

Code Stroke: Identification of Inpatient Brain Attack

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Objectives

1. Understand the need to have a process for the in hospital Brain Attack patient
2. Discuss barriers to protocols and steps to overcome barriers
3. Describe Code Stroke Drill and Feedback process
4. Explain the new National Consortium of Stroke Coordinators (NCSC) group.

Stroke Sense

- The stroke center participates in *StrokeSense*, a national VHA initiative focused on increasing community awareness of stroke. The program includes outcomes benchmarking of mortality rates and clinical performance measures.



Data Collection

- The stroke center is a “Get With The Guidelines” facility, working cooperatively with the American Heart Association to treat and improve stroke care at FMC.



Patient Management tool

Meeting JCAHO requirements for Access to care

- The Program evaluates services provided through contractual arrangement to ensure that the scope and level of care, treatment, and services are consistently provided.
- Documented policies, processes, and procedures support the care, treatment and services provided.



Disease Specific Care Certification Manual 2nd Edition 2005
Standard PR.3, pg 46, 47

Realizing the gap

- Plan in place for patients presenting to the Emergency Department with stroke symptoms
- No plan available for the inpatient population
- Nurses need a clear plan and protocol in place to give proper and timely care

Meeting of the Minds



meeting of the minds

Courtesy Of Goddesses Get Down

Meeting of the Minds

- Neurologist
- Stroke Coordinator
- CT Director
- Lab Director
- Nursing House Supervisor

Meeting of the Minds



- Assess the situation
- Anticipate barriers
- Collaborate
- Plan
- Write the protocol
- Get approval:
 - Clinical Practice Council
 - Medical Executive Committee

Meeting of the Minds

Assessment:

- Patients weren't receiving the same level of care consistently
- No systematic approach for inpatients
- Not educated on new trends
- Nurses and physicians still in old paradigm
“wait, observe, get some rehab”
- Missed opportunities

Meeting of the Minds

Plan

- Write a protocol:

Code Stroke: Identification of Inpatient Brain
Attack

- Educate ALL nurses and ancillary staff to:

- Recognize stroke symptoms
- Respond appropriately and timely (i.e. stat head CT, stat labs) and notify the Stroke Team

Meeting of the Minds

Implement education plan and roll out

- Coordinator to present new protocol to Staff Development Clinicians
- Staff Development Clinicians to disseminate to staff

Meeting of the Minds

Evaluate

- Code Stroke drills
- All medical/surgical units throughout the hospital
- After ample time for education

STROKE?????

1. Sudden **numbness** or weakness in the face, arms or legs, particularly on one side of the body.
2. Sudden onset of **confusion**: difficulty speaking or understanding what others are saying.
3. Sudden Vision problems like **blindness** in one or both eyes.
4. Sudden onset of **dizziness**: difficulty walking, loss of balance or coordination.
5. Sudden **severe headache** that does not have an obvious or known cause.



Time of Onset?



ACTION!!!!!

1. After ABC's, notify attending physician
2. Call: **Stroke Pager #750-3541**
3. Prepare for STAT Head CT
4. Do NIHSS and record score
5. Make a difference in your patient's life!

Barriers

#1. “We can’t do this without a physician’s order.”

Nurse has no autonomy to provide appropriate assessment/treatment for an acute stroke patient

Policy- Excerpt from policy

1. Notify the attending physician. Obtain orders for:
2. STAT Head CT for “stroke” without contrast
3. STAT Labs: CBC, BMP, PT, PTT
4. Call stroke pager

CLINICAL		Novant HEALTH	
TITLE	Code Stroke – Identification of Inpatient Brain Attack		
NUMBER	TRw-PC-Neuro-101	Jun 05+	(double link to PC-EM)
JCAHO FUNCTIONS	PC		
APPLIES TO	TRw (Excluding TMC)		

I. SCOPE / PURPOSE

This document provides guidance in the event that an inpatient exhibits symptoms of a brain attack otherwise known as a stroke.

II. POLICY

We are committed to the treatment of patients experiencing sign and symptoms of acute stroke. When a patient is experiencing an acute stroke or “brain attack” the Stroke Pager will be utilized, and the Stroke Team will respond to support the care of the patient as needed. This policy/procedure applies to patients over the age of 18.

III. QUALIFIED PERSONNEL

All clinical staff

IV. EQUIPMENT

Stroke digital pager

V. PROCEDURE

1. Symptoms of acute stroke include but are not limited to:
 - a. Sudden numbness or weakness in the face, arms or legs, particularly on one side of the body.
 - b. Sudden onset of confusion, difficulty speaking or understanding what others are saying.
 - c. Sudden visual problems such as blindness in one or both eyes.
 - d. Sudden onset of dizziness, difficulty walking, loss of balance or coordination.
 - e. Sudden severe headache that does not have an obvious or known cause.
2. If a patient exhibits symptoms of acute stroke the clinical personnel present will ensure emergency procedures are initiated according to the patient assessment and hospital policy/procedure. Please see policy: [Interdepartmental Patient Transport and Immediate Care of the Critical and/or Unstable Patient](#)
 The patient will be transported with a nurse and cardiac monitor/BP monitor.
3. Obtain stat bedside finger stick glucose.
 Call the Stroke Pager at 750-3541. This will notify the Stroke Team.
 Enter requests in SMS for:
 - STAT head CT without contrast- reason: “stroke” and describe the symptoms
 - Labs: CBC, BMP, PT, PTT –signify “Stroke” in the comments section on SMS
 Note: Call CT 85524
 • Radiology will help facilitate getting a stretcher to the patient’s room, and assist with transport, even after hours.

How Do We Educate the Staff?

- Goals of education:
 - Recognize symptoms of acute stroke.
 - Initiate emergency procedures.
 - Identify resources within the multi-disciplinary team
 - Become familiar with policy guidelines for treatment of acute stroke.

Educational Methods

- Stroke Education Flyers posted at each station
- “Potty Trainings”
- Self Learning Activity on Code Stroke
- Education fairs
- Neuro Bowl
- Staff Development Clinicians reinforcing on units/staff meetings

Neuro Bowl Fun



More Barriers??

#2. One day the Stroke team was called for a Code Stroke..... the patient was in CT...

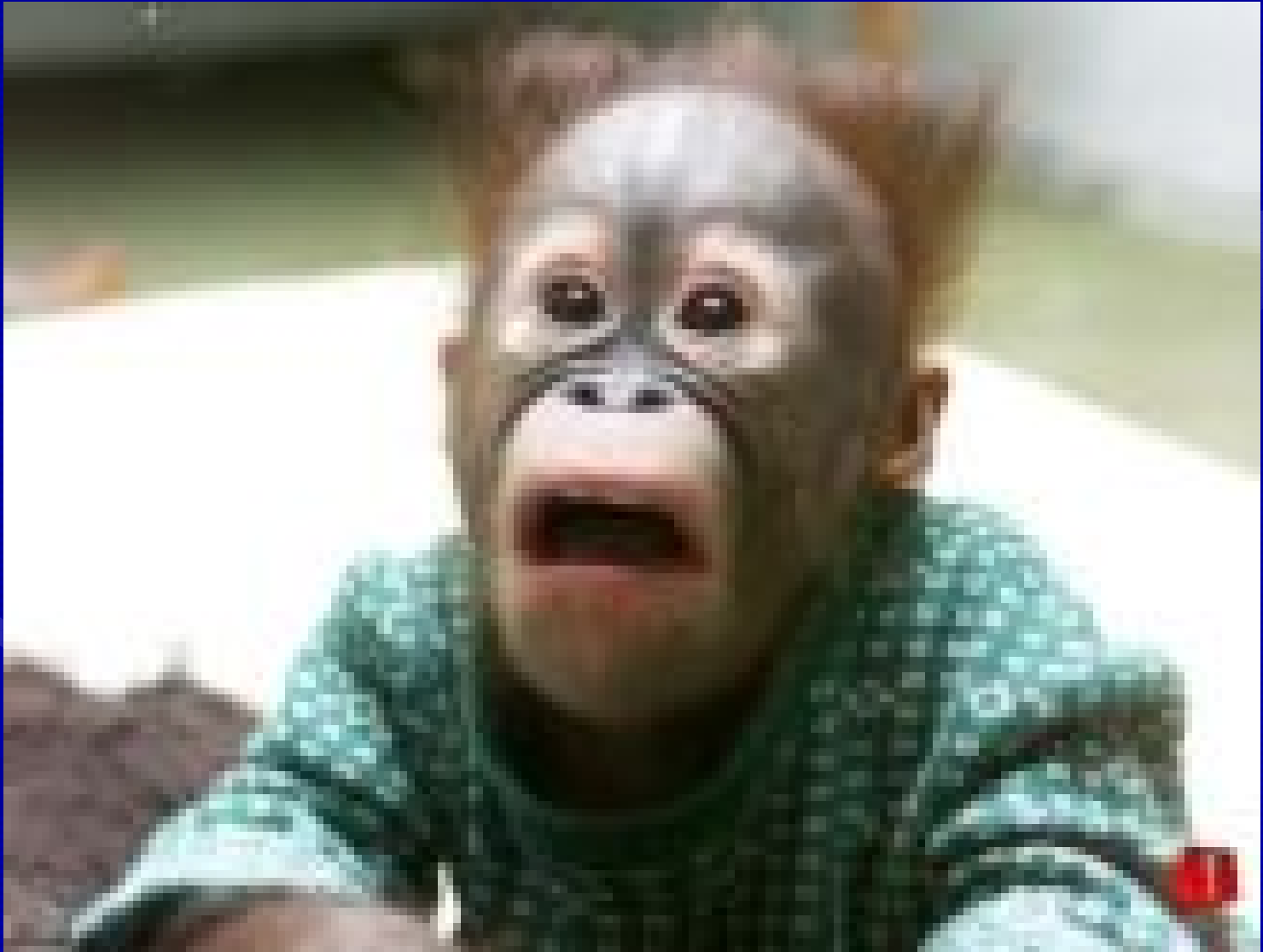
- We arrived in CT to find the patient in the hallway **ALONE.**
- Patient was aphasic with a dense right hemiplegia
- No monitor, no nurse
- This was not a good scene!

Barrier #3

GI nurse...

- Recognized stroke symptoms in her patient
- Initiated Code Stroke
- Called the attending immediately
- Attending physician said to get a CT scan....
- **“in the morning”**

What??



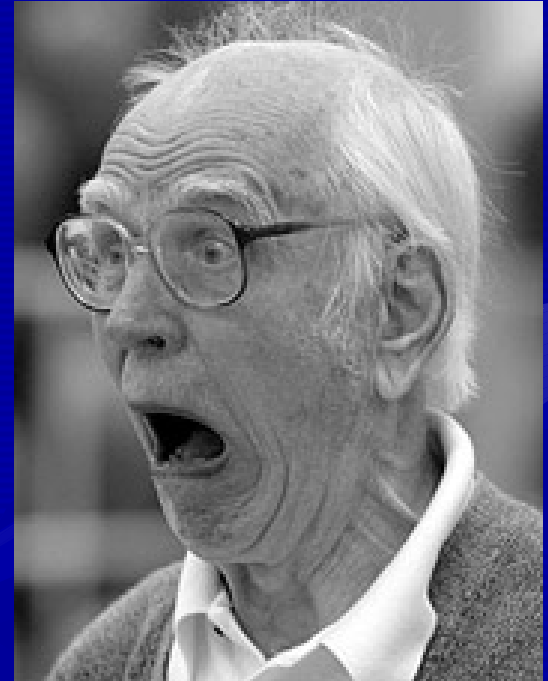
Barrier #4

- A med/surg nurse...
 - Recognized stroke symptoms
 - Initiated Code Stroke
 - Was told by the attending physician...

“Do not call the Stroke Team”

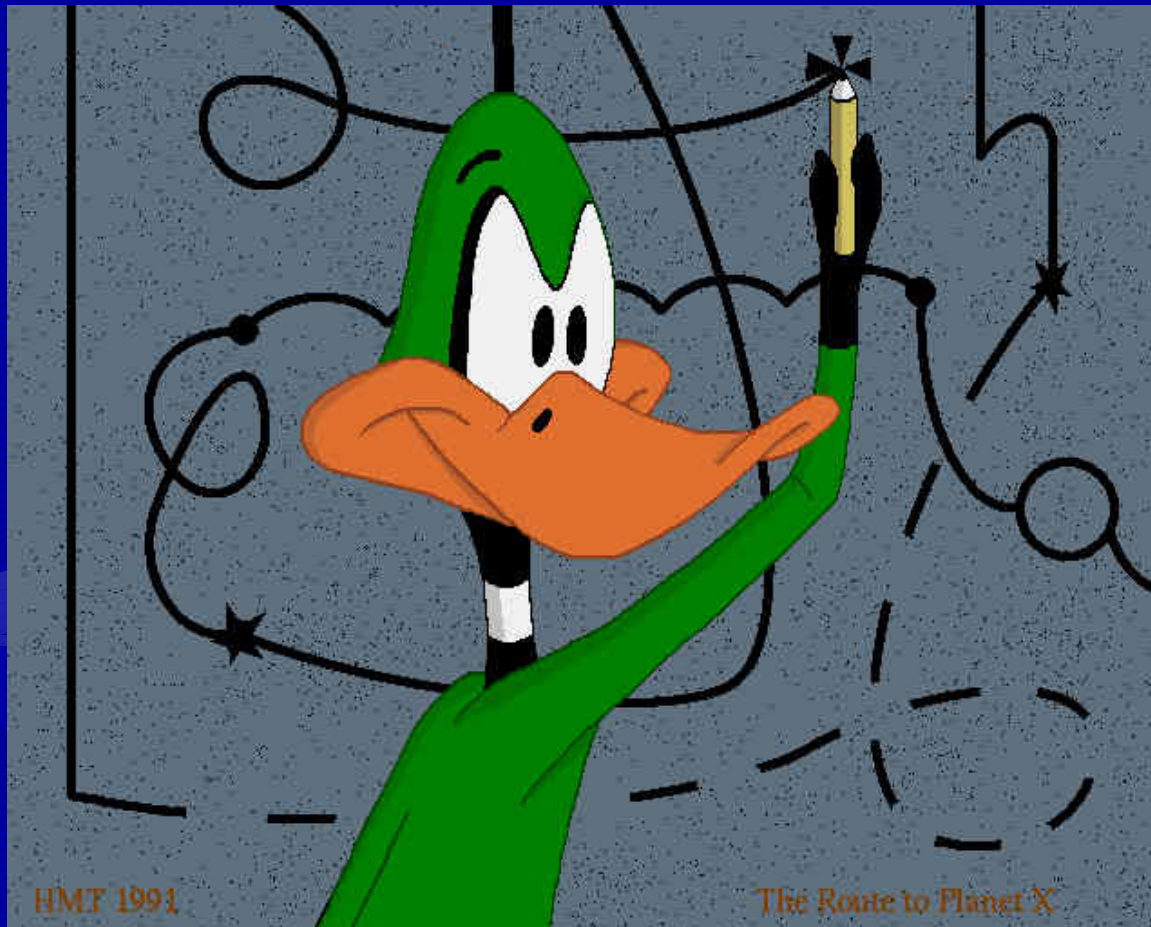
What???

- Isn't stroke an **EMERGENCY???**
- Don't **ALL** patients deserve equal access to the stroke program protocols???
- Shouldn't we **CONSIDER** this patient for **t-PA???**



**Yes, Yes and
YES!**

Back to the Drawing Board



Another Meeting of the Minds



meeting of the minds

Courtesy Of Goddesses Get Down

Another Meeting of the Minds

- Neurologist
- Stroke Coordinator
- CT Director
- Lab Director
- Nursing House Supervisor
- Assess the situation
- Overcome barriers
- Collaborate
- Plan more education
- Re-write the protocol
- Get approval:
 - Clinical Practice Council
 - Medical Executive Committee

Compare Code Stroke to Code Blue?!?

- Consider the steps you would take if you found a patient in cardiac/pulmonary arrest (Code Blue).
- You would follow predetermined steps. ACLS guidelines
 - Open airway
 - Call for help
 - Check for pulse
 - Begin CPR

In Code Blue...

- You would **NOT** leave the patient in arrest to go notify the attending and obtain an order to start CPR?!?!?



As in Code Blue

- Thus it is with Code Stroke. There are emergency steps to be taken before notifying the attending physician.

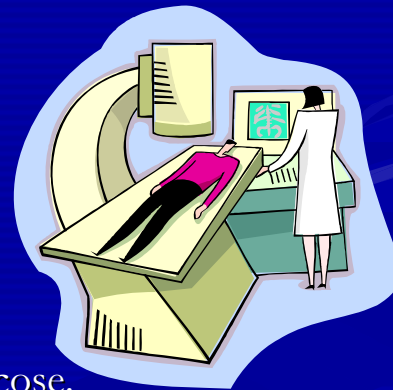




Now you're talkin'

STROKE?????

- Sudden **numbness** or weakness in the face, arms or legs, particularly on one side of the body.
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- Sudden Vision problems like **blindness** in one or both eyes.
- Sudden onset of **dizziness**: difficulty walking, loss of balance or coordination.
- Sudden **severe headache** that does not have an obvious or known cause.



Time of Onset?

ACTION!!!!

- ABC's..... and stat bedside finger stick glucose.
- Call: **Stroke Pager #750-3541** to notify **Stroke Team**
- Put request in SMS for: **STAT head CT without contrast**-reason "**Stroke**" and describe symptoms
- **STAT Labs: CBC, BMP, PT, PTT**, signify "Stroke" in comments section in SMS.
- **Call Lab 82902** Phlebotomist to meet pt in CT scanner. - Remember to **call CT-85524**
- Call: **Nursing House Supervisor** / Send Pt on a **monitor**, with a **nurse**
- Obtain a **STAT head CT**
- Do **NIHSS** and record score.
- Call and notify **Attending Physician**.
- Revised 6-13-2005

Code Stroke (Acute) Emergency Protocol Orders

+

+

X **STAT**
For Stroke & TIA Evaluation Only.
 (If the flow is unclear, cross out
 what is required to take orders)

ALLERGIES:
 Specify all known or suspected allergies, and substitute reactions, as dictated by the prescriber according to hospital policy.

If a patient exhibits symptoms of Acute Stroke, implement the Stroke (Acute) Emergency Protocol Orders below:

POB Stat – If Blood Glucose < 80, implement Hypoglycemia Protocol Orders and Call MD before proceeding with additional Stroke (Acute) Emergency Protocol Orders

LABS:

<input checked="" type="checkbox"/> CBC Stat	Label Comment: <u>Stroke Patient</u>
<input checked="" type="checkbox"/> BMP Stat	Label Comment: <u>Stroke Patient</u>
<input checked="" type="checkbox"/> PT Stat	Label Comment: <u>Stroke Patient</u>
<input checked="" type="checkbox"/> PTT Stat	Label Comment: <u>Stroke Patient</u>

RADIOLOGY SERVICES:

CT Head without Contrast Stat Reason: Stroke
 Describe symptoms: _____

NURSING CARE AND TREATMENTS:

- Call Stroke Team Stat at Pager 750-3544
- Call CT Stat at 85524 to facilitate getting a stretcher to patient's room and assist with transportation (Patient to be transported with a Nurse and Cardiac Monitor/SP Monitor)
- Call Lab Stat at 82902 to meet patient in CT to draw Stat Labs
- Call Nursing Supervisor Stat at 72877
- Complete the NIH Stroke Scale (located in the Intensiv) and record Score
- Notify Attending Physician Stat

DO NOT WRITE IN THIS SECTION OR IN THE MARGINS

SEE PHYSICIAN ORDER SHEET FOR ADDITIONAL ORDERS

DATE: _____ **TIME:** _____ **Ordered Per Hospital Policy/Procedure: RN Signature:** _____

Forsyth MEDICAL CENTER **FMSUBH01A**
Remarkable People. Remarkable Medicine.

**CODE STROKE (ACUTE)
 EMERGENCY PROTOCOL ORDERS**

R: 04/02/2008 Page 1 of 1 Name: MDR/Label

Revised Policy/Procedure- Code Stroke

1. Obtain stat bedside finger stick glucose.
2. Call the Stroke Pager at 750-3541. This will notify the Stroke Team.
3. Enter orders per protocol:
 - STAT head CT without contrast-
reason: “stroke” and describe the
symptoms
 - Labs: CBC, BMP, PT, PTT

Revised Policy/Procedure- continued

Note: Call CT

Radiology will help facilitate getting a stretcher to the patient's room, and assist with transport, even after hours.

Revised Policy/Procedure- continued

Note: Call Lab

Phlebotomist will meet patient in the CT scanner.

0700-1700 in Main department CT.

1700-0700 in ED CT scanner.

Revised Policy/Procedure- continued

4. Call the Nursing Supervisor. The role of the Nursing Supervisor will be to:
 - Facilitate resources to the primary nurse.
 - Assure a nurse remains with the patient.
 - Assure appropriate personnel do the NIHSS
 - Facilitate bed availability for the patient if change is required.

Policy/Procedure - continued

- Last, but not least...
- 5. Notify attending physician

Policy/Procedure- continued

- The National Institute of Health Stroke Scale, NIHSS will be completed by trained clinicians and the score recorded in the patient's medical record.
- Resources are 7th Neuro unit, Neuro ICU or Nursing Resource Team.

end

Code Stroke

Know your Resources

Stroke Team-

- Committed to respond and arrive at the bedside within 30 minutes of a page.
- Established **code 22** for use in a **Code Stroke**.
- The nurse may pick up the phone and dial our emergency #22, say “I have a code stroke” and the FMC hospital emergency operator will know to page the stroke team.

Forsyth Stroke Team



Know your Resources

- Radiology CT-
- CT department knows that **stroke is an emergency**
- Policy that allows rapid diagnostics for “stroke”.
- They will actually remove a current patient from the table to scan a stroke patient.
- Once you call, they will send a tech with a stretcher to help transport patient to CT.

Know your Resources

- **Lab-**
- The lab department will facilitate a phlebotomist to meet the stroke patient in the CT scanner to draw blood for stat labs.
- Predetermined and in policy

Know your Resources

- **Nursing House Supervisor**
 - Supervisor will help facilitate resources to the primary nurse
 - Assure that the stroke patient is transported according to protocol
 - Facilitate bed availability Neuro ICU or TICU, if a change is required.

Code Stroke Resources

- **NIHSS Trained Clinicians**
 - We have specially trained nurses in the hospital that will respond to the bedside to help with assessment and obtaining an NIHSS (National Institutes of Health Stroke Scale) score. You may call for resources from 7th Neuro Unit, Neuro ICU or Nursing Resource Team.

Code Stoke Emergency Protocol & Orders

- Protocol Order set
- Inclusion/Exclusion Criteria Form for tPA consideration
- Laminated Stroke Instruction Flyer

Each placed on every code cart in the hospital.
All forms readily available on our FMC intranet.



Code Stroke Drills

- Practice is good for any new skill
- Code stroke drills are held unannounced, periodically on different units throughout the hospital.
- Immediate feedback is given verbally and in written form.
- A log of performance times is kept.

Overcoming Barriers

- With education, physicians and nurses are shifting their paradigms concerning stroke care
- Increasing knowledge base
- With a clear “plan in place” and written protocols, nurses are empowered with autonomy to provide appropriate care for every stroke patient in our system

Expanding and Improving

- We have taken Code Stroke education to our physician offices and outlying urgent care centers

In Conclusion

- Have a clear plan in place
- Anticipate barriers in the planning stage
- Education is key in shifting paradigms and forging change
- Practice and measure successes

Having a clear plan in place, and written protocols for nurses to utilize, decreases delays in timely acute stroke care and provides better outcomes for stroke patients.

Forsyth Interdisciplinary Stroke Team



Questions?

National Consortium of Stroke Coordinators (NCSC)

- **Established:** June 2006
- **Purpose:** To advance acute stroke management through the standardization of care
- **Mission Statement:**
 - Establish a network for mutual and professional support among Stroke Coordinators
 - Provide quarterly opportunities to share information and resources related to stroke program development and proficiency across the continuum of care

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NCSC website:

www.strokecoordinators.com