Arkansas Stroke Ready Hospital

Attachment Examples

1. An example of a copy of the roster/call schedule for nurses.

EXAMPLE ONLY

Hospital's Name:

EMERGENCY DEPARTMENT NURSES ROSTER

Roster 1	Date (W/E)	12-Aug-18	Time	8.00am	10.00pm

Manager	Mgr	Supervisor	Spvr	Cashier	Cshr	Front Desk	Fdesk	Customer Service	C-S
Security	Scrty	Janitor	Jan	Day Off	Doff	Other 1	O1	Other 2	O2

		Staff No.	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Total Shifts
Employee	Department		Role	Time	Role	Time	Role	Time	Role	Time	Role	Time	Role	Time	Role	Time	
Joe Blog	Accounts	Staff 001	Cshr	9.00-5.30	Cshr	9.00-5.30	Cshr	9.00-5.30									3
Jim Big	Admin	Staff 002							Cshr	9.00-5.30	Cshr	9.00-5.30	Cshr	9.00-5.30			3
Jill Good	Admin	Staff 003	Fdesk	9.00-5.30	Fdesk	9.00-5.30	Fdesk	9.00-5.30	Fdesk	9.00-5.30							4
John Great	Customer Service	Staff 004									Fdesk	9.00-5.30	Fdesk	9.00-5.30			2
Jane Tops	Customer Service	Staff 005	C-S	3.00-10.00	C-S	3.00-10.00	C-S	3.00-10.00	C-S	3.00-10.00	C-S	3.00-10.00					5
David Small	Customer Service	Staff 006	C-S	8.00-3.00	C-S	8.00-3.00	C-S	8.00-3.00	C-S	8.00-3.00	C-S	8.00-3.00					5
Tom Boss	Mangement	Staff 007	Mgr	9.00-5.30	Mgr	9.00-5.30	Mgr	9.00-5.30	Mgr	9.00-5.30	Mgr	9.00-5.30					5
Amy Special	Management	Staff 008					Spvr	9.00-5.30	Spvr	9.00-5.30	Spvr	9.00-5.30	Spvr	9.00-5.30			4
Employee 9	Admin	Staff 009	Scrty	9.00-5.30	Scrty	9.00-5.30	Scrty	9.00-5.30	Scrty	9.00-5.30	Scrty	9.00-5.30	Scrty	9.00-5.30			6
Employee 10		Staff 010															0
Employee 11	Admin	Staff 011	jan	9.00-5.30			jan	9.00-5.30			jan	9.00-5.30	jan	9.00-5.30			4
Employee 12		Staff 012															0
Employee 13		Staff 013															0
Employee 14		Staff 014															0
Employee 15		Staff 015															0
Employee 16		Staff 016															0
Employee 17		Staff 017															0
Employee 18		Staff 018															0
Employee 19		Staff 019															0
Employee 20		Staff 020															0
Employee 21		Staff 021															0
Employee 22		Staff 022															0
Employee 23		Staff 023															0
Employee 24		Staff 024															0
Employee 25		Staff 025															0
Employee 26		Staff 026															0
Employee 27		Staff 027															0
Employee 28		Staff 028															0
Employee 29		Staff 029															0
Employee 30		Staff 030															0

(Please Do Not Use Patient Identifiers)

Arkansas Stroke Ready Hospital

Attachment Examples

2. An example of a hospital's a designated stroke coordinator/facilitator.

EXAMPLE ONLY

Hospital's Name:

STROKE PROGRAM COORDINATOR			
Job Code: 800031	FLSA Status: Exempt	Mgt. Approval: T Abitz	Date: 7-18
Department: 9328 Nursing Admin-Surgical		HR Approval: M Buenger	Date: 7-18

JOB SUMMARY

The Stroke Program Coordinator is fundamental to the development, implementation, and evaluation of the stroke program directed towards the provision of quality services for patients who are experiencing stroke from a multi-disciplinary perspective throughout the continuum of care. This individual works collaboratively with the Stroke Program Medical and Surgical Directors in a mutually supportive relationship which is essential to the success of the program.

The Stroke Program Coordinator is an expert nurse who provides leadership for the organization of services and systems necessary for a collaborative approach to stroke care. The Stroke Program Coordinator will assume the day-to-day responsibilities of process and performance improvement activities as they relate to nursing, and ancillary personnel and assist in carrying out the same functions for all staff.

The Stroke Program Coordinator plans, implements and evaluates clinical programs to achieve high quality, patient-focused outcomes which advance patient and family care and nursing practice in stroke care.

The Stroke Program Coordinator is responsible for the Stroke Program development, quality assessment, improvement and inter/intra disciplinary communications.

The Stroke Program Coordinator will work collaboratively with all hospital and clinic personnel on shared system and performance improvement projects.

MAJOR RESPONSIBILITIES

The position responsibilities listed below are in priority order.

Program Management Responsibilities

- Develops and establishes operational and strategic goals and objectives consistent with the American Heart and Stroke Association, The Joint Commission for Accreditation, and UW Health including Performance Improvement and a Patient Safety program.
- Coordinates the development, implementation, review, and revision of Stroke Program standards, policies, procedures, and protocols.
- Incorporates knowledge of AHA Guidelines as well as emerging science and evidence based practice into Stroke program standards.
- Participates in Acute Stroke Code activations when available to ensure protocols are followed.
- Assists in coordination of the Telestroke Program.
- Leads and participates in performance improvement processes.

Administrative Responsibilities

- Assists in the development of annual budgets and capital equipment requests.
- Monitors the Operational Efficiency of the Stroke Program.
- Promotes marketing efforts for the Stroke Program to internal and external audiences that will support the Program image to the community.
-

Education Responsibilities

- Develop and deliver acute stroke continuing education programs. Plans, coordinates and evaluates Stroke education for nursing, residents and providers related to the care and management of a stroke a patient in collaboration with Stroke Program Directors.
- Provides stroke related education to internal and external audiences, including planning and participating in educational programs targeting hospital personnel, EMS providers in the local and regional communities.
- Participate in educational opportunities appropriate to professional goals.

Research Responsibilities

- Remains current in research related to the stroke patient populations and stroke systems of care.
- Interprets and applies current research into clinical practice.
- Participates in Comprehensive Stroke Center research
- Participates in the development, implementation, and analysis of research projects and communicate findings through presentations and publications.

Committee Responsibilities.

- Chairs relevant Stroke Program Committees related to quality improvement and regulatory adherence.

- Actively participates on internal, local, regional, and national advisory groups to work to advance the science of care for the person experiencing stroke

Clinical Responsibilities

- Supports delivery of evidence-based acute stroke assessment and management.
- Provides expert nursing consultation and practice oversight.
- Manages critical pathway time frames. Evaluates patient outcomes and identifies and intervenes on variances.
- Create and implement delivery models for the transitions of complex patients between multiple specialty and primary care providers and between healthcare settings and home.

(Please Do Not Use Patient Identifiers)

Arkansas Stroke Ready Hospital

Attachment Examples

3. An example of a hospital's ER physician call roster.

EXAMPLE ONLY

Hospital's Name:

EMERGENCY DEPARTMENT PHYSICIAN ROSTER

Roster 1	Date (W/E)	12-Aug-18	Time	8.00am	10.00pm

Manager	Mgr	Supervisor	Spvr	Cashier	Cshr	Front Desk	Fdesk	Customer Service	C-S
Security	Scrty	Janitor	Jan	Day Off	Doff	Other 1	O1	Other 2	O2

			Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Total Shifts
Employee	Department	Staff No.	Role	Time	Role	Time	Role	Time	Role	Time	Role	Time	Role	Time	Role	Time	
Joe Blog	Accounts	Staff 001	Cshr	9.00 - 5.30	Cshr	9.00 - 5.30	Cshr	9.00 - 5.30									3
Jim Big	Admin	Staff 002							Cshr	9.00 - 5.30	Cshr	9.00 - 5.30	Cshr	9.00 - 5.30			3
Jill Good	Admin	Staff 003	Fdesk	9.00 - 5.30	Fdesk	9.00 - 5.30	Fdesk	9.00 - 5.30	Fdesk	9.00 - 5.30							4
John Great	Customer Service	Staff 004									Fdesk	9.00 - 5.30	Fdesk	9.00 - 5.30			2
Jane Tops	Customer Service	Staff 005	C-S	3.00 - 10.00	C-S	3.00 - 10.00	C-S	3.00 - 10.00	C-S	3.00 - 10.00	C-S	3.00 - 10.00					5
David Small	Customer Service	Staff 006	C-S	8.00 - 3.00	C-S	8.00 - 3.00	C-S	8.00 - 3.00	C-S	8.00 - 3.00	C-S	8.00 - 3.00					5
Tom Boss	Mangement	Staff 007	Mgr	9.00 - 5.30	Mgr	9.00 - 5.30	Mgr	9.00 - 5.30	Mgr	9.00 - 5.30	Mgr	9.00 - 5.30					5
Amy Special	Management	Staff 008					Spvr	9.00 - 5.30	Spvr	9.00 - 5.30	Spvr	9.00 - 5.30	Spvr	9.00 - 5.30			4
Employee 9	Admin	Staff 009	Scrty	9.00 - 5.30	Scrty	9.00 - 5.30	Scrty	9.00 - 5.30	Scrty	9.00 - 5.30	Scrty	9.00 - 5.30	Scrty	9.00 - 5.30			6
Employee 10		Staff 010															0
Employee 11	Admin	Staff 011	jan	9.00 - 5.30			jan	9.00 - 5.30			jan	9.00 - 5.30	jan	9.00 - 5.30			4
Employee 12		Staff 012															0
Employee 13		Staff 013															0
Employee 14		Staff 014															0
Employee 15		Staff 015															0
Employee 16		Staff 016															0
Employee 17		Staff 017															0
Employee 18		Staff 018															0
Employee 19		Staff 019															0
Employee 20		Staff 020															0
Employee 21		Staff 021															0
Employee 22		Staff 022															0
Employee 23		Staff 023															0
Employee 24		Staff 024															0
Employee 25		Staff 025															0
Employee 26		Staff 026															0
Employee 27		Staff 027															0
Employee 28		Staff 028															0
Employee 29		Staff 029															0
Employee 30		Staff 030															0

(Please Do Not Use Patient Identifiers)

4. An example of a Standardized Assessment Tool for Stroke Severity.

EXAMPLE ONLY

Hospital's Name:

NIH STROKE SCALE

Patient Identification. ___ ___-___ ___ ___-___ ___ ___

Pt. Date of Birth ___ ___/___ ___/___ ___

Hospital _____(___ ___-___ ___)

Date of Exam ___ ___/___ ___/___ ___

Interval: [ ] Baseline [ ] 2 hours post treatment [ ] 24 hours post onset of symptoms ±20 minutes [ ] 7-10 days
[ ] 3 months [ ] Other _____(___ ___)

Time: ___ ___:___ ___ [ ]am [ ]pm

Person Administering Scale _____

Administer stroke scale items in the order listed. Record performance in each category after each subscale exam. Do not go back and change scores. Follow directions provided for each exam technique. Scores should reflect what the patient does, not what the clinician thinks the patient can do. The clinician should record answers while administering the exam and work quickly. Except where indicated, the patient should not be coached (i.e., repeated requests to patient to make a special effort).

Instructions	Scale Definition	Score
1a. Level of Consciousness: The investigator must choose a response if a full evaluation is prevented by such obstacles as an endotracheal tube, language barrier, orotracheal trauma/bandages. A 3 is scored only if the patient makes no movement (other than reflexive posturing) in response to noxious stimulation.	0 = **Alert;** keenly responsive. 1 = **Not alert;** but arousable by minor stimulation to obey, answer, or respond. 2 = **Not alert;** requires repeated stimulation to attend, or is obtunded and requires strong or painful stimulation to make movements (not stereotyped). 3 = Responds only with reflex motor or autonomic effects or totally unresponsive, flaccid, and areflexic.	_____
1b. LOC Questions: The patient is asked the month and his/her age. The answer must be correct - there is no partial credit for being close. Aphasic and stuporous patients who do not comprehend the questions will score 2. Patients unable to speak because of endotracheal intubation, orotracheal trauma, severe dysarthria from any cause, language barrier, or any other problem not secondary to aphasia are given a 1. It is important that only the initial answer be graded and that the examiner not "help" the patient with verbal or non-verbal cues.	0 = **Answers** both questions correctly. 1 = **Answers** one question correctly. 2 = **Answers** neither question correctly.	_____
1c. LOC Commands: The patient is asked to open and close the eyes and then to grip and release the non-paretic hand. Substitute another one step command if the hands cannot be used. Credit is given if an unequivocal attempt is made but not completed due to weakness. If the patient does not respond to command, the task should be demonstrated to him or her (pantomime), and the result scored (i.e., follows none, one or two commands). Patients with trauma, amputation, or other physical impediments should be given suitable one-step commands. Only the first attempt is scored.	0 = **Performs** both tasks correctly. 1 = **Performs** one task correctly. 2 = **Performs** neither task correctly.	_____
2. Best Gaze: Only horizontal eye movements will be tested. Voluntary or reflexive (oculocephalic) eye movements will be scored, but caloric testing is not done. If the patient has a conjugate deviation of the eyes that can be overcome by voluntary or reflexive activity, the score will be 1. If a patient has an isolated peripheral nerve paresis (CN III, IV or VI), score a 1. Gaze is testable in all aphasic patients. Patients with ocular trauma, bandages, pre-existing blindness, or other disorder of visual acuity or fields should be tested with reflexive movements, and a choice made by the investigator. Establishing eye contact and then moving about the patient from side to side will occasionally clarify the presence of a partial gaze palsy.	0 = **Normal.** 1 = **Partial gaze palsy;** gaze is abnormal in one or both eyes, but forced deviation or total gaze paresis is not present. 2 = **Forced deviation,** or total gaze paresis not overcome by the oculocephalic maneuver.	_____

Rev 10/1/2003

BE-FAST[17]

For **Triage Nurse** evaluation of **Walk-In Patients** to screen for **symptoms of stroke**

Symptoms due to stroke are usually **sudden** in onset and otherwise **unexplained** (i.e. by trauma, intoxication, pre-existing condition)

B	E	F	A	S	T
Balance	**E**yes	**F**ace	**A**rm	**S**peech	**T**ime
Sudden unexplained loss of balance, dizziness or vertigo	Loss of vision in one eye or one side of vision or Double vision	Smile is asymmetric	Arm/hand (or leg) weakness	Slurred speech or trouble speaking or understanding speech	Time to notify an ED physician for stat evaluation*

*If acute stroke is the suspected cause of symptoms, ED physician would then activate an ED Code Stroke

(Please Do Not Use Patient Identifiers)

5. An example of a hospital's Acute Ischemic Stroke Guidelines/Protocols.

EXAMPLE ONLY

Hospital's Name:

APPROVED JUNE 2018

Acute Stroke Practice Guidelines for the Emergency Department

INCLUDES ISCHEMIC STROKES, TIAS, INTRACEREBRAL HEMORRHAGE, NON-TRAUMATIC SUBARACHNOID HEMORRHAGE

Policy statement:

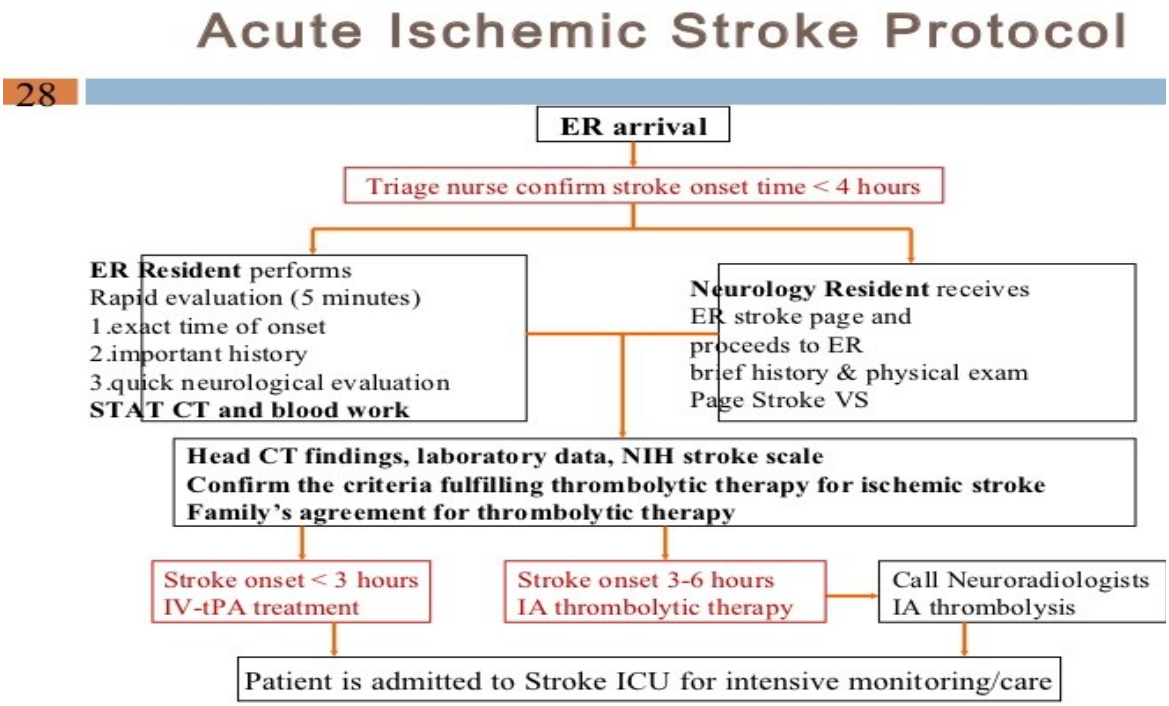
Hospital Name: has adopted theses practice guidelines to delineate a consistent, evidence-based approach to treating the patient who presents with signs and symptoms consistent with acute stroke. Although these guidelines assist in guiding care, responsibility to determine appropriate individualized care remains with provider themselves.

OUTCOMES/GOALS	1. Rapid identification of vascular events. 2. Manage appropriately and efficiently according to Brain Attack Coalition guidelines. 3. Evaluate in a cost-effective manner.
TRIAGE STAFF	1. Triage nurse to see patient rapidly upon arrival. If presenting with stroke signs/symptoms less than 24 hours from onset, notify ED provider. (Stoke symptoms include: Sudden onset of numbness or weakness of the face, arm, or leg, especially on one side of the body; confusion, trouble speaking or understanding speech; trouble seeing in one or both eyes; trouble walking, dizziness, or loss of balance or coordination; severe headache with no known cause or "worst headache of my life.") Anticipate ED provider initial evaluation to be completed within 10 minutes of patient arrival; if stroke suspected, they would activate Stroke Alert or Code Stroke. 2. If onset of symptoms is greater than 24 hours or symptoms have resolved and ABC's are stable, then triage level may be Level 3. May upgrade the triage level based on nursing judgement. 3. Registration to be done at bedside.
E.D. REGISTRATION	Prioritize for immediate bedside registration.

R. N.	1. Notify CT to anticipate an emergent CT scan and enter order as Extreme Emergency if symptoms are persistent and onset is less than 24 hours. 2. Obtain Point of Care (POC) glucose unless EMS glucose value already known. 3. Anticipate orders for: a. CT without contrast b. Labs for CBC, INR, PTT, to be sent in red Stroke Alert bag c. Labs for POC troponin and POC Chem 8 to be run in the ED d. 12 lead EKG e. CXR (if clinically indicated)
ED PHYSICIAN	4. If symptoms onset is less than 24 hours, evaluate for suspected acute stroke within 10 minutes of patient arrival, if stroke suspected, activate Stroke Alert via the ECC and initiate orders for CT without contrast, CBC, INR, PTT, to be sent in Stroke Alert bag; POC troponin, POC Chem 8, and 12 lead EKG. Obtain CXR if clinically indicated. 5. History: age, time of symptom onset (when last normal), duration, type of symptoms, medications (antiplatelet and anti-coagulants), past medical history (CAD, HTN, DM, previous TIA/stroke, PVD, seizures/epilepsy, tobacco, illicit drug use. 6. Exam: visual fields, extraocular muscles, speech impairment, weakness or sensory deficits, incoordination, ataxia.
ED STROKE TEAM **ED PHYSICIAN**	1. Actions based on duration of symptoms: a. For persistent symptoms onset less than 24 hours: I. Stroke Team to respond via phone to Stroke Alert page within 5 minutes and discusses case with ED provider. If patient determined to be a potential treatment candidate with thrombolytics and /or thrombectomy, the rapid acute stroke workup with continue as outlined in #2 below, and the Stroke Team will arrive in the department within 30 minutes, along with a clinical stroke coordinator, to evaluate patient for further treatment. If not a treatment candidate, the Stroke Alert will be considered a Stand Down and appropriate workup will continue in a timely manner. II. Consider thrombolytics for all ischemic stroke patients who present with symptom onset of 3 hours or less. Select patients may be considered for thrombolytics between 3-4.5 hours of onset. Follow your hospital Practice Standard for Intravenous Administration of t-PA in Acute Ischemic Stroke as appropriate with goal of door to thrombolytics less than 60 minutes. III. Consider interventional radiology maneuvers for onset of symptoms of 24 hours or less. IV. Other research options may be available for patients with onset of symptoms of 24 hours or less and initiated by the Stroke Team Physician. b. For potential acute treatment candidates: I. Head CT to be completed within 20 minutes of arrival and film reviewed by radiology (or Stroke Team Physician) within 20 minutes of completion. Order “CT without contrast” and ordered “extreme emergent.” I. Labs, if indicated: CBC, INR, PTT, POC troponin, and POC Chem 8 (must be completed and results available in Epic within 45 minutes of

	arrival). II. 12 lead EKG (must be completed and results ready for review within 45 minutes of arrival, prioritize CT over 12 lead). III. CXR, if clinically indicated (must be completed and results ready for review within 45 minutes of arrival, prioritize CT over CXR). 2. If CT subsequently shows intracranial hemorrhage (subarachnoid or intracerebral), request immediate neurosurgery consult and reverse any anti-coagulants. Refer to AHA Practice Guidelines for the Inpatient Management of Patients with Intracerebral and Subarachnoid Hemorrhage. 3. For ischemic stroke or TIA with persistent symptom onset of greater than 12 hours, but less than 24 hours, have the ECC (Emergency Communication Center) contact the Stroke Team (pager: ____). Complete the items in #2 above in a timely manner, unless advised otherwise by the Stroke Team. 4. If symptom onset is greater than 24 hours, obtain CBC with diff, INR, PTT, BMS and call the neurology resident on call who will determine additional diagnostics that may be required. 5. If symptoms have resolved or are transient (TIA), see evaluation of TIA section below.

(Please Do Not Use Patient Identifiers)



Arkansas Stroke Ready Hospital

Attachment Examples

6. An example of verifying the amount of ACTIVASE stocked in a hospital. (The attachment must include dosage forms and strengths of ACTIVASE are available, the number of vials present, and the number of patients treated with (1) vial of ACTIVASE)

EXAMPLE ONLY

Hospital's Name:

NAME	DOSAGE	LOCATION	NUMBER OF VIALS
Alteplase (Activase)	100 mg (58 Million IU)	Pharmacy	2
Alteplase (Activase)	100 mg (58 Million IU)	ED Pyxis	1

(Please Do Not Use Patient Identifiers)

7. An Example of a Hospital Inter-Facility Transfer Protocol and Contingency Plan for Inclement Weather

EXAMPLE ONLY

Hospital's Name:

STROKE GUIDELINES FOR INTER-FACILITY TRANSFER

INTRODUCTION

Each designated hospital level of care is based on accessibility and availability of timely health care resources. The development of designated levels of care and inter-facility transfer guidelines will maximize quality of care, ensure patient safety, and promote effective use of health care resources.

(1) Level I - Comprehensive Stroke Center (CSC).
(2) Level II - Primary Stroke Center (PSC); and
(3) Level III - Acute Stroke Ready Center (ASRC)

I. Level I Comprehensive Stroke Center: Defined as a facility with immediate 24-hour access to the necessary personnel, infrastructure, equipment, expertise, and programs to rapidly diagnose and treat stroke patients who require a high intensity of medical and surgical care, specialized tests, or interventional therapies.

Timely Transfer of Patients to a Comprehensive Stroke Center:

Because of the potential for rapid clinical deterioration, patients who present with severe disease or who have the high likelihood of clinical deterioration should be considered for timely transfer to a CSC. The transfer process should be initiated as early as possible in the patient's course. Remember, "**time is brain**."

Circumstances to consider for a transfer to a Comprehensive Stroke Center

- Non-traumatic Subarachnoid Hemorrhage
- Intracerebral Hemorrhage
  - ✓ Hemispheral /Supratentorial: (> 30 mL or > 3cm)
  - ✓ Cerebellar hemorrhage
  - ✓ Brain Stem hemorrhage
  - ✓ Intraventricular hemorrhage
  - ✓ Suspected underlying lesion by imaging (e.g., CTA reveals a possible AVM)
- s/p IV t-PA with Concerns
  - ✓ Potential for malignant cerebral edema
  - ✓ Potential need or benefit from intra-arterial recanalization interventions
  - ✓ Perceived higher risk for symptomatic intracranial hemorrhage (e.g., difficult to
  - ✓ control hypertension, malignant hypertension)
- Consideration for Hemicraniectomy
  - ✓ Age dependent (considered especially for age less than 60)
  - ✓ Baseline Modified Rankin of 0 or 1 or baseline independent in activities of daily
  - ✓ living (ADLs)
  - ✓ Potential for malignant cerebral edema (e.g., high NIH stroke scale)
- Consideration for Endovascular Recanalization Treatment (ERT) - (Interventional Neuroradiology)

Consultation with tertiary facility initiated as soon as possible
There is a goal time of 90 minutes from arrival of the patient at the PSC to departure to the CSC or PSC with EVT capability.

Goal from acceptance of the patient for transfer by the CSC or PSC with EVT capability to arrival at the CSC or PSC with EVT capability is 90 minutes.

A. Thrombectomy for M1 and ICA occlusions are of proven benefit and recommended by guidelines. Patients should be considered candidates for neurointervention if imaging demonstrates a large artery occlusion and:
   1. Less than 4.5 hours from time of onset (time last known to be at neurologic baseline)
      - NIH stroke score greater than or equal to 6.
      - ASPECTS score greater than or equal to 6; and
      - functionally independent at baseline
   2. Greater than 4.5 hours up to 20 hours from time of onset (time last known to be at neurologic baseline) and can be received in the tertiary facility by 22 hours of last known well (LKW).
      - ASPECTS score 8-10 or core measurements < 30 ml from CT Perfusion or MRI.
      - NIH stroke score greater than or equal to 6; and
      - functionally independent at baseline

B. Other large artery occlusion patients can be considered based on the above criteria, however, though it is not a proven indication. However, it may be reasonable in certain select patients although the benefit is uncertain:
   - Basilar Artery
   - M2
   - M3
   - PCA
   - ACA

Special Circumstances to consider transfer to a Comprehensive Stroke Center
   - Pregnancy associated stroke
   - Pediatric stroke (under age 18) refer to a MIEMSS designated Pediatric Trauma Center
   - Any circumstance for which there is a perceived need for higher level of care
   - Young adult (18-45 years of age) with ischemic stroke
   - Large cerebellar infarct and anticipation for surgical decompression
   - History of Sickle Cell Anemia

II. Level II - Primary Stroke Center: Defined as a facility with the immediate availability of necessary personnel, infrastructure, equipment, expertise, and programs to rapidly diagnose, treat, and either admit the patient or transfer the acute stroke patient. Level II Primary Stroke Centers may be able to take referrals for some but not all conditions managed at a Comprehensive Stroke Center (e.g., Subarachnoid Hemorrhage).

Circumstances to consider for a transfer to a Comprehensive Stroke Center
• Meeting circumstances as identified in §A of this guideline

Circumstances to consider for keeping patient at a Primary Stroke Center
• Intracerebral Hemorrhage
   a) Small volume (less than 30 ml or < 3cm)
   b) No cerebellar / brain stem involvement
   c) No intraventricular hemorrhage
   d) An alert patient
   e) No suspicion of an underlying lesion such as AVM / Aneurysm
• Patients not meeting circumstances as identified in §A under Comprehensive Center
• Discussion of goals of care is recommended when making decisions to transfer to a Comprehensive Stroke Center
   - Situations in which further interventions might be considered futile
   - Patients with advanced co-morbid disease

- Patients with poor baseline level of independent function
- Patients identified as DNR

- s/p IV t-PA without special concerns
- Unruptured and Asymptomatic Cerebral Aneurysm (consider outpatient clinic referral)

III. Level III - Acute Stroke Ready Center: Defined as a facility with limited access to the necessary personnel, infrastructure, equipment, expertise, and programs to treat the acute stroke patient. The Acute Stroke Ready Center does possess the means to deliver emergent stroke therapies and transfer the acute stroke patient to a Primary or Comprehensive Stroke Center based on the patient's immediate needs.

Circumstances to consider for transfer to a Comprehensive Stroke Center

• Meeting circumstances as identified in §A of this guideline

Circumstances to consider for transfer to a Primary Stroke Center

• Limited or no cranial neurosurgery coverage for patient's s/p IV t-PA or hemorrhage
• s/p IV t-PA
• Intracerebral hemorrhage
  - Small volume (less than 30 ml or < 3 cm)
  - An alert patient
  - No midline shift

IV. Non-Stroke Centers:

Circumstances to consider for transfer to a Comprehensive Stroke Center

• Meeting circumstances as identified in §A of this guideline

Circumstances to consider transfer to a Primary Stroke Center

• Limited or no cranial neurosurgery coverage
• Intracerebral Hemorrhage
  - Small volume (less than 30 ml or < 3cm)
  - An alert patient
  - No midline shift
• s/p IV t-PA

STABILIZATION AND PREPARATION FOR TRANSPORT

1. Upon identification of a patient who may require transfer, immediately contact the potential receiving Primary Stroke Center, Thrombectomy-capable Primary Stroke Center, or Comprehensive Stroke Center based on the above criteria.

   Once transfer is recommended, the consulting facility will reply to the sending facility, within 15 minutes, whether a bed will be available for transfer. If a bed is not available, the consulting facility will advise the sending facility to contact an alternative Comprehensive Stroke Center, Thrombectomy-capable Primary Stroke Center, or Primary Stroke Center.
2. The transferring physician is responsible for contacting the accepting hospital and securing an accepting physician at the receiving facility.
3. The accepting physician will determine the transfer location (e.g., directly to the unit, Interventional Radiology Lab, or the Emergency Department).

ARRANGING FOR TRANSPORTATION

When determining the mode of transport, the following factors should be considered:

1. How soon does the patient need to reach the referral center?

a. A complex stroke patient who might benefit from emergent neurosurgical or interventional neuroradiology treatment should have the transfer completed within 90 minutes of acceptance of patient at the Comprehensive Stroke Center.
b. Transfer times for all other cases will be determined by the receiving center based on the patient's diagnosis and clinical status.
c. The sending facility should inform the patient and family that the patient is being transferred for consideration for advanced treatment.
   - ✓ However, upon arrival at the Comprehensive Stroke Center the patient will be re-evaluated.
   - ✓ The appropriateness of advanced treatment will be determined by the receiving center after re-evaluation.
   - ✓ Advanced treatment may include enrollment in a clinical trial as appropriate.

2. What is the weather/ground conditions that might inhibit air transport?
3. What are the transport times for ground versus air transport from the referring institution?
4. The transferring hospital physician should make an assessment as to whether the patient requires intubation for safe transport to the higher level of care.
5. Should a patient's clinical status change (for better or worse) prior to departure from the hospital, it is imperative that the transferring physician inform the receiving physician of the change in clinical status.
6. All reasonable efforts will be made to obtain a reliable cell phone number for the patient and for responsible family members.

The transportation decision should be made by the receiving physician in collaboration with the referring physician based on clinical judgment, with careful consideration given to the above questions.

TRANSPORT PATIENT WITH:

- ✓ Copy of Medical Record including treatment rendered.
- ✓ Signed consent to transfer patient to receiving facility.
- ✓ Documentation of medications given; and
- ✓ X-ray, neuroimaging, and laboratory results. Include a CD with any relevant imaging.

DO NOT DELAY TRANSPORT WHILE AWAITING RESULT

EXAMPLE ONLY

A CONTINGENCY PLAN FOR INCLEMENT WEATHER

Purpose

The purpose of this plan is to assist in activating sheltering, patient relocation, or partial or full evacuation of [Company]. The responsible individual for content and implementation of this plan is the Chief Executive Officer and/or designee for [Company]. This plan informs actions taken to shelter, relocate (within the facility) or evacuate (external to the facility) patients and personnel. These actions may be driven by many incidents and situations. The overall management of the incident and recovery are the responsibility of the incident commander. Reimbursement tracking, restoration, business continuity, and recovery activities must be conducted in concert with patient protection and movement and are not included in this plan. [Company] will maintain procedures to manage internal and/or external situations which pose a threat to the environment of care or present a life safety threat. Additional personnel may be required to conduct these operations. [Company] will assign personnel to this task including internal staff and external according pre-existing agreements with other facilities (compacts), local First Responder agencies and/or other entities (medical reserve corps, etc.) with resources. This plan was developed in conjunction with the Choose an item. to ensure a consistent approach across the region. Plans have been cross walked against applicable Joint Commission, Occupational Safety and Health Administration (OSHA), Center for Medicare and Medicaid Services (CMS), and other regulations to assure compliance.

Scope

This plan is a supplement to, not a replacement for, the response actions and resources described in the facility Emergency Operations Plan (EOP) and provides additional details relevant to an incident that involves facility sheltering, relocation, or evacuation.

Objectives

The objectives of this plan are to:

- Define key terms,
- Identify the direction and control systems for the coordination of an evacuation or protective actions,
- Provide algorithms for decision-making,
- Describe key communications components,
- Identify the steps of the facility evacuation process, and
- Identify responsibilities of outside agencies and their activation.

Hazard Vulnerability Assessment

[Company] has tailored this plan according to the latest facility Hazard Vulnerability Assessment (HVA) in respect to the hazards which would likely impact the environment of care. The potential hazards which are most likely to impact the facility and force sheltering, patient relocation, and/or evacuation are:

- Weather emergencies – tornado
- Hazardous materials events
- Community based major utilities or systems failures
- Flooding – internal or external
- Structural damage
- [Company] Hazards and Vulnerabilities
- Special Vulnerabilities According to Specialty Functions
  - Click or tap here to enter text.
  - Click or tap here to enter text.
  - Click or tap here to enter text.
- Water (potable and non-potable)
- Steam
- Electricity
- Gas
- Boilers/chillers
- Powered life support equipment
- Information technology/communications
- Security
- Location of the facility in relation to receiving hospitals with appropriate capacity/capability (e.g. NICU capability)

Pre-event Mitigation actions have been undertaken to help minimize the impact of each of these types of emergencies on the facility systems. The [Company] HVA and Pre-Disaster assessment as well as information about mitigation actions are available upon request.

Possible Actions and Definitions

Factors Influencing Actions

Incident Command staff will have to balance the needs, and the time and resources available to meet the needs to determine which of the following strategies is appropriate.

Action Timing

1. PRE-EVENT ACTIONS: Occur in advance of the event (for example, staged evacuation in advance of flooding, sheltering in place)
2. POST-EVENT ACTIONS: Occurs after an event. Post-event actions may be:

- **Emergent** Undertaken immediately and with limited ability to stage patients, transfer records, etc.
- **Urgent** Undertaken after assessment of an evolving threat or after considerations of risk posed by the impact of the event, usually within 4-8 hours after an event occurs

Action Types

1. **SHELTER IN PLACE (SIP)**: Shelter in place assures the maximal safety of individuals in the present location when the dangers of movement exceed the relative risk from the threat or movement cannot be safely completed in a reasonable timeframe. Shelter in place decisions must be made in relation to the risk to the patient—a patient undergoing cardiac surgery at the time of the threat would be moved only the direst situation. Similarly, intensive care unit patients should be moved only in extreme circumstances, but outpatient clinics may be easily evacuated. SIP decisions are not, therefore, necessarily applied to the entire facility. However, in situations where the external environment is the threat (e.g., chemical cloud) protective actions may be taken to protect the facility at large.
2. **INTERNAL PATIENT RELOCATION:** Movement of patients to an area of relative safely in response to a given threat or movement to staging areas within the institution in preparation for evacuation.
    a) Horizontal—Movement to a safe location on the same floor, preferably nearer to an emergency exit. For example, movement to the next smoke compartment during a fire.
    b) Vertical—Movement of individuals to a safe location on a different floor when a horizontal evacuation cannot meet the service or safety needs of the patients or is unsafe.
3. **EVACUATION:** Movement of patients out of the affected facility when the facility cannot maintain a safe environment of care. Evacuations may be emergent or non-emergent.
    a) Partial evacuation—Evacuation of a subset of facility patients. This may involve patients requiring specialized care that can no longer be safety delivered at the affected facility.
    b) Complete evacuation—Complete evacuation of a facility due to an unsafe environment of care. Usually, this will involve facility shutdown actions.

Direction and Control

1. All personnel are authorized to take immediate patient relocation or sheltering actions in response to a life safety emergency.
2. All non-emergent patient movement or evacuation decisions should be made by the Incident Commander after initial situation assessment (see algorithm below) according to the facility EOP and personnel appointed under the Hospital Incident Command System (HICS).

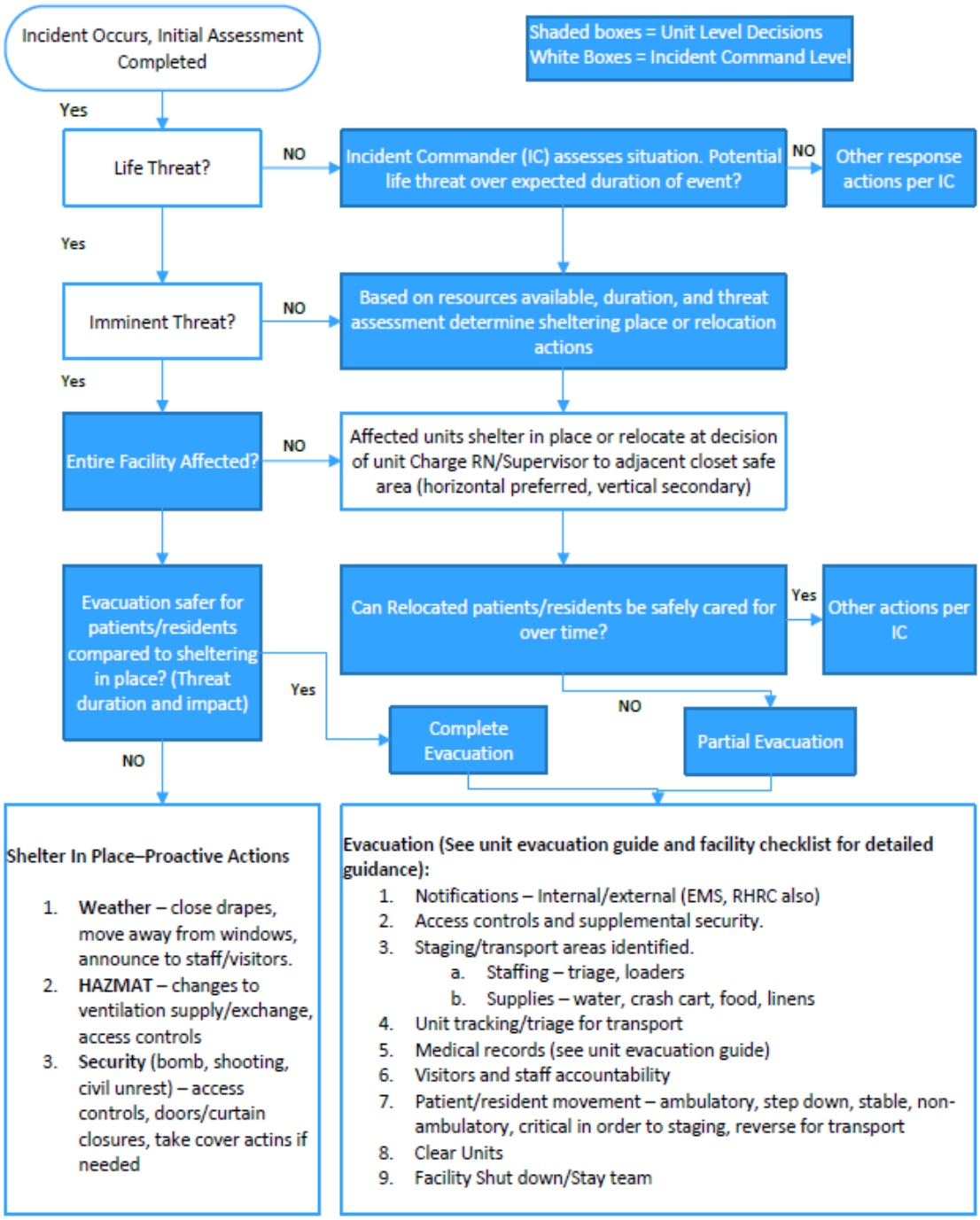
If an evacuation is suggested by local authorities, [Company] will collaborate with local officials and assist in the coordination of the facilities evacuation to the degree safely possible - though this may not necessarily involve a complete evacuation depending on the timeframe and risk of the threat compared to the risk to the patients.

The incident commander will determine the HICS structure for the incident:

a) If evacuation is the incident at the facility (anticipated evacuation for flooding): Operations Chief may supervise evacuation activities.
b) If evacuation is due to another incident at the facility: Evacuation Branch Director should be appointed to supervise (see example below for a partial HICS chart reflecting a fire requiring evacuation).
c) Each facility may wish to map out the division and unit assignments prior to an event as they will be consistent regardless of whether an Evacuation Branch Director is used.

The **decision tree below** can be used to assist in decision making regarding sheltering, relocation, and evacuation, though this is not meant to account for all circumstances.

Figure 1: Sheltering, Relocation, and Evacuation Decision Tree



(Please Do Not Use Patient Identifiers)

Arkansas Stroke Ready Hospital

Attachment Examples

8. An example of a hospital's stroke physician or telestroke physician call roster.

EXAMPLE ONLY

Hospital's Name:

Roster 1	Date (W/E)	12-Aug-18	Time	8.00am	10.00pm

Manager	Mgr	Supervisor	Spvr	Cashier	Cshr	Front Desk	Fdesk	Customer Service	C-S
Security	Scrty	Janitor	Jan	Day Off	Doff	Other 1	O1	Other 2	O2

		Staff No.	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Total Shifts
Employee	Department		Role	Time	Role	Time	Role	Time	Role	Time	Role	Time	Role	Time	Role	Time	
Joe Blog	Accounts	Staff 001	Cshr	9.00-5.30	Cshr	9.00-5.30	Cshr	9.00-5.30									3
Jim Big	Admin	Staff 002							Cshr	9.00-5.30	Cshr	9.00-5.30	Cshr	9.00-5.30			3
Jill Good	Admin	Staff 003	Fdesk	9.00-5.30	Fdesk	9.00-5.30	Fdesk	9.00-5.30	Fdesk	9.00-5.30							4
John Great	Customer Service	Staff 004									Fdesk	9.00-5.30	Fdesk	9.00-5.30			2
Jane Tops	Customer Service	Staff 005	C-S	3.00-10.00	C-S	3.00-10.00	C-S	3.00-10.00	C-S	3.00-10.00	C-S	3.00-10.00					5
David Small	Customer Service	Staff 006	C-S	8.00-3.00	C-S	8.00-3.00	C-S	8.00-3.00	C-S	8.00-3.00	C-S	8.00-3.00					5
Tom Boss	Mangement	Staff 007	Mgr	9.00-5.30	Mgr	9.00-5.30	Mgr	9.00-5.30	Mgr	9.00-5.30	Mgr	9.00-5.30					5
Amy Special	Management	Staff 008					Spvr	9.00-5.30	Spvr	9.00-5.30	Spvr	9.00-5.30	Spvr	9.00-5.30			4
Employee 9	Admin	Staff 009	Scrty	9.00-5.30	Scrty	9.00-5.30	Scrty	9.00-5.30	Scrty	9.00-5.30	Scrty	9.00-5.30	Scrty	9.00-5.30			6
Employee 10		Staff 010															0
Employee 11	Admin	Staff 011	Jan	9.00-5.30			Jan	9.00-5.30			Jan	9.00-5.30	Jan	9.00-5.30			4
Employee 12		Staff 012															0
Employee 13		Staff 013															0
Employee 14		Staff 014															0
Employee 15		Staff 015															0
Employee 16		Staff 016															0
Employee 17		Staff 017															0
Employee 18		Staff 018															0
Employee 19		Staff 019															0
Employee 20		Staff 020															0
Employee 21		Staff 021															0
Employee 22		Staff 022															0
Employee 23		Staff 023															0
Employee 24		Staff 024															0
Employee 25		Staff 025															0
Employee 26		Staff 026															0
Employee 27		Staff 027															0
Employee 28		Staff 028															0
Employee 29		Staff 029															0
Employee 30		Staff 030															0

(Please Do Not Use Patient Identifiers)

9. This example identifies documentation that verifies one hospital average time from patients' arrival time in the ED to the completion time of the CT scan initiation and interpretation in less than < or = 45 Minutes over a 6-month timeframe. (According to AHA GWTG-Stroke, the CT scan should be completed within 25 minutes from the patient's arrival in the ED and should be read within 45 minutes)

EXAMPLE ONLY

Hospital's Name:

Door to CT Initiation and Interpretation < or = 45 Minutes

This example identifies documentation that verifies one hospital average time from patients' arrival time in the ED to the completion time of the CT scan initiation and interpretation in less than < or = 45 Minutes over a 6-month timeframe.

Time Period: Jan 2021 - Jun 2021; **Site:** Your Hospital

Benchmark Group	Time Period	0-15 min.	16-25 min.	26-35 min.	36-45 min.
Your Hospital	Jan 2021	1 (50%)	1 (50%)	0 (0%)	0 (0%)
	Feb 2021	1 (100%)	0 (0%)	0 (0%)	0 (0%)
	Mar 2021	2 (100%)	0 (0%)	0 (0%)	0 (0%)
	Apr 2021	2 (100%)	0 (0%)	0 (0%)	0 (0%)
	May 2021				
	Jun 2021	2 (100%)	0 (0%)	0 (0%)	0 (0%)

(Please Do Not Use Patient Identifiers)

Arkansas Stroke Ready Hospital

Attachment Examples

10. An example of a hospital's laboratory staff roster identifying 24/7 laboratory staff coverage.

EXAMPLE ONLY

Hospital's Name:

Roster 1	Date (W/E)	12-Aug-18	Time	8.00am	10.00pm

Manager	Mgr	Supervisor	Spvr	Cashier	Cshr	Front Desk	Fdesk	Customer Service	C-S
Security	Scrty	Janitor	Jan	Day Off	Doff	Other 1	O1	Other 2	O2

		Staff No.	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Total Shifts
Employee	Department		Role	Time	Role	Time	Role	Time	Role	Time	Role	Time	Role	Time	Role	Time	
Joe Blog	Accounts	Staff 001	Csh	9.00-5.30	Csh	9.00-5.30	Csh	9.00-5.30									3
Jim Big	Admin	Staff 002							Csh	9.00-5.30	Csh	9.00-5.30	Csh	9.00-5.30			3
Jill Good	Admin	Staff 003	Fdesk	9.00-5.30	Fdesk	9.00-5.30	Fdesk	9.00-5.30	Fdesk	9.00-5.30							4
John Great	Customer Service	Staff 004									Fdesk	9.00-5.30	Fdesk	9.00-5.30			2
Jane Tops	Customer Service	Staff 005	C-S	3.00-10.00	C-S	3.00-10.00	C-S	3.00-10.00	C-S	3.00-10.00	C-S	3.00-10.00					5
David Small	Customer Service	Staff 006	C-S	8.00-3.00	C-S	8.00-3.00	C-S	8.00-3.00	C-S	8.00-3.00	C-S	8.00-3.00					5
Tom Boss	Mangement	Staff 007	Mgr	9.00-5.30	Mgr	9.00-5.30	Mgr	9.00-5.30	Mgr	9.00-5.30	Mgr	9.00-5.30					5
Amy Special	Management	Staff 008					Spvr	9.00-5.30	Spvr	9.00-5.30	Spvr	9.00-5.30	Spvr	9.00-5.30			4
Employee 9	Admin	Staff 009	Scrty	9.00-5.30	Scrty	9.00-5.30	Scrty	9.00-5.30	Scrty	9.00-5.30	Scrty	9.00-5.30	Scrty	9.00-5.30			6
Employee 10		Staff 010															0
Employee 11	Admin	Staff 011	jan	9.00-5.30			jan	9.00-5.30			jan	9.00-5.30	jan	9.00-5.30			4
Employee 12		Staff 012															0
Employee 13		Staff 013															0
Employee 14		Staff 014															0
Employee 15		Staff 015															0
Employee 16		Staff 016															0
Employee 17		Staff 017															0
Employee 18		Staff 018															0
Employee 19		Staff 019															0
Employee 20		Staff 020															0
Employee 21		Staff 021															0
Employee 22		Staff 022															0
Employee 23		Staff 023															0
Employee 24		Staff 024															0
Employee 25		Staff 025															0
Employee 26		Staff 026															0
Employee 27		Staff 027															0
Employee 28		Staff 028															0
Employee 29		Staff 029															0
Employee 30		Staff 030															0

(Please Do Not Use Patient Identifiers)

11. This example of documentation verifies your hospital average time for stat lab for CBC, BMP, and PT/PTT/INR from patients arrive time in the ED to the completion time of Lab results being reported in < or = 45 minutes over a 6-month timeframe. (May Run A Report)

EXAMPLE ONLY

Hospital's Name:

	Jan	Feb	Mar	Apr	May	June
CBC (min)						
Patient Arrival in the ED	43	29	21	13	4	13
Completion Time of Lab Results Reported	35	45	30	45	40	30

	Jan	Feb	Mar	Apr	May	June
BMP (min)						
Patient Arrival in the ED	43	29	21	13	4	13
Completion Time of Lab Results Reported	35	45	30	45	40	30

	Jan	Feb	Mar	Apr	May	June
PT/PTT/INR (min)						
Patient Arrival in the ED	43	29	21	13	4	13
Completion Time of Lab Results Reported	35	45	30	45	40	30

(Please Do Not Use Patient Identifiers)