Announcements at Sporting Events (screen)
- KIOSK – Touch & Learn
  - 5 to 10 minutes of information on stroke, how to prevent
    - In one month had 512 views (December)

Community Stroke Education

- Medical Anthropology (Doctorate Program’s Dissertation)
  - It encourages an understanding of self, along with empathy for the strength, weaknesses, rights and needs of others, as well as the ability to relate to others with greater human understanding
Illness Narrative
- Personal story someone tells that reflects upon their illness experience, symptoms and suffering (increase awareness to promptly responding to symptoms)
- Increased awareness of stroke risk factors and warnings signs/symptoms

Use of Social Media
- Educate people who may not come to the hospital for healthcare but will read/review a post on a social networking site
Gadget ownership among American adults

% of American adults who own each device, as of May 2011

* Note: Game console data is from September 2010.

Source: The Pew Research Center’s Internet & American Life Project, April 26-May 22, 2011 tracking survey. N=2,277 adults ages 18 and older, including 755 reached via cell phone. Interviews conducted in English and Spanish.
Community Stroke Education
### Most Challenging Requirements

Top Standards Compliance Issues for 2010

Source: Joint Commission Perspectives, May 2011, page 12.

<table>
<thead>
<tr>
<th>% Not Compliant</th>
<th>Standard Number</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>23%</td>
<td>DSDF.2</td>
<td>The program develops a standardized process originating in clinical practice guidelines or evidence-based practice to deliver or facilitate the delivery of care.</td>
</tr>
<tr>
<td>7%</td>
<td>DSDF.1</td>
<td>Practitioners are qualified and competent.</td>
</tr>
<tr>
<td>5%</td>
<td>DSSE.3</td>
<td>The program addresses patients' education needs.</td>
</tr>
<tr>
<td>5%</td>
<td>DSPM.6</td>
<td>The program evaluates patient perception of care quality.</td>
</tr>
<tr>
<td>4%</td>
<td>DSDF.3</td>
<td>The program is designed to meet the participant's needs.</td>
</tr>
</tbody>
</table>

The program evaluates participant perception of the quality of care

1. The program evaluates patient/participant satisfaction and perception of quality of care
2. The program uses patient/participant satisfaction results to analyze quality of care and make improvements
Sample size for non-standardized measure

<table>
<thead>
<tr>
<th>Monthly patient volume (number of discharges)</th>
<th>Monthly sample size (number of medical records)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9</td>
<td>100%</td>
</tr>
<tr>
<td>10-49</td>
<td>10 cases</td>
</tr>
<tr>
<td>50-99</td>
<td>20%</td>
</tr>
<tr>
<td>≥100</td>
<td>20 cases</td>
</tr>
</tbody>
</table>

Source: Disease-Specific Care Certification Manual, p. PI-6

- Paper questionnaire
  - Hand-out at time of discharge
- Phone calls
  - Barrier to reaching people
- Support Groups
  - Hand out questionnaire
Patient Satisfaction Survey - Stroke Care

This form is to be used by a patient, family caregiver, nurse advocate or other person authorized to complete on behalf of the patient and family. Please use the rating scale of 1: extremely unsatisfied to 5: extremely satisfied.

1. Your Name

2. Your Email

3. Name of patient this relates to (optional)
   Can put in a full name or MM, whatever you are comfortable with

4. Were the teaching materials on diet and exercise following your stroke clearly understandable?
   Remember: 1 is extremely unsatisfied, and 5 is extremely satisfied.

<table>
<thead>
<tr>
<th>Your level of satisfaction</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Did you or a family member receive instructions related to blood pressure control and its importance to prevent future strokes?
   Remember: 1 is extremely unsatisfied, and 5 is extremely satisfied.

<table>
<thead>
<tr>
<th>Your level of satisfaction</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Were the instructions about your medications to be taken after discharge clearly understandable?
   Remember: 1 is extremely unsatisfied, and 5 is extremely satisfied.

<table>
<thead>
<tr>
<th>Your level of satisfaction</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Were the instructions about your follow-up treatment and medical care after discharge clearly understandable?
   Remember: 1 is extremely unsatisfied, and 5 is extremely satisfied.

<table>
<thead>
<tr>
<th>Your level of satisfaction</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Did you or a family member feel that you received good or exceptional care following your admission for a stroke?
   Remember: 1 is extremely unsatisfied, and 5 is extremely satisfied.

<table>
<thead>
<tr>
<th>Your level of satisfaction</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. How did you feel about your nurses’ understanding and caring in general?
   Remember: 1 is extremely unsatisfied, and 5 is extremely satisfied.

<table>
<thead>
<tr>
<th>Your level of satisfaction</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. How did you feel about the Nurse Practitioner discussion with you (or your family member) about any anxieties or fears you (or your family member) might have had about a stroke?
    Remember: 1 is extremely unsatisfied, and 5 is extremely satisfied.

<table>
<thead>
<tr>
<th>Your level of satisfaction</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. How did you feel about the Neurologist’s (Physician) level of understanding and caring?
    Remember: 1 is extremely unsatisfied, and 5 is extremely satisfied.

<table>
<thead>
<tr>
<th>Your level of satisfaction</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. How did you feel about the Neurologist’s discussion with you (or your family member) about any anxieties or fears you (or your family member) might have had about a stroke?
    Remember: 1 is extremely unsatisfied, and 5 is extremely satisfied.

<table>
<thead>
<tr>
<th>Your level of satisfaction</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>
### Most Challenging Requirements

#### Top Standards Compliance Issues for 2010


<table>
<thead>
<tr>
<th>% Not Compliant</th>
<th>Standard Number</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>23%</td>
<td>DSDF.2</td>
<td>The program develops a standardized process originating in clinical practice guidelines or evidence-based practice to deliver or facilitate the delivery of care.</td>
</tr>
<tr>
<td>7%</td>
<td>DSDF.1</td>
<td>Practitioners are qualified and competent.</td>
</tr>
<tr>
<td>5%</td>
<td>DSSE.3</td>
<td>The program addresses patients’ education needs.</td>
</tr>
<tr>
<td>5%</td>
<td>DSPM.6</td>
<td>The program evaluates patient perception of care quality.</td>
</tr>
<tr>
<td>4%</td>
<td>DSDF.3</td>
<td>The program is designed to meet the participant’s needs.</td>
</tr>
</tbody>
</table>
The program is designed to meet the participant’s needs

1. The program defines the elements of assessment for the targeted population

2. The assessment(s) are completed within the time frame determined by the program
   (Time parameters for stroke workup are included in the protocol or the emergency department workup protocol.)

3. The plan of care is developed based on the participant’s assessed needs.

4. The program uses a specified method for prioritizing the needs of participants.

5. The program implements interventions based on priority and risk

6. The program individualizes delivery of care

7. The program continually evaluates, revises, and implements the plan of care to meet the participant’s ongoing needs.
Performance Improvement
Performance Improvement Action Plan

**Stroke Education**

**BACKGROUND**
- Stroke patients, families, and caregivers will receive stroke education materials during their hospital stay.
- TJC recommends five elements be addressed as part of stroke education: The elements are: 1. Identification of EMS, follow-up after discharge, medication education, risk factors for stroke & warning signs & symptoms of stroke.

**Action**
- Provide appropriate materials and discuss discussion of topics with patient & caregiver.
- A review of current patient education material available from AHA, ASA, and Brain Awareness Coalition will be conducted. Materials will be shared by Stroke Team leaders and Stroke navigator.
- Marketing will provide folders to organize material.
- Nurses in Stroke units will review education on use of materials and documentation of education in patient medical record.

**Expected Impact**
- Compliance went from 9% to 49%.

**Contact**
- Minimum target was not met. Nursing representatives to the Stroke team believe the issue is documentation rather than lack of providing materials to patient.
- Plan for Stroke navigator to meet with stroke units nurses to identify barriers and develop action plan in second week in March with re-evaluation of compliance in third week in March.

Performance Improvement Action Plan

**Documentation of Exclusion Criteria for Alteplase**

**BACKGROUND**
- Ischemic stroke patients will have exclusion criteria for Alteplase documented by assessing physician.

**Action**
- Meet with 10 physicians to determine barriers to compliance.
- Develop criteria for each physician's practice.
- Review shared exclusion criteria with appropriateness for only ischemic stroke patients in our stroke population.
- Discussed findings with physicians. Decision to include exclusion criteria on order set to facilitate documentation of exclusion criteria was made.

**Expected Impact**
- Compliance increased from 10% to 50%.

**Contact**
- Minimum target was not met. Plan to add exclusion criteria to order set at the end of March and follow up with survey of physicians second week in April.
Log-in to the website