

Stroke Awareness and Prevention

Physician and Advanced Practice
Professional Education
September 2025



Physician and Allied Health Professional Stroke Education

Kaweah Health is a Primary Stroke Certified center through the
Joint Commission since 2018



**The Joint
Commission®**



**American Heart
Association®
American Stroke
Association®**

C E R T I F I C A T I O N

Meets standards for

Primary Stroke Center

Physician and Allied Health Professional Stroke Education

This means that all stroke patients are evaluated and managed according to the current evidence and recommendations as outlined by the American Heart Association/American Stroke Association guidelines

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Most stroke patients are admitted at KH, but those requiring advanced endovascular or neurosurgical intervention are transferred to a tertiary care center

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On presentation to the Emergency Department....

Suspected stroke patients have a *Stroke Alert* called, which prioritizes them for physician evaluation, CT imaging, and neurology consultation

Admission criteria and destination is outlined on the next slide

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TIA/STROKE Guidelines

NURSING WORKLOAD	ICU	ICCU	OTHER UNIT
	<ul style="list-style-type: none"> • Ratio 1:1, 1:2 • Continuous observation and interventions more frequently than every 2 hours 	<ul style="list-style-type: none"> • Ratio at most 1:3 • Frequent observation and intervention no more frequently than every 2 hours for limited time. 	<ul style="list-style-type: none"> • Tele-Med/Surg Ratio 1:4 • Routine observation and intervention no more frequently than every 4 hours.
STROKE/TIA	<ul style="list-style-type: none"> • Cerebellar hemorrhage • CVA with Thrombolytics –ICU level of care suggested for 24 hours after Thrombolytic administration • CVA with Airway compromise • CVA with Hemodynamic Instability • CVA with Mod. Hemodynamic Instability requiring vasoactive medication titration – Preferred ICU • Hemorrhagic CVA with Hemodynamic Instability 	<ul style="list-style-type: none"> • Hemorrhagic CVA - Hemodynamically stable and patent airway • Cerebellar Stroke - critically stable. 	<p>OBSERVATION UNIT (PREFERRED 2 SOUTH):</p> <ul style="list-style-type: none"> • TIA patients <p>MED/SURG/TELE UNIT (PREFERRED 4 SOUTH):</p> <ul style="list-style-type: none"> • CVA patients

Policy References:
1) PC.19 Medication Administration
2) PC.180 Patient Placement Guidelines

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To assist in achieving the best evidence-based care for stroke patients as well as being in compliance with Joint Commission standardized practices, admission PowerPlans have been developed.











These should be used for patients admitted for TIA, ischemic stroke, and hemorrhagic stroke

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The Stroke
PowerPlans can
be found by
typing in “stroke”
in Cerner order
entry



stroke  Advanced Options  Type: 




- Stroke Alert
- Stroke Education
- Stroke Quality Measures
- Stroke Risk Assessment
-  ED Stroke Alert GREATER than 4 hours or Wake Up
-  ED Stroke Alert LESS than 4 hours
-  ED Stroke/TIA - NON ALERT
-  NEURO Stroke Admission ICU (POST-IV Thrombolytic)
-  NEURO Stroke Admission ICU/ICCU (NON-IV Thrombolytic)
-  NEURO Stroke Admission Med-Surg (NON-IV Thrombolytic)
-  NEURO Stroke Alert Inpatient
-  NEURO Stroke Intracerebral Hemorrhage Admission ICU/ICCU
-  Neuro/Stroke MED Tube Feeding: Small Bowel (ADULT Patients)
- NIH Stroke Scale
-  ED Stroke: Intracerebral Hemorrhage




"Enter" to Search

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The TIA
Observation
PowerPlan can be
found by typing
“TIA” in Cerner
order entry



tia  Advanced Options  Type:  Inpatient

-  Clinical Pathway TIA
-  ED Stroke/TIA - NON ALERT
-  NEURO Transient Ischemic Attack (TIA) Admission
- A & D topical ointment
- A & D topical ointment (1 app, Topical, Ointment, every 4 hours., PRN other (see comment))
- A+D topical ointment
- A+D topical ointment (1 app, Topical, Ointment, every 4 hours., PRN other (see comment))
- Absorbine Athletes Foot 1% topical cream
- Absorbine Athletes Foot 1% topical cream (1 app, Topical, Cream, BID)
- Absorbine Athletes Foot 1% topical cream (1 app, Topical, Cream, Once)
- Acticin 5% topical cream
- Acticin 5% topical cream (1 app, Topical, Cream, Once)
- acyclovir 5% topical ointment

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Our recent recertification survey from the Joint Education(March 2025) found opportunity for increased compliance in our use of order sets.

As an action plan, we have set a **benchmark of 92% compliance** of orderset use in the Emergency Department and on admission orders for all stroke and TIA patients

Physician and Allied Health Professional Stroke Education

Patient education is a
required component of our
service as a stroke center



This dotphrase allows you to
incorporate patient
education on cardiovascular
risk factors into your
documentation

Dot-phrase [..stroke_risk]

Patient Education on Cardiovascular Risk Factors

The following marked items were identified as risk factors for stroke for the patient.

Strategies to address these risk factors were discussed with the patient.

- ☐ Hypertension
- ☐ Hyperlipidemia
- ☐ Diabetes
- ☐ Physical Inactivity
- ☐ Overweight/Obesity
- ☐ Smoking
- ☐ Atrial Fibrillation

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Inpatient Stroke Alert process

- For patients who have acute onset of new neurologic symptoms, or an increase in NIHSS score of 3 or more, the rapid response team (RRT) is activated to evaluate the patient
- The RRT RN will perform a full NIHSS score, activate the stroke alert, and will notify the attending physician
- The patient's attending physician is expected to respond within 15 minutes of notification (in person is preferred)
- The attending physician will discuss care with the on-call neurologist as needed to determine need for further imaging (e.g. CTA of the head/neck) and treatment options such as IV thrombolytics or transfer for interventional treatment

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Inpatient Stroke Alert process - continued

- MD to MD communication should be accomplished within 20 minutes of the in-house stroke alert. The primary care physician will discuss treatment options with the on-call neurologist.
- Clear communication by the primary care physician with all responders on the treatment plan is essential (e.g., tenecteplase administration or transfer for large vessel occlusion).
- The RN may request the PCP come to the bedside for immediate evaluation (within 30 minutes)
- If IV thrombolytics are given as a result of an inpatient stroke alert the primary care physician will transfer the patient to the ICU
- If a new or expanding hemorrhage is found on CT, the attending physician will consult neurosurgery to assist in determining the treatment plan

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Inpatient Stroke Alert process

RRT RN - Stroke Alert Neurology Call

- Patient age
- Admitted for ... on hospital day #...
- Reason stroke alert called (new neurologic symptoms or worsening of previous symptoms)
- Last seen normal time
- Current NIHSS score (and what the new deficits are)
- Previous NIHSS score
- Past Medical History (especially important are cardiac and neurologic disorders, history of seizures, history of diabetes, recent surgery/arterial punctures)
- Current Medications – especially anticoagulants

If you have time to gather it

- Any abnormal findings on the patient's initial CT or CTA (if they were initially seen as a potential stroke patient)
- Family contact name and number (if the patient is unable to make their own medical decisions)

RRT RN - Duties

(see in-house stroke alert checklist for full list of duties)

- Call stroke alert if patient meets criteria (+BE FAST OR NIHSS ≥ 3 points)
- Primary RN to assist with LKW verification
- Place in-house stroke alert PowerPlan (attending physician)
- Obtain patient information using script
- Call primary care physician (PCP)
 - Prep patient for CT imaging at the same time
 - PCP/Neurologist will determine if CT and/or CTA is needed
- If the PCP does not respond within 15 minutes (preferably at bedside) contact the on-call neurologist for treatment plan.
- If the neurologist does not respond within 10 minutes; refer to AMiON schedule and contact the back-up neurologist
- Primary RN to contact attending physician with update
- RRT RN may request attending and/or neurologist to come to bedside if possible tenecteplase, new hemorrhage or large vessel occlusion

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Inpatient Stroke FLOWCHART



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CONTACT STROKE CARE PERSONNEL

Alert:

1. RRT RN
2. Nursing supervisor
3. Inpatient pharmacist on duty
4. Respiratory therapist
5. Phlebotomist
6. Patient transport

Page/Call:

1. Primary Care Provider (PCP)
2. Neurologist and/or neurosurgeon on call as needed
3. CT tech
4. Engage interpreter services as needed
5. Engage Patient Family Services as needed

- Patients with LKW < 24 hours with large vessel occlusion (ICA, MCA, MI) provider may contact stroke interventionalist for potential transfer to tertiary center.
- Patients with LKW > 4 hours consider CT perfusion.

WITHIN 5 MIN

WITHIN 20 MIN

WITHIN 30 MIN

OUR GOAL
45 MIN

Patient noted to have new or worsening neurological deficits?
NIHSS \geq 3 points, + BE FAST or RN discretion establish last known well time.

1. Call RRT.
2. Check blood glucose and vital signs.
3. NIHSS to be completed by certified personnel.
4. RRT RN to confirm new or worsening neuro deficits.

POSSIBLE STROKE? YES

NO

Care per RRT RN/Primary Care Provider (PCP).

RRT RN initiates In-House Stroke Alert

1. PBX to page personnel indicated in stroke alert policy.
2. CT scanner held.
3. RRT RN to contact Primary Care Provider (PCP). Use the stroke scripting tool.
4. Frequent BP checks (at least x 2 prior to initiation of IV thrombolytic).

CONTINUE STROKE ALERT? YES

NO

1. Care per PCP.
2. Call PBX to cancel stroke alert.

1. Attending to order In-house Stroke Alert Powerplan.
2. Obtain STAT CT/CTA scan per PCP/neurologist.
3. PCP to discuss plan of care with neurologist as needed to determine if patient is a candidate for IV thrombolytic or other treatment options.

IV THROMBOLYTIC CANDIDATE? YES

NO

1. Care per PCP.
2. Neurologist may consult.
3. If bleed on CT: provider to initiate neurosurgical consult and order Hemorrhagic Admission Powerplan.

1. Attending notifies ICU provider, if not already done.
2. Official CT read by radiologist. Radiologist to call RRT RN with CT results and CTA if large vessel occlusion.
3. Neurologist to order IV thrombolytic and initiate NEURO: IV Thrombolytic CC Infusion Powerplan. Consent obtained.

1. RN to initiate IV thrombolytic flowsheet.

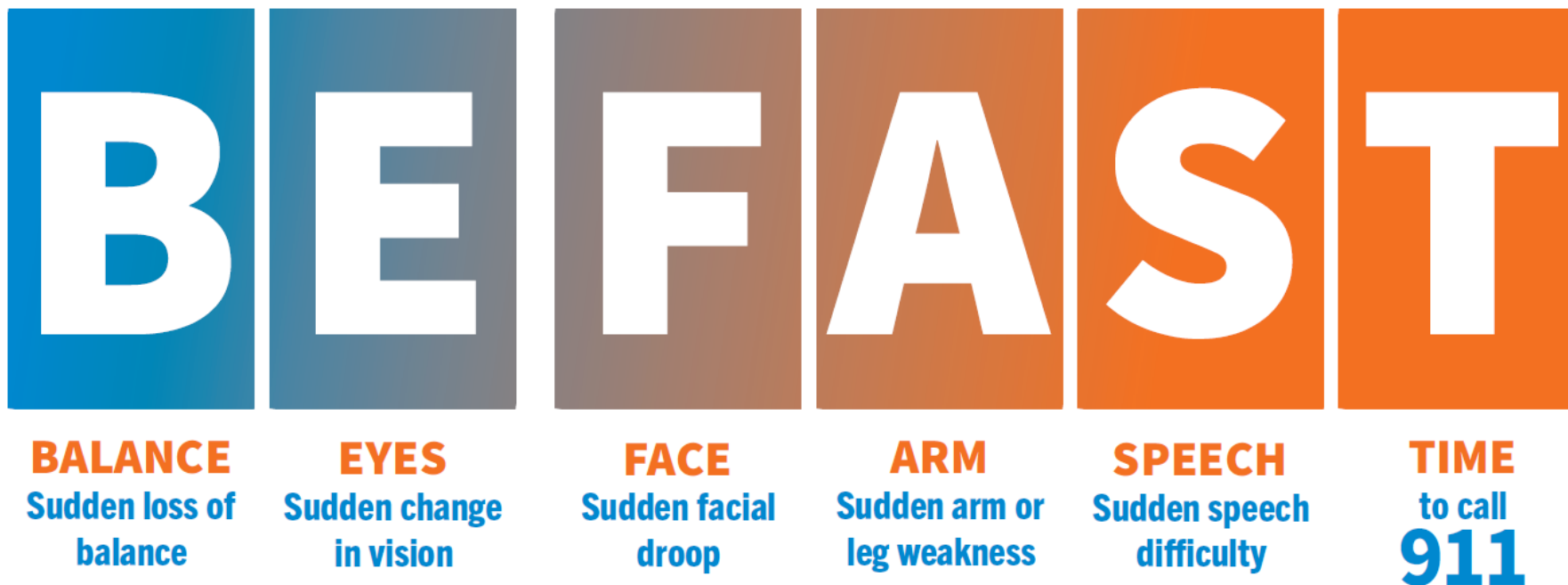
2. Pharmacist to mix IV thrombolytic.
3. Double verification performed at bedside prior to administration and noted on IV thrombolytic flowsheet.
4. IV thrombolytic initiated without delay; RRT RN to monitor patient and document on IV thrombolytic flowsheet and remain with patient until transfer.

Amit to ICU

ICU provider to order IV thrombolytic Admission Powerplan.

Physician and Allied Health Professional Stroke Education

Know the signs of stroke



FAST emergency treatment may reduce disability and save your life

How to Call for Help

BE FAST emergency treatment may reduce disability and save a life!!



911

If you are in the
community - call 911.



9-911

If you are at work, but
outside the acute
hospital – call 9-911 and
call for help



44

If you are in the acute
care hospital – call 44
and a Rapid Response
(RRT)

Stroke Program Leadership



Dr. Sean Oldroyd
Stroke Program Medical Director



Cheryl Smit, RN-BC
Stroke Program Manager





**The pursuit of
healthiness**