University of Louisville Hospital Observation Unit (ULOU) Operations Manual

University of Louisville Hospital
Department of Emergency Medicine

11/27/2024-ark

Executive Summary

Observation services are provided through the University of Louisville Hospital Observation Unit (ULOU) for a certain type of emergency department patient who meets criteria for observation admission.

Observation patients are those emergency department patients requiring 6-24 hours of care with an average length of stay of 16 hours. The ULOU will have targets of 10-15% of patients in the emergency department will be admitted to the ULOU with 70-90% of patients being discharged from observation status.

Ideal observation services provide protocol driven clinical care through observation units commonly referred to in the emergency department as EDOUs staffed by physicians and advanced practice providers (APPs) in the department of emergency medicine.

Evidence demonstrates protocol driven observation services improve patient outcomes relative to traditional care. These units have been proven to improve patient and clinician satisfaction, decrease diagnostic uncertainty for high-risk conditions, decreased hospital length of stay (LOS), improved clinical outcomes, improved emergency department flow and resource utilization, lowered costs for patients, payers, and hospitals.

Guidelines for common conditions drive protocols and order sets and are based on evidence-based guidelines. Each guideline includes an inclusion and exclusion criteria for discharge and admission from the ULOU. Physicians from the department of emergency medicine (EM) will provide direct medical supervision in the ULOU. The EM attendings will round on patients assigned to their services at the beginning of their shift with the Advanced Practice Provider (APPs) and will be available to assist the APPs while working in their respective areas outside of the ULOU. Coverage for the ULOU will occur 24/7, 365 days of the year with other physicians in the department of emergency medicine. Clinical practice, documentation, billing and coding will be consistent with national standards and guidelines. The leadership of this unit will meet on a monthly basis to evaluate utilization and quality measures and adjust or modify practice based on these measures.

Mission Statement:

The mission of the University of Louisville Hospital Observation Unit (ULOU) is to provide evidence-based, compassionate, and comprehensive observation care to patients admitted to the Emergency Department Observation Unit. The unit will be efficient, safe, and a pleasant patient experience for those patients admitted.

Objectives:

The University of Louisville Hospital Observation Unit (ULOU) is an emergency department (ED) observation unit which will provide physician led observation services as defined by the American College of Emergency Physicians (ACEP), the American Medical Associations Current Procedural Terminology Manual (AMA-CPT), and the Center for Medicare and Medicaid Services (CMS). The ULOU will be an area for observation, delineation, and/or further testing for those emergency department patients requiring further management and to determine their need for further inpatient admission.

The ULOU will provide active management for patients with specific conditions utilizing clinical acumen of clinicians, evidence-based patient care pathways and medical decision-making algorithms. The ULOU is intended to optimize patient flow using patient work models which support efficient clinician clinical acumen in a patient-centric environment.

Organizational Structure:

The University of Louisville Hospital Observation Unit (ULOU) is a department of emergency medicine observation unit with 24 patient beds which provides physician and hospital "observation services" as defined by CMS, ACEP, and the AMA-CPT policy on the management of observation units. The ULOU is functionally, operationally and administratively under the direction of the University of Louisville Department of Emergency Medicine and the University of Louisville Hospital Director for Emergency Services.

Physician Leadership:

The Director of Observation Medicine, who reports to the Chair of the Department of Emergency Medicine, shall oversee all ULOU Operations.

The ULOU will be staffed with 36 hours of mid-level provider coverage per departmental schedule with direct supervision by both Emergency Medicine (EM) Attendings. The EM Attendings shall be responsible for supervision of care delivery in the ULOU. Physician coverage is provided 24 hours a day, and 7 days per week as assigned by the departmental schedule and will be available as needed. EM Attendings will round twice a day with the advanced practice providers.

Nursing Leadership:

The Clinical Manager, who reports to the Director of Nursing for Emergency Services, shall be responsible for all nursing administrative ULOU operations. The Nurse Managers, who report to the Clinical Manager, shall be responsible for all clinical nursing operations in the ULOU. The ULOU Nurses and Emergency Technicians shall work under the direction of the ULOU Lead/Charge Nurse.

Other Disciplines:

Other healthcare team members involved in patient care includes consultant physicians, respiratory therapy, pharmacy, physical therapy, occupational therapy, dieticians, social workers, case managers, laboratory services, clergy, environmental services, registration, informational technology, and other support services.

Admissions:

Admissions to and discharges from the ULOU can only be done by the EM attending or his or her designees. Physician services other than EM may not admit patients to the ULOU. Consultants or other services may recommend a treatment plan; however, the final disposition must come from the EM Attending. If a ULOU patient requires admission to a unit other than the ULOU, the appropriate service will admit the patient following existing hospital guidelines.

It is expected the ULOU will operate at capacity. The ULOU should not serve as a department for patients admitted to inpatient services and when possible, avoid boarding patients who are admitted to an inpatient service.

Patient Selection:

The ULOU will manage patients for up to 18-24 hours, after which time a disposition should be determined. Patients admitted to the ULOU should be expected to be discharged in <24 hours. The ULOU will target approximately 10-15% of ED patients to be admitted to the observation unit with a consistent targeted average Length of Stay (LOS) of 16 to 18 hours in compliance with CPT and CMS standards. Patient care in the ULOU beyond this time frame may occasionally occur if it is clear that a short-term disposition is likely to occur (i.e. stress test in the morning). Patient care will be initiated in the emergency department and be admitted to the ULOU if found appropriate. If a patient can be discharged within 4-6 hours, then admission to the ULOU is discouraged. Based on evidence-based practices, patients should have a greater than 85% probability of discharge within 18 hours- if actively managed. Condition-specific

guidelines are provided for guidance and capture of the most common conditions admitted to the ULOU.

When determining inpatient versus ULOU admission, the CMS and CPT, "2-Midnight Rule" will be utilized. If a physician or admitting provider expects a patient's hospital stay to exceed two midnights, then this patient should be admitted as an inpatient rather than to the ULOU. This timeframe begins upon arrival to the hospital including emergency department LOS. Time as an emergency department patient and observation patient may count toward the first midnight, therefore, if the patient cannot be discharged on the second day, inpatient admission should be considered before the third day (second midnight).

Absolute Exclusion Criteria

- Unstable Vital Signs
  - Sustained Heart Rate <40 bpm or >130 bpm
  - Respiratory Rate <10 bpm or >26 bpm
  - Systolic Blood Pressure <90 mmHg or >230 mmHg
  - Diastolic Blood Pressure >120 mmHg
  - Oxygen Saturation <90%; COPD patients with <88%
  - Temperature <96 F or >104 F
- High Intensity of Service (Vasopressors, LVAD devices, drips, etc.)
- Patients for whom inpatient admission is clearly needed
- Complicated disposition predicted
- Age <15 years of age
- Gravid patients >20 weeks
- Anticipated ULOU LOS of <8 hours or >24 hours
- Patients with:
  - Acute Altered Mental Status (GCS <13 in Closed Head Inj)
  - Transplant Patients
  - High risk CP
  - Sub-massive/Massive PE
  - Patients under MIW
  - Failure to Thrive
  - Suicidal and Homicidal Patients

Chest Pain

Inclusion Criteria

- Stable vitals / afebrile
- Established IV access
- HEART Score ≤6
- No significant abnormalities on EKG
    - No new Right Bundle Branch Block
    - No new Left Bundle Branch Block
    - No new ST-T changes
- Negative or stable initial cardiac markers
- Other life-threatening causes of chest pain ruled out

Exclusion Criteria

- New EKG changes consistent with ischemia or new LBBB
- Delta troponin (>15) increase
- High risk for ACS
- Recent / normal cardiac catheterization or provocative cardiac test
- Chest pain is NOT concerning for potential cardiac etiology

Potential Intervention in ULOU

- Monitoring for potential arrhythmias, hemodynamic issues or ischemia
- IV fluid as indicated
- Nitrates as indicated
- Aspirin therapy if not initiated in ED
- Serial cardiac markers
- Repeat EKG as indicated
- Cardiology consultation
- Echocardiography
- Treadmill stress test, CTA or nuclear stress test as indicated per protocol

Discharge Parameters

- Resolution of clinical condition(s)
- Negative serial cardiac markers and EKGs
- Negative exercise treadmill (ETT), Cardiac CT (CTA) or nuclear study

Admission Parameters

- Worsening of clinical condition
- Persistent ischemia
- Abnormal EKG
- Positive trending cardiac markers
- Indeterminate or positive treadmill, CTA or nuclear stress test
- Inability to perform baseline ADLs

CHEST PAIN (LOW-MODERATE RISK) OBSERVATION ORDERSET

Diagnosis: Low-Moderate Risk Chest Pain

Admit to: Emergency Department Observation Unit

Allergies:

Activity [ ] Up as Tolerated [ ] Bed Rest

Diet: [ ] NPO [ ] Cardiac Diet [_] Regular Diet

IVF: 0.9NS@ 1,000 ml, Rate= 75mL/hr - OR – Lactated Ringer @ 75 mL/hr

Consults: [ ] Cardiology Service

Medications:

[ ] Enteric coated aspirin 325mg PO daily x 1 dose
[ ] Metoprolol tartrate 25mg PO q12hours Do NOT administer if patient has a Heart Rate LESS than 60 bpm or a Systolic Blood Pressure LESS than 100 mmHg x 1 dose
[ ] Nitroglycerin 0.4 mg Topical Patch q8h

Labs:

[ ] Troponin I & EKG q 2h x 6 hours
[ ] EKG q4h duration: 8 hours
[ ] Blood glucose ACHS Special instructions: if glucose > 120 or diabetic
[ ] PTT PT INR
[ ] Type and Screen
[_] Lipid Panel

Imaging:
[ ] 2D Echocardiography Complete
[ ] CTA Coronary Study W 3D
[_] EKG Stress Test Exercise
[_] Powerplan: CARD Stress Echocardiogram_ULH

Nursing:

[ ] Saline Lock Insert
[ ] VS Q4hr
[ ] Cardiac Monitoring
[ ] NPO after Midnight

Closed Head Injury (4 Hour Repeat CT Head)

Inclusion Criteria

- Patients on anticoagulation with a normal head CT who need serial neuro exams or repeat head imaging
- Patients not on anticoagulation with mildly abnormal CT head (questionable punctate hyperdensity, small SAH or SDH with no mass effect/shift) who need serial neuro exams or repeat CT imaging
- Headache, dizziness, transient vomiting, transient amnesia are acceptable
- Patient GCS 13 or greater
- Otherwise cleared from a trauma standpoint
- Lacerations repaired prior to ULOU admission
- Trauma and Neurosurgery consults initiated in the ED, as appropriate

Exclusion Criteria

- Unstable VS
- Abnormal CT Scan of brain in the setting of a coagulopathy
- Depressed skull fracture
- Penetrating skull injury
- Focal neurologic abnormality or significant confusion
- Uncooperative patient, restraints, or sitter required
- Other traumatic injuries requiring further work-up or close monitoring
- Patients who require ongoing spine precautions
- Requirement of anticoagulation reversal
- Suicidal patient

Potential Intervention in ULOU

- Serial neurologic exams including vital signs every 2-4 hours, as ordered
- Analgesics
- Antiemetics
- Neurosurgical consultation as indicated
- Repeat CT scan or MRI as indicated

Discharge Parameters

- Acceptable VS
- Normal serial neurologic exams
- Able to perform ADLs or at neurological baseline
- Cleared for discharge by Neurosurgery

Admission Parameters

- Deterioration in clinical condition
- Development of any exclusion criteria
- Progression of clinical disease
- If admission deemed necessary by Neurosurgery
- Mental status decline

CLOSED HEAD INJURY OBSERVATION ORDERSET

Diagnosis: Closed Head Injury

Admit to: Emergency Department Observation Unit

Allergies:

Activity [ ] Up as Tolerated [ ] Bed Rest

Diet: [ ] NPO [ ] Advanced Diet Instructions to Nursing: Beginning Diet: Clear Liquids, Ending Diet: Regular Diet [ ] Regular Diet

IVF: [ ] 0.9NS@ 1,000 ml, Rate= 75mL/hr - OR – Lactated Ringer @ 75mL/hr

Consults: [ ] Neurosurgery

Medications:
[ ] Acetaminophen (Tylenol) 650mg PO q4hours as needed for pain
[ ] Ondansetron (Zofran) 4mg po/IV q4hours as needed for nausea/vomiting
[ ] Compazine 10 mg PO IV, q4hours as needed for nausea/vomiting
[ ] Morphine 4mg IV prn severe pain
[_] Diphenhydramine 25 mg IV/PO prn for dystonic reaction

Labs:
[ ] CBC w/ Auto Diff
[ ] PTT PT INR
[ ] Type and Screen

Imaging:
[ ] CT Head w/o, Repeat in 4 hours from initial CT Head

Nursing:

[ ] Saline Lock Insert
[ ] VS Q4hr
[ ] Cardiac Monitoring
[ ] Neurological checks q2h, duration: 4 hours
[ ] Neurological checks q4h, starting in 4 hours

Endoscope/G Tube Replacement/Interventional Radiology

Inclusion Criteria

- Stable vitals
- Established IV access
- No significant laboratory abnormality (i.e.WAGMA Anion Gap <20, severe renal failure)
- Bolus obstruction or need for GI upper endoscopy.
- Nephrostomy or G/J tube requiring Interventional Radiology
- Other services requiring replacement of tube that will likely result in patient discharge in <24 hours.

Exclusion Criteria

- Evidence of hemodynamic compromise
- Hemoglobin < 5
- Suspicion for acute coronary artery disease or evidence of acute ischemia.
- Co-morbid conditions requiring admission or critical care consultation.

Potential Intervention in ULOU

- Monitoring for potential arrhythmias or hemodynamic issues
- IV fluids
- Electrolyte replacement as indicated
- Repeat laboratories as indicated
- Monitor Intake & Output
- Antiemetics as indicated

Discharge Parameters

- Resolution of clinical condition(s)
- **Able to tolerate oral intake OR Able to tolerate feeds at clinical baseline.**
- Able to perform baseline ADLs
- Vital signs with-in accepted range for patient

Admission Parameters

- Worsening of clinical condition
- Associated cause found requiring hospitalization.
- Inability to tolerate baseline feeding.
- Inability to perform baseline ADLs
- Continued nausea and vomiting >12 hours
- Development of any exclusion criteria
- Progression of clinical disease
- If admission deemed necessary by Consulting Service
- Mental status decline

ENDOSCOPE/INTERVENTIONAL RADIOLOGY OBSERVATION ORDERSET

Diagnosis: Endoscope/Tube Replacement

Admit to: Emergency Department Observation Unit

Allergies:

Activity [ ] Up as Tolerated [ ] Bed Rest

Diet: [ ] NPO [ ] Advanced Diet Instructions to Nursing: Beginning Diet: Clear Liquids, Ending Diet: Regular Diet [ ] Regular Diet [ ] Tube Feeds

IVF: [ ] 0.9NS@ 1,000 ml, Rate= 75mL/hr - OR – Lactated Ringer @75 mL/hr

Consults: [ ] Surgery [ ] Gastroenterology [ ] Interventional Radiology

Medications:
[ ] Acetaminophen (Tylenol) 650mg PO q4hours as needed for pain
[ ] Ondansetron (Zofran) 4mg po/IV q4hours as needed for nausea
[ ] Compazine 10 mg PO IV, q4hours as needed for nausea
[ ] Morphine 4mg IV prn severe pain
[_] Diphenhydramine 25 mg IV/PO prn for dystonic reaction

Labs:
[ ] CBC w/ Auto diff
[ ] PTT PT INR
[ ] Type and Screen

Imaging:
[ ] XR Chest 1 view portable
[ ] XR Portable KUB
[ ] Cr Contrast Inj Any GI Tube

Nursing:

[ ] Saline Lock Insert
[ ] VS Q4hr
[ ] Cardiac Monitoring

SPINAL FRACTURES

Inclusion Criteria

- Spinal Fractures
- Stable vitals (RR >10 or <26, SBP <100, HR <40 or <130)
- Afebrile
- Cooperative patient
- Neurosurgery or Orthopedic Spine recommends MRI or Upright X-Rays or TLSO/Brace
- No significant laboratory abnormality
- No Focal Neurologic Deficits
- No Fecal or Urinary Incontinence
- No evidence of Cauda Equina
- No Saddle Anesthesia

Exclusion Criteria

- Evidence of hemodynamic compromise or infection
- New onset hypoxia, O2 Sat <92% on room air
- Hypotension, systolic blood pressure <95
- Uncooperative patient, patient's requiring restraint
- Pregnancy >14 weeks
- Significant other trauma (long bone fracture, multi-system trauma)
- Neurosurgery or Orthopedic Spine recommends admission to their service

Potential Intervention in ULOU for Spinal Fractures

- MRI of Spine
- Upright X-Rays
- Analgesics
- Serial Neurological exams
- Routine monitoring of vital signs
- PT/OT

Discharge Parameters for Seat Belt Sign

- Patient ambulatory, not ataxic
- Serial neurological exams are negative
- Vital signs remains stable (RR >8 or <26, SBP <100, HR <40 or <130)
- Patient able to tolerate PO
- Pain well tolerated on oral analgesics
- Neurosurgery or Orthopedic Spine Signs off after MRI or Upright X-rays

Admission Parameters

- Worsening of clinical condition
- Persistent pain despite adequate therapeutic intervention (>12 hours)

- Inability to take oral fluids
- Inability to ambulate
- Recommended admission by Neurosurgery or Orthopedic Spine

SPINAL FRACTURE OBSERVATION ORDERSET

Diagnosis Spinal Fracture
Admit to: Emergency Department Observation Unit
Allergies:

Activity [ ] Up as Tolerated [ ] Bed Rest

Diet: [ ] NPO [ ] Advanced Diet Instructions to Nursing: Beginning Diet: Clear Liquids, Ending Diet: Regular Diet [ ] Regular Diet

IVF: [ ] 0.9NS@ 1,000 ml, Rate= 20mL/hr - OR – Lactated Ringer @ ____ mL/hr

Consults: [ ] Neurosurgery [ ] Orthopedic Spine [ ] PT/OT [ ] Orthotics Tech

Medications:
[ ] Acetaminophen 650 mg PO q4hours PRN (Mild Pain 1-3)
- OR –
[ ] Hydrocodone/Acetaminophen (Norco) 5/325 1 tab PO q4hours PRN (Moderate Pain 4-6)
- OR –
[ ] Oxycodone/Acetaminophen (Percocet) 5/325 1 tab PO q4hours PRN (Moderate Pain 4-6)
- OR –
[ ] Morphine 2 mg IV q4hours prn (Severe pain 7-10)
- OR –
[ ] Hydromorphone (Dilaudid) 1 mg IV q4hours prn (Severe pain 7-10)

Labs:
[ ] CBC

Imaging:
[ ] MRI Cervical Spine
[ ] MRI Thoracic Spine
[ ] MRI Lumbar Spine
[ ] Upright X-ray of Cervical Spine
[ ] Upright X-ray of Thoracic Spine
[ ] Upright X-ray of Lumbar Spine

Nursing:
[ ] Saline Lock
[ ] VS Q2hr
[ ] Continuous Monitoring

Misc:
[ ] TLSO

Rule Out Stroke/Transient Ischemic Attack (NIH <4, Pending MRI)

Inclusion Criteria

- Transient ischemic attack – resolved acute deficit, not crescendo TIAs.
- Sub-acute stroke (onset >72hr; NIHSS<4; seen by neurology in the ED)
- No Acute Stroke on Head CT and CTA (unless prompt MRI planned, with a normal exam and not high risk for bleed)
- Workup can be completed within ~18hrs.

Exclusion Criteria

- Head CT imaging positive for bleed, mass, or acute infarction.
- Known extra-cranial embolic source – history of decompensated cardiomyopathy, artificial heart valve, endocarditis, known mural thrombus, or recent MI.
- Known carotid stenosis (>50%)
- TPA started in the emergency department
- Non-focal symptoms – ie confusion, seizure, transient global amnesia
- Hypertensive encephalopathy
- Unable to pass ED dysphagia screen
- Severe headache or evidence of cranial arteritis
- Acute medical or social (poor home support) issues requiring inpatient admission
- Prior large stroke - making serial neurological examinations problematic
- Pregnancy

Potential Interventions

- Neuro checks Q-2hr – to detect stroke, crescendo TIA, etc.
- Neurology consult – to detect occult stroke (done in ED)
- Fasting lipid panel, HgA1c
- Carotid imaging with MRI/MRA - to detect surgical carotid stenosis (>50%) and microinfarct. If contraindications to MRI/MRA and good renal function, then CTA of head and neck vessels (if not already performed in ED). If contraindications to MRI/MRA and poor renal function, then doppler of neck vessels
- 2-D Echocardiography as indicated by neurology - to detect a cardioembolic source.
- Cardiac monitoring – for at least 12 hours for paroxysmal atrial fibrillation
- Appropriate antiplatelet therapy (Aspirin as recommended by Stroke Service. If on ASA then Plavix OR Aggrenox)

- Stroke preventive educational materials (lipids, smoking, DM, HT, obesity, alcohol, stroke)
- Subacute strokes - rehab evaluation and outpatient treatment planning

Discharge Parameters

- No recurrent deficits, negative workup
- MRI Negative
- Stroke service sign off
- Clinically stable for discharge home (on Asa – 81mg/day)

Admission Parameters

- Recurrent symptoms / deficit
- Evidence of treatable vascular disease - ie >50% stenosis of neck vessels
- Evidence of embolic source requiring treatment (ie heparin / coumadin) - ie mural thrombus,
- Paroxysmal atrial fibrillation
- Unable to complete workup or safely discharge patient within timeframe
- ULOU Physician judgment

RULE OUT STROKE/TRANSIENT ISCHEMIC ATTACK
OBSERVATION ORDERSET

Diagnosis: Rule Out Stroke/Transient Ischemic Attack

Admit to: Emergency Department Observation Unit

Allergies:

Activity [ ] Up as Tolerated [ ] Bed Rest

Diet: [ ] NPO

IVF: [ ] 0.9NS@ 1,000 ml, Rate= 75mL/hr [ ] 0.9NS @ 1,000 mL bolus - OR – Lactated Ringer @75 mL/hr

Consults: [ ] Neurology [ ] Speech Pathology [ ] PT/OT

Medications:

[ ] Ondansetron (Zofran) 4 mg IV PO every 6 hours PRN nausea/vomiting
-OR-
[ ] Metoclopramide (Reglan) 5mg 10 mg IV PO every 6 hours PRN nausea/vomiting

Labs:
[_] Lipid Panel
[_] Hgb A1c

Imaging:
[ ] MRI Brain W/o Code Stroke

Nursing:

[ ] Saline Lock
[ ] VS Q4hr
[ ] Continuous Monitoring
[ ] Neurological checks q2hours x2 then q4hours
[ ] Yale Bedside Swallow Study

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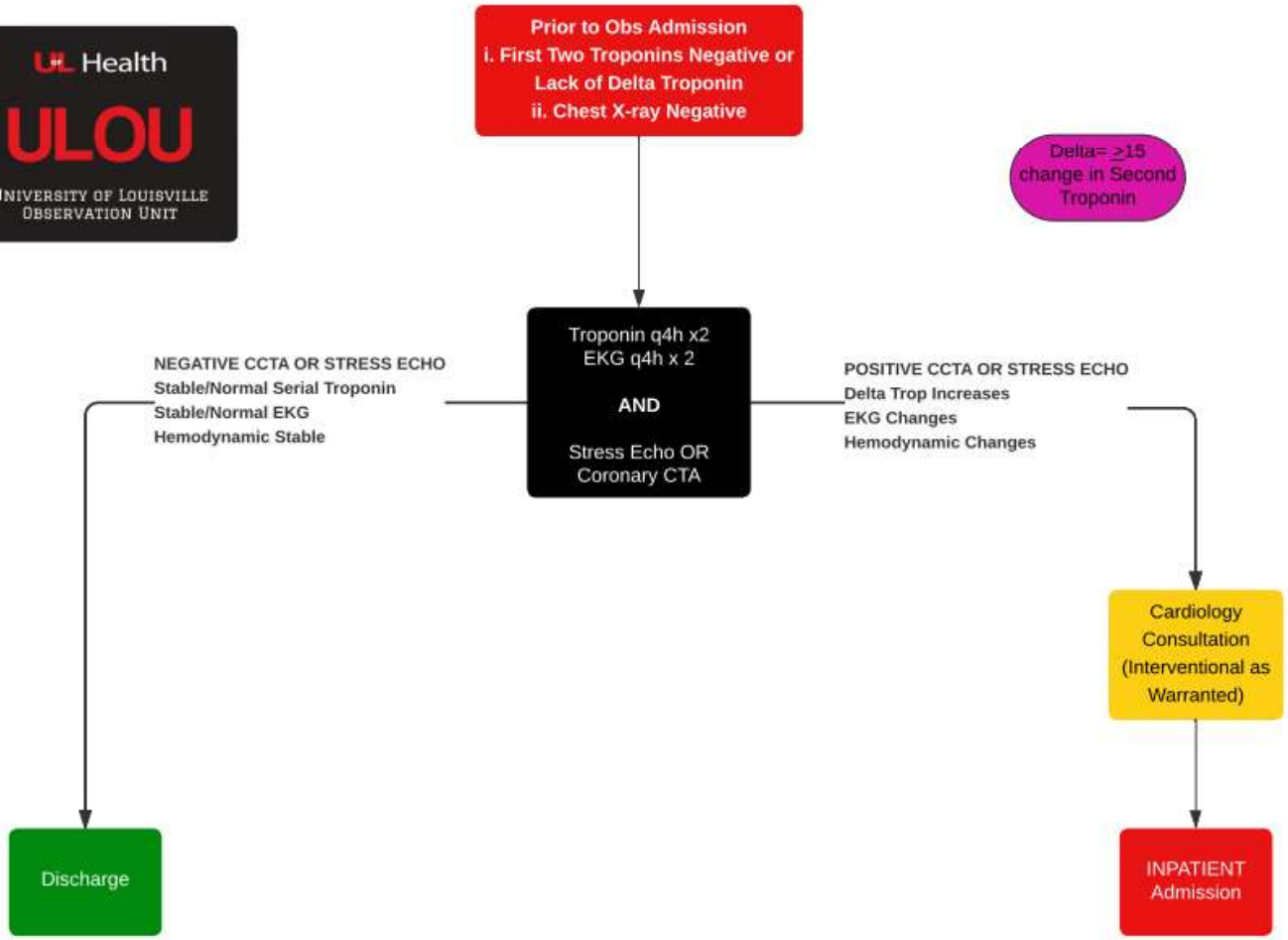
Low to Moderate Risk Chest Pain Protocol

Aaron Kuzel, D.O. | January 23, 2025



CHEST PAIN PROTOCOL

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INCLUSION CRITERIA

· Symptoms deemed low or intermediate risk for unstable angina
·Controllable chest pain
· Stable vital signs
· At or below baseline troponin
· Normal, unchanged from prior, or nonspecific ST-T wave changes

EXCLUSION CRITERIA

· Uncontrollable chest pain felt to be cardiac in nature
· Second troponin is meaningfully greater than the first troponin drawn

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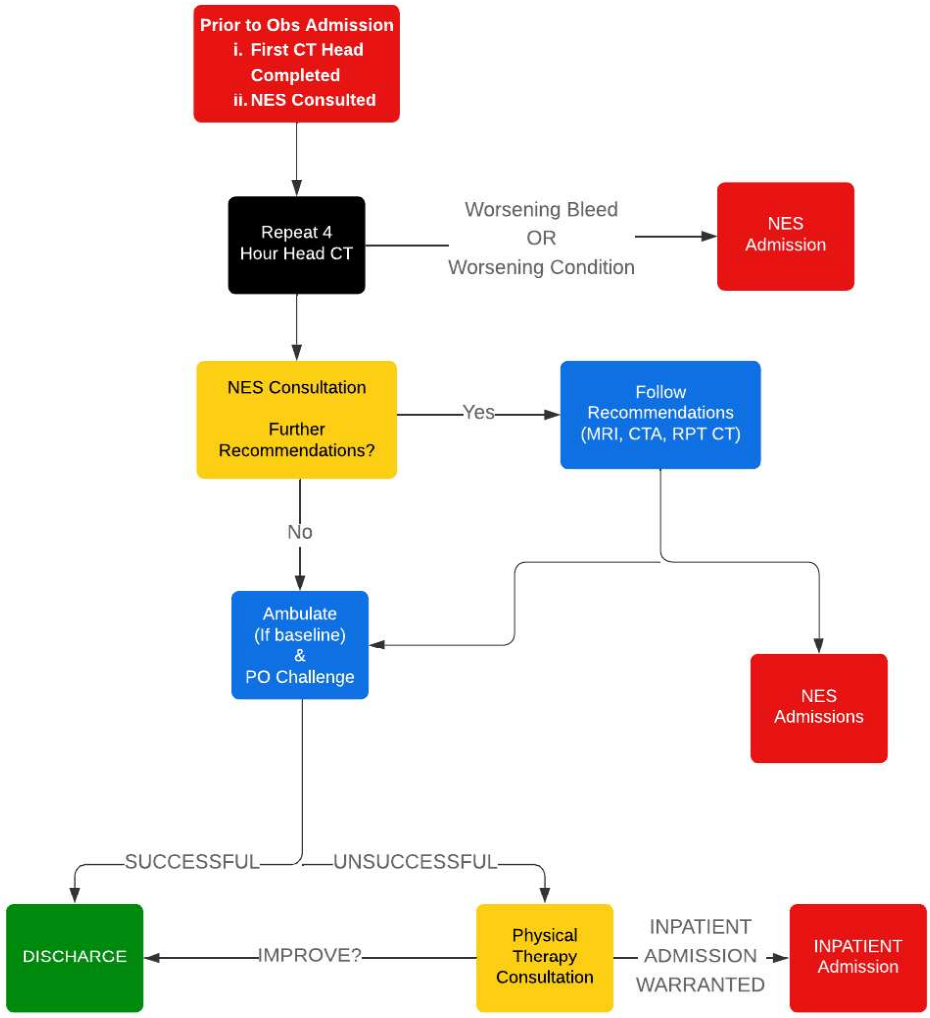
Closed Head Injury Protocol

Aaron Kuzel, D.O. | January 13, 2025



CLOSED HEAD INJURY PROTOCOL

INCLUSION CRITERIA

· Patients on anticoagulation with a normal head CT who need serial neuro exams or repeat head imaging
· Patients not on anticoagulation with mildly abnormal CT head (questionable punctate hyperdensity, small SAH or SDH with no mass effect/shift) who need serial neuro exams or repeat imaging
· Headache, dizziness, transient vomiting, transient amnesia are acceptable
· Been evaluated and cleared from traumatic injury
· **Lacerations repaired prior to admission**
· Trauma and neurosurgery consults initiated in the ED, as appropriate
· GCS 13 of greater

EXCLUSION CRITERIA

· Abnormal CT scan of brain in the setting of a coagulopathy or midline shift
· Depressed skull fracture
· Penetrating skull injury
· Focal neurologic abnormality or significant confusion
· Uncooperative patient, restraints, or sitter required
· Other traumatic injuries requiring further work-up or close monitoring
· Patients who require ongoing spine precautions
· Acute psychiatric disorder, suicidal patient

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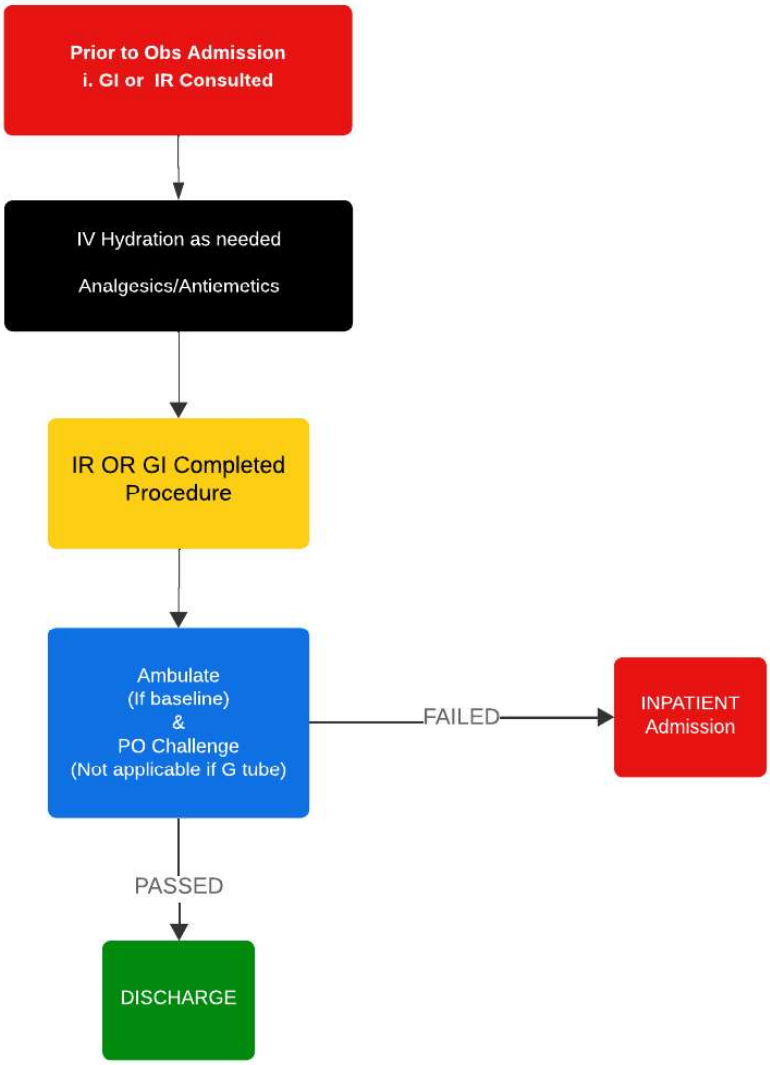
IR/Endoscopy Protocol

Aaron Kuzel, D.O. | January 13, 2025



IR/ENDOSCOPY PROTOCOL

INCLUSION CRITERIA

- Stable vitals
- Established IV access
- No significant laboratory abnormality (i.e.WAGMA Anion Gap <20, severe renal failure)
- Bolus obstruction or need for GI upper endoscopy.
- Nephrostomy or G/J tube requiring Interventional Radiology
- Other services requiring replacement of tube that will likely result in patient discharge in <24 hours.

EXCLUSION CRITERIA

- Evidence of hemodynamic compromise
- Hemoglobin < 5
- Suspicion for acute coronary artery disease or evidence of acute ischemia.
- Co-morbid conditions requiring admission or critical care consultation.

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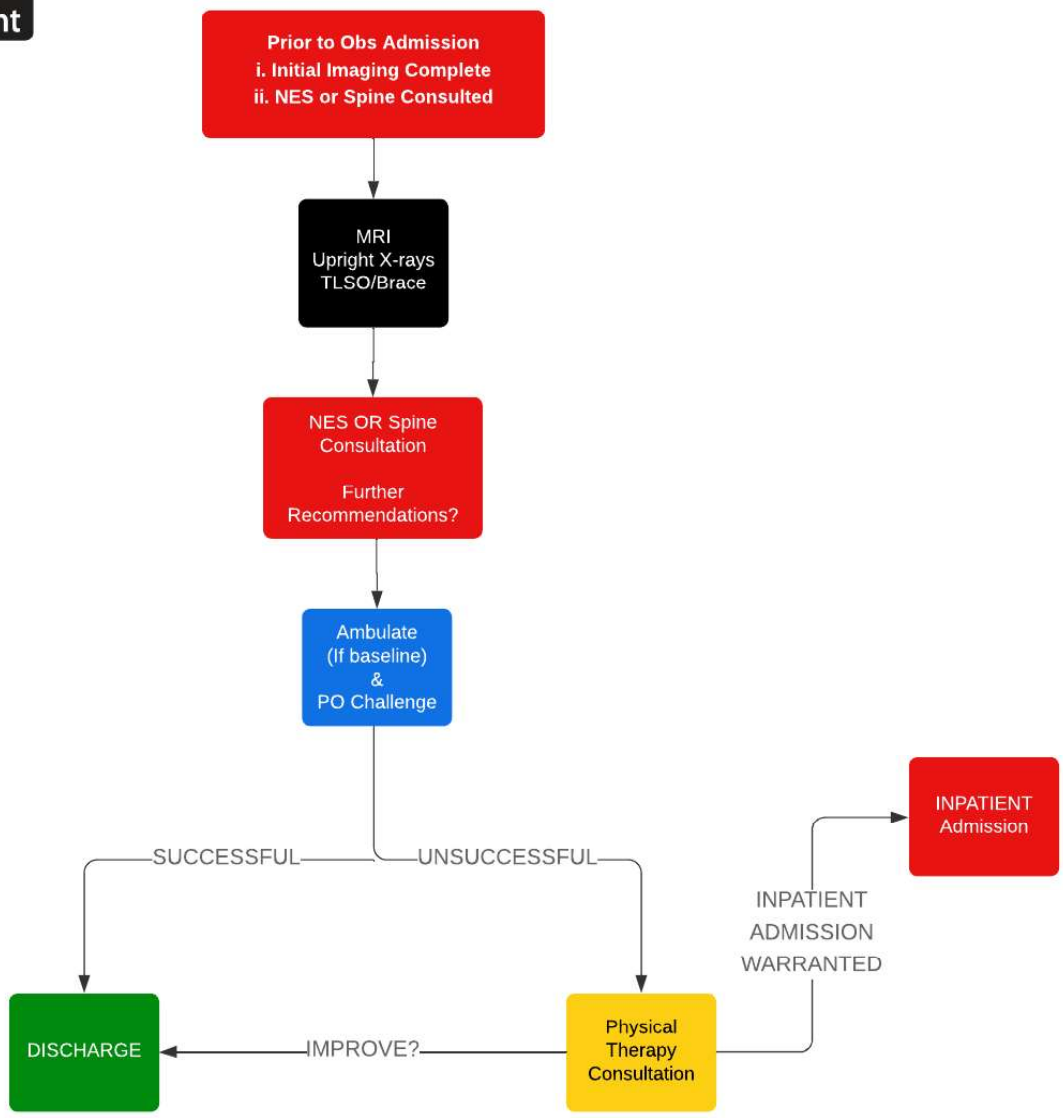
Spinal Fracture Protocol

Aaron Kuzel, D.O. | January 13, 2025



SPINAL FRACTURE PROTOCOL

INCLUSION CRITERIA

· Spinal Fracture
· Neurosurgery or Spinal Surgery will likely recommend MRI or Upright X-Rays or TLSO/Brace
· No focal neurological deficits
· No signs for Cauda Equina
· No significant laboratory abnormality
· No other traumatic injuries or cleared by trauma service

EXCLUSION CRITERIA

· Significant other trauma that would warrant admission (long bone fractures, multi-system trauma)
· Hemodynamic instability or focal deficit
· Neurosurgery or Spinal Surgery recommends inpatient admission

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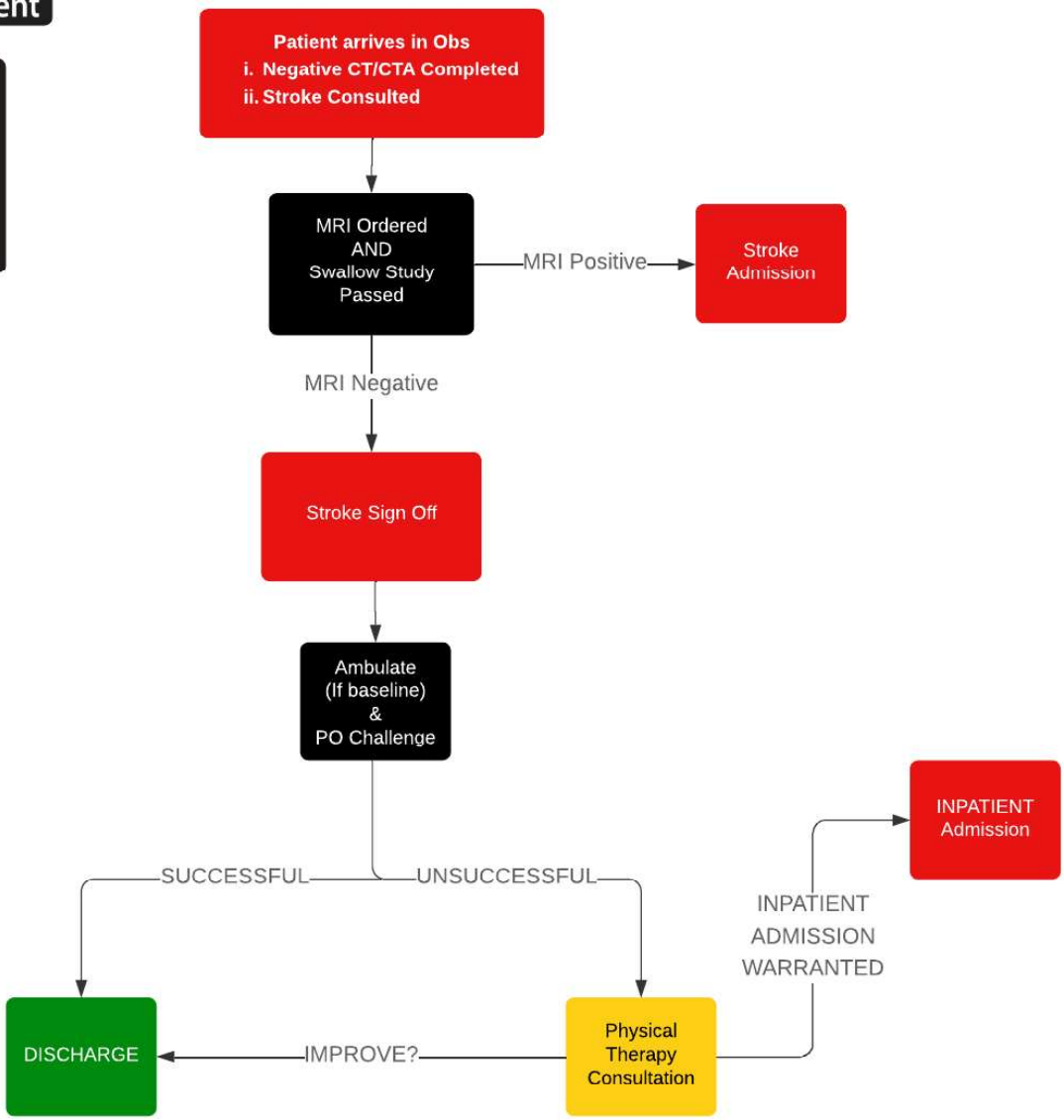
Stroke Rule Out/TIA Protocol

Aaron Kuzel, D.O. | January 13, 2025



TRANSIENT ISCHEMIC ATTACK (TIA) PROTOCOL

INCLUSION CRITERIA

· TIA resolved acute deficit, not crescendo TIAs
· Negative CT/CTA (unless prompt MRI planned, with a normal exam and not high risk for bleed)
· Screened by stroke service in ED
· Bedside swallow screen passed

EXCLUSION CRITERIA

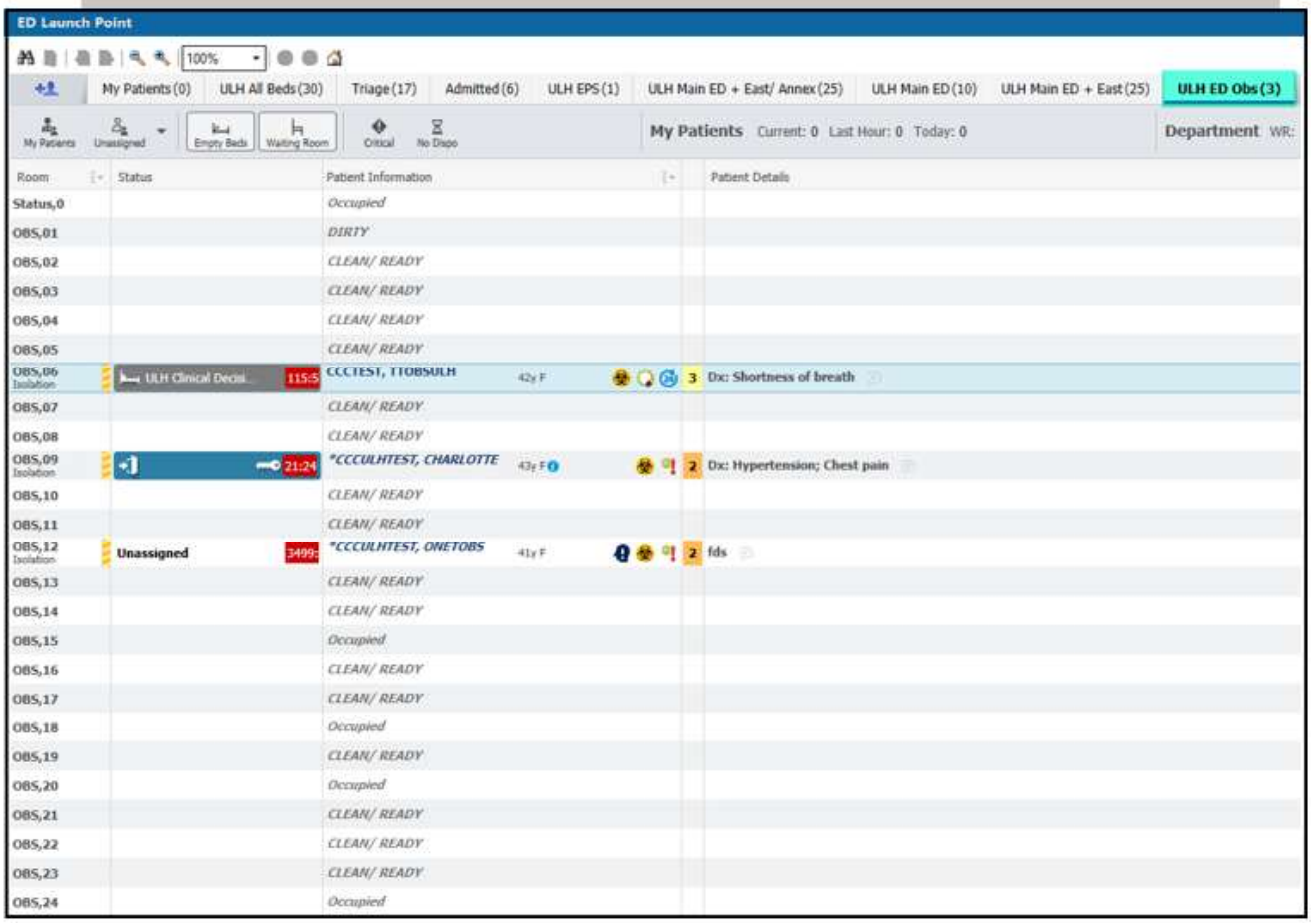
· CT/CTA imaging positive for bleed, mass, or acute infarction
· Known carotid stenosis (>50%)
· Any persistent acute (72hr) neurological deficit or crescendo TIAs
· Non-focal symptoms (confusion, weakness, seizures, transient global amnesia)
· Hypertensive encephalopathy
· Severe headache or evidence of cranial arteritis
· Prior large stroke making serial neurological examinations problematic
· Dysphagia

Appendix B:
CERNER TIP SHEET

ULH 1T Observation Unit

In Cerner, the new Observation unit will be called **ULH 1T Observation**. It will have one room called OBS with 24 beds.

On LaunchPoint for ULH ED, there will be a new zone added called **ULH ED Obs** that will display all 24 beds.



Admission Order for ULH 1T Observation Patients

The ED providers will complete steps 1-4 below.

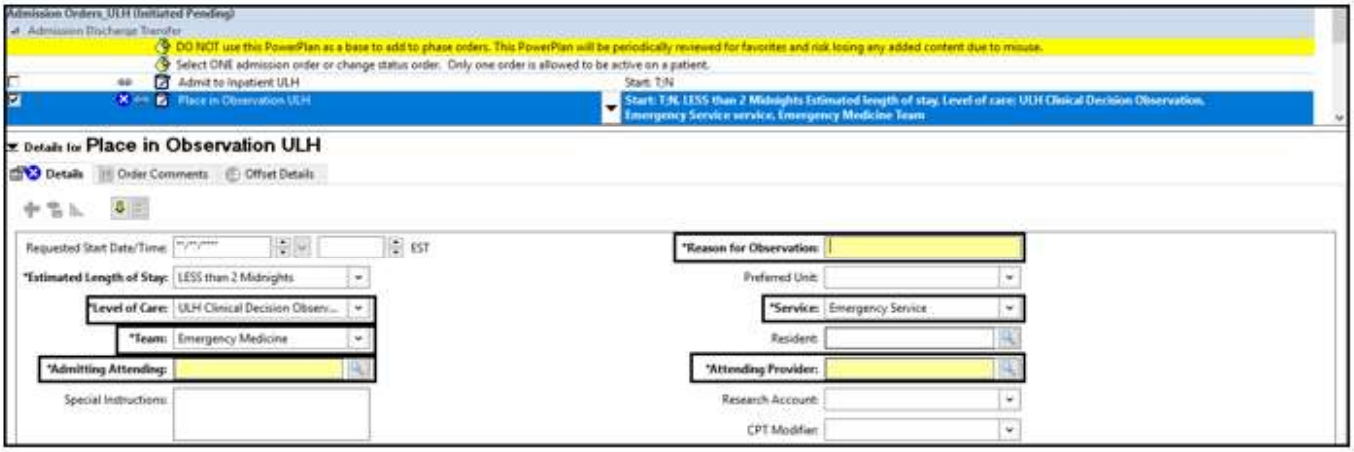
1: Search for **Admit Orders_ULH** PowerPlan in the orders section.

2: Place a check mark next to the **Place in Observation ULH** order.

3: Complete the required fields in the details box at the bottom:

Reason for Observation: Enter the **appropriate reason.**
Level of Care: **ULH Clinical Decision Observation.**
Service: **Emergency Service.**
Team: **Emergency Medicine.**
Admitting Attending: Enter the **appropriate Provider's name**.
Attending Provider: Enter the **appropriate Provider's name**.

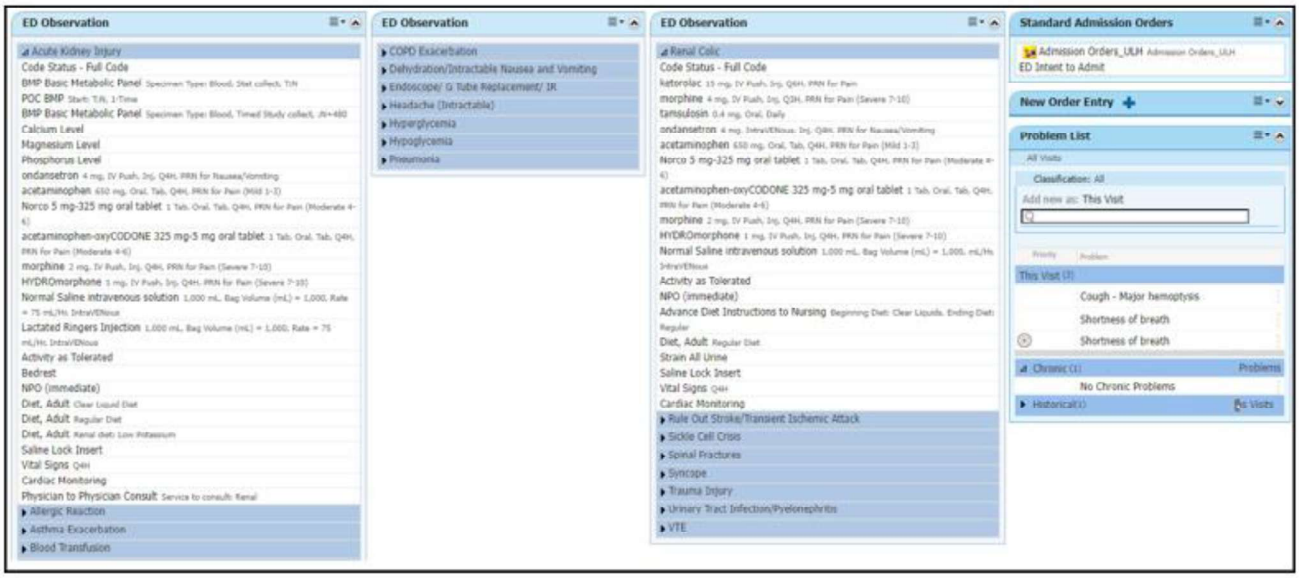
4: Sign the order.



5: This will update the patient's status column on ED LaunchPoint to show ULH Clinical Decision Observation.

ED Observation Quick Orders

To the ED Provider View, the **ED Observation Quick Orders** MPage will be added. This MPage contains the different protocols and their appropriate orders that should be used to care for patient in the ULH 1T Observation unit.



Also, the **ED Observation Quick Orders folder** will also be added ED Common Orders folder on the Add Orders screen.