



Alameda County Health  
**Emergency Medical Services**

May 24<sup>th</sup>, 2024

Dear Team,

We are excited to inform you that the Alameda County EMS Agency has completed drafts for the new protocol updates to be implemented in 2025.

**Action Required by June 7<sup>th</sup> at 1700/5 pm PST:**

- **Review the Drafts:** Please carefully review the new protocol drafts available on the agency's website: <https://ems.acgov.org/>.
- **Feedback Submission:** Submit your feedback, suggestions, or concerns through this form: <https://forms.office.com/g/AnWMcTY5KR>

Your expertise and insights are crucial for the refinement and successful implementation of these updates. We strongly encourage you to participate in the review process and share your valuable feedback.

Best regards,  
The Alameda County EMS Agency

**Colleen Chawla**  
*Director, AC Health*

**Lauri McFadden**  
*EMS Director*

Zita Konik, M.D.  
EMS Medical Director

1000 San Leandro Boulevard  
Suite 200  
San Leandro, CA 94577

<https://ems.acgov.org/>

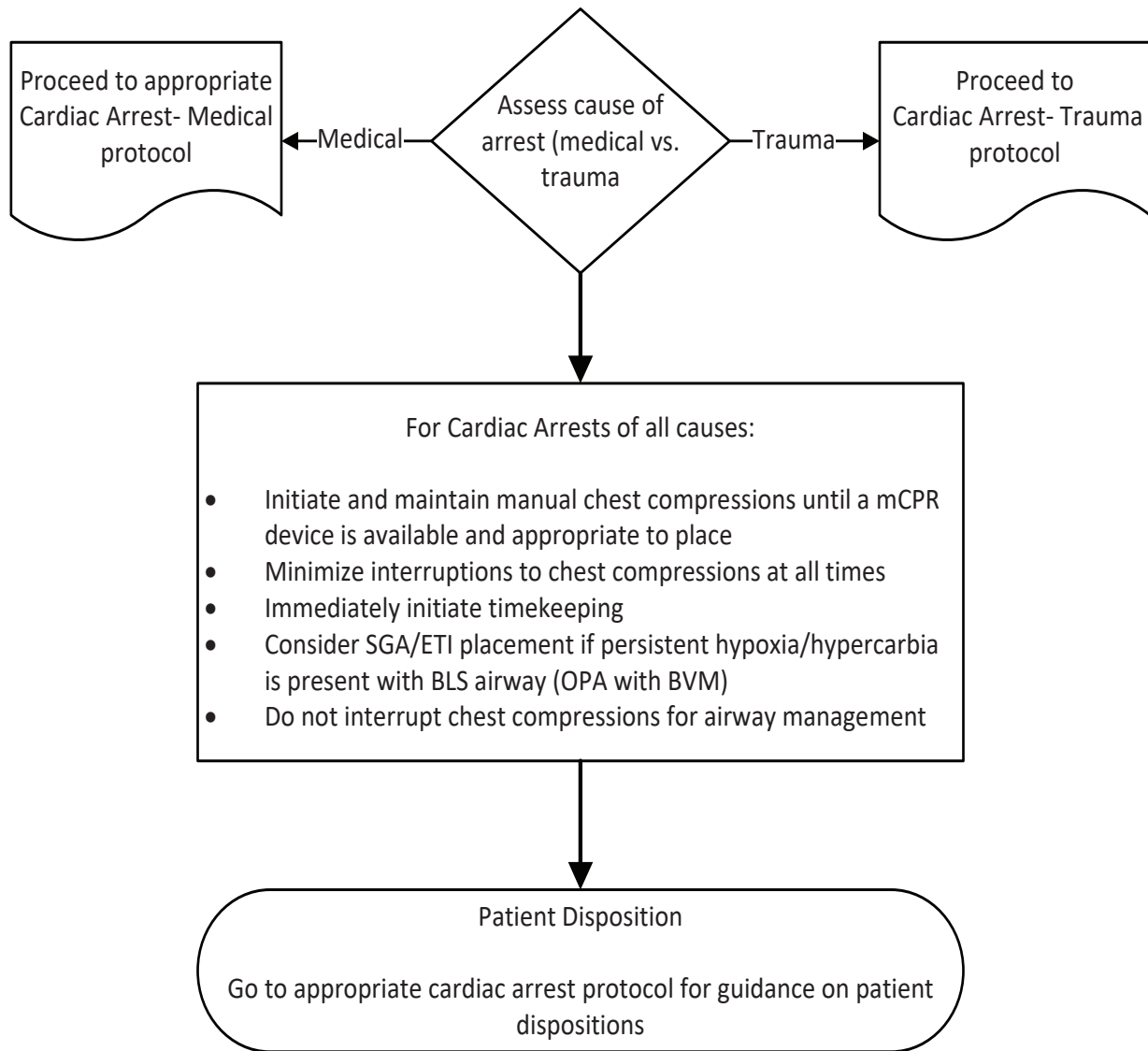
**TRAUMA PATIENT CRITERIA**

4. **TRANSPORT:** Patients that meet Red or Yellow trauma criteria in the prior sections will be transported to **the closest, most appropriate, designated Trauma Center**
  - 4.1 **Adult trauma patients are defined as being 15 years of age or older**
  - 4.2 **Pediatric trauma patients are defined as being 14 years of age or younger**
5. **Exceptions:** The patient is identified as meeting Red or Yellow trauma criteria, but presents with one of the following:

PATIENT PRESENTATION	ACTION				
<p><b>UNMANAGEABLE AIRWAY:</b>  <i>The patient requires advanced airway management, and the paramedic is unable to manage the patient's airway through basic or advanced interventions.</i></p>	<p><b>Closest Basic E.D.</b></p>				
<p><b>ADULT TRAUMATIC ARREST:</b></p>	<p>Proceed to <b>Adult Cardiac Arrest - Traumatic</b> protocol or <b>Determination of Death in the Field</b> protocol</p>				
<p><b>PEDIATRIC TRAUMATIC ARREST</b></p>	<p>Proceed to <b>Pediatric - Cardiac Arrest - Traumatic</b> protocol or <b>Determination of Death in the Field</b> protocol</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">→ ETA to the Pediatric Trauma Center ≤ 20 minutes</td> <td style="padding: 5px; text-align: center;">Pediatric Trauma Center</td> </tr> <tr> <td style="padding: 5px;">→ ETA to the Pediatric Trauma Center ≥ 20 minutes</td> <td style="padding: 5px; text-align: center;">Closest Adult Trauma Center</td> </tr> </table>	→ ETA to the Pediatric Trauma Center ≤ 20 minutes	Pediatric Trauma Center	→ ETA to the Pediatric Trauma Center ≥ 20 minutes	Closest Adult Trauma Center
→ ETA to the Pediatric Trauma Center ≤ 20 minutes	Pediatric Trauma Center				
→ ETA to the Pediatric Trauma Center ≥ 20 minutes	Closest Adult Trauma Center				

6. **BASE HOSPITAL CONTACT:** Varying field circumstances make rigid application of any set of rules impractical. These criteria should serve as guidelines. Clinical circumstances may dictate that transport be undertaken immediately with Base Hospital contact made during transport
  - 6.1 **Contact the Base Hospital Physician if:**
    - ▶ The patient meets the criteria listed in the "Yellow Criteria" but the provider is requesting transport to a basic ED
    - ▶ The patient requires medical treatment not covered in the **Trauma Patient Care** protocol
    - ▶ The patient would benefit from consultation with the Base Hospital Physician

**CARDIAC ARREST - GENERAL GUIDELINES**

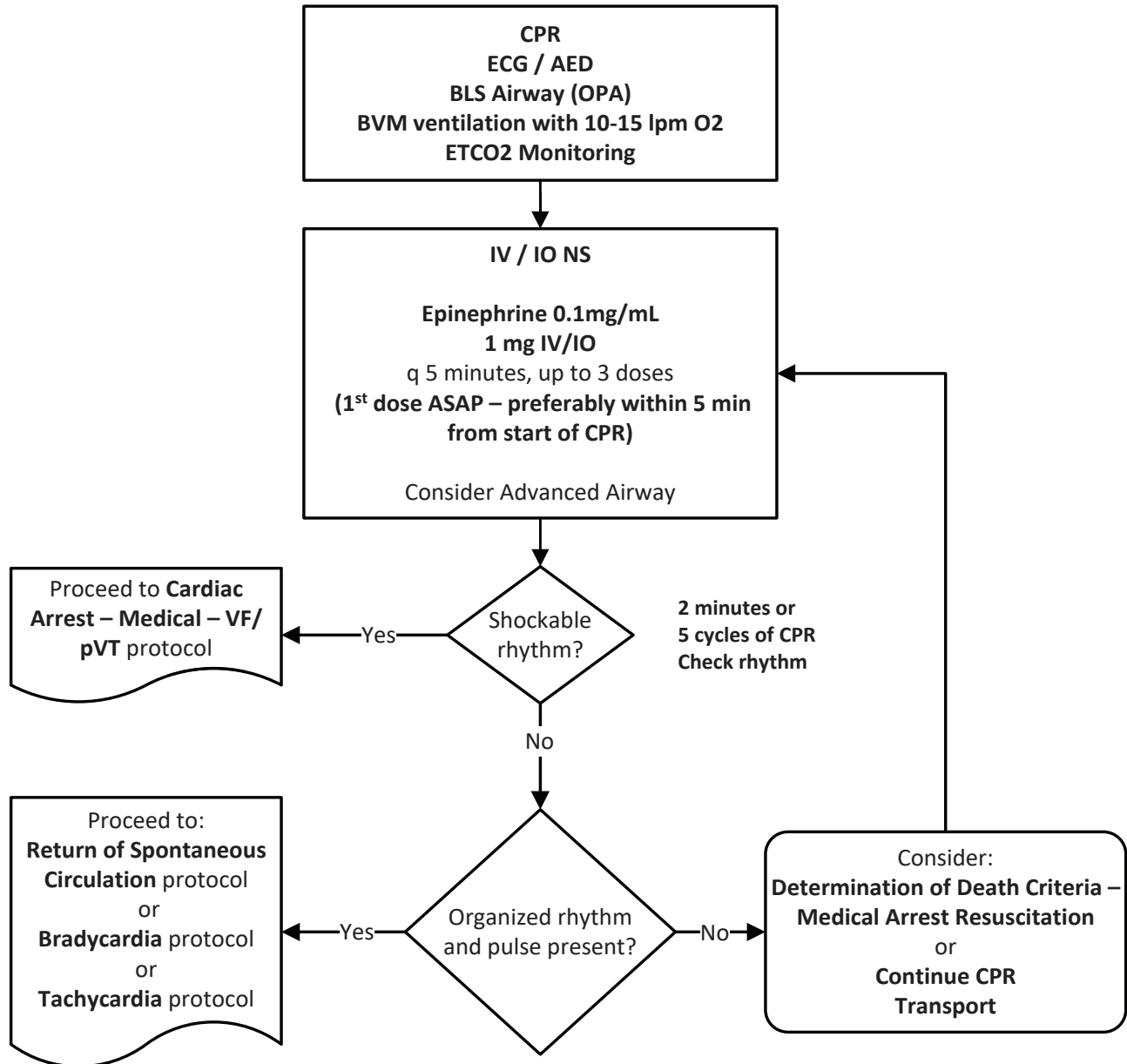


**Special Considerations:**

- BLS and ALS prehospital personnel are not required to initiate resuscitative measures in circumstances of obvious death, signed DNR/POLST form, or upon meeting **Family Discretion Criteria** as outlined in **Determination of Death in the Field** protocol
- Consider strangulation/hanging or extreme domestic violence as causes of arrest and treat as a Medical Cardiac Arrest with SMR if suspected spinal cord injury

**CARDIAC ARREST - MEDICAL - ASYSTOLE / PEA**

- Routine Medical Care
- Consider and treat other possible causes – See CPR **page 10**
- If patient presents with signs of obvious death or a valid DNR is presented - See **Determination of Death in the Field Procedure**



**Important Considerations:**

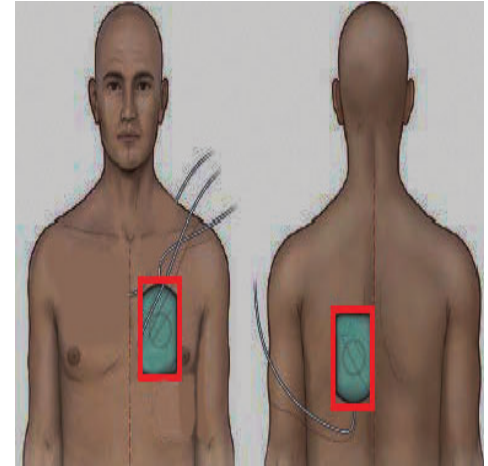
- Do not interrupt CPR to administer medications or perform airway management
- Use of a mechanical CPR device is required whenever it is available and appropriate
- Consider and treat reversible causes as appropriate:
  - Hypovolemia • Hypoxia • Hydrogen ion (acidosis) • Hypo-/hyperkalemia • Hypothermia
  - Tension pneumothorax • Tamponade, cardiac • Toxins • Thrombosis, pulmonary / coronary
- If renal failure or hyperkalemia suspected, you may consider administering the following:
  - Calcium Chloride** 1 gm slow IVP (over 2 min.) *Note: flush IV tubing after administering CaCl to avoid precipitation*
  - Sodium Bicarbonate** 1 mEq/kg IVP *Note: make sure to have a second IV line as other medications may not be compatible*

## CARDIAC ARREST - MEDICAL - VF/PVT

• Routine Medical Care  
 • Note: Use of a mechanical CPR device is required whenever available and appropriate

**\*Manual chest compressions**  
 Place defibrillator pads in the anterior / posterior configuration  
 Apply mechanical CPR (mCPR) device if available

Anterior/Posterior pad placement illustration:



Shockable rhythm?

**\*\*Defibrillate (see note)**

- Resume CPR immediately
- BLS Airway (OPA)
- BVM ventilation at rate of 10-12 with 10-15 lpm O2
- ETCO2 Monitoring
- IV/IO NS
- 2 minutes or 5 cycles of CPR
- Check Rhythm

Shockable rhythm?

- CPR while defibrillator charging
- **\*\*Defibrillate (see note)**
- Resume CPR
- **\*\*\*Epinephrine 0.1mg/mL 1 mg IV/IO**
- 2 minutes or 5 cycles of CPR
- Check Rhythm

Shockable Rhythm?

- CPR while defibrillator charging
- **\*\*Defibrillate (see note)**
- Resume CPR
- **Amiodarone 300 mg IV/IO**
- Consider Advanced Airway

- **Initiate transport to the closest STEMI center**
- Proceed to **Cardiac Arrest – Medical – VF/pVT** protocol

Proceed to **Cardiac Arrest – Medical – Asystole/PEA** protocol or **Return of Spontaneous Circulation** protocol

**VF/Pulseless VT notes:**

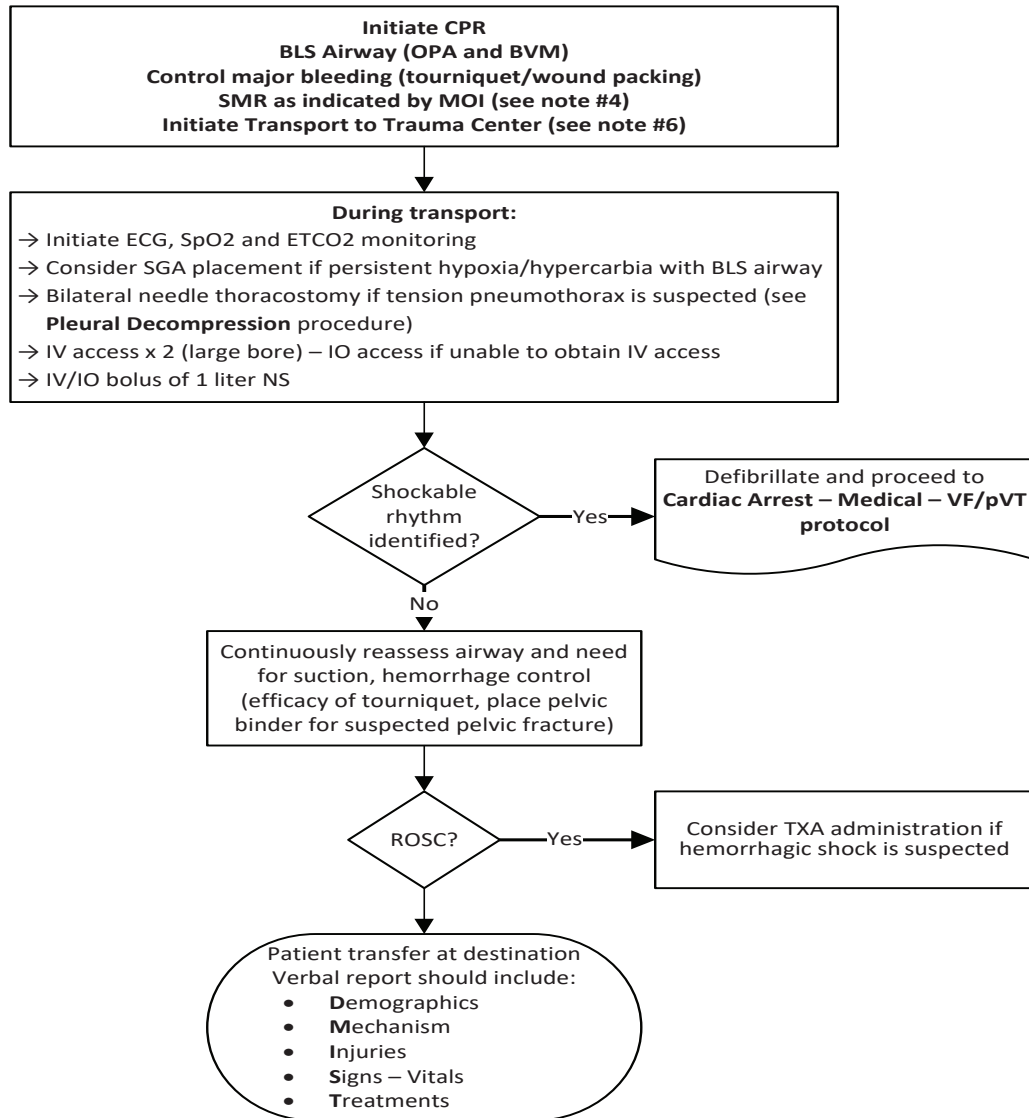
**\*Chest compressions:**  
 CPR/mCPR must be minimally interrupted (<10 secs) and should not be paused for airway placement. mCPR does not need to be paused for defibrillation(s). Manual chest compressors must be rotated at every rhythm check.

**\*\*Defibrillation:**  
 Refer to manufacturer's documentation for energy dose recommendations

**\*\*\*Epinephrine**  
 May be repeated q 5mins to a max of 3 doses

**CARDIAC ARREST - TRAUMATIC**

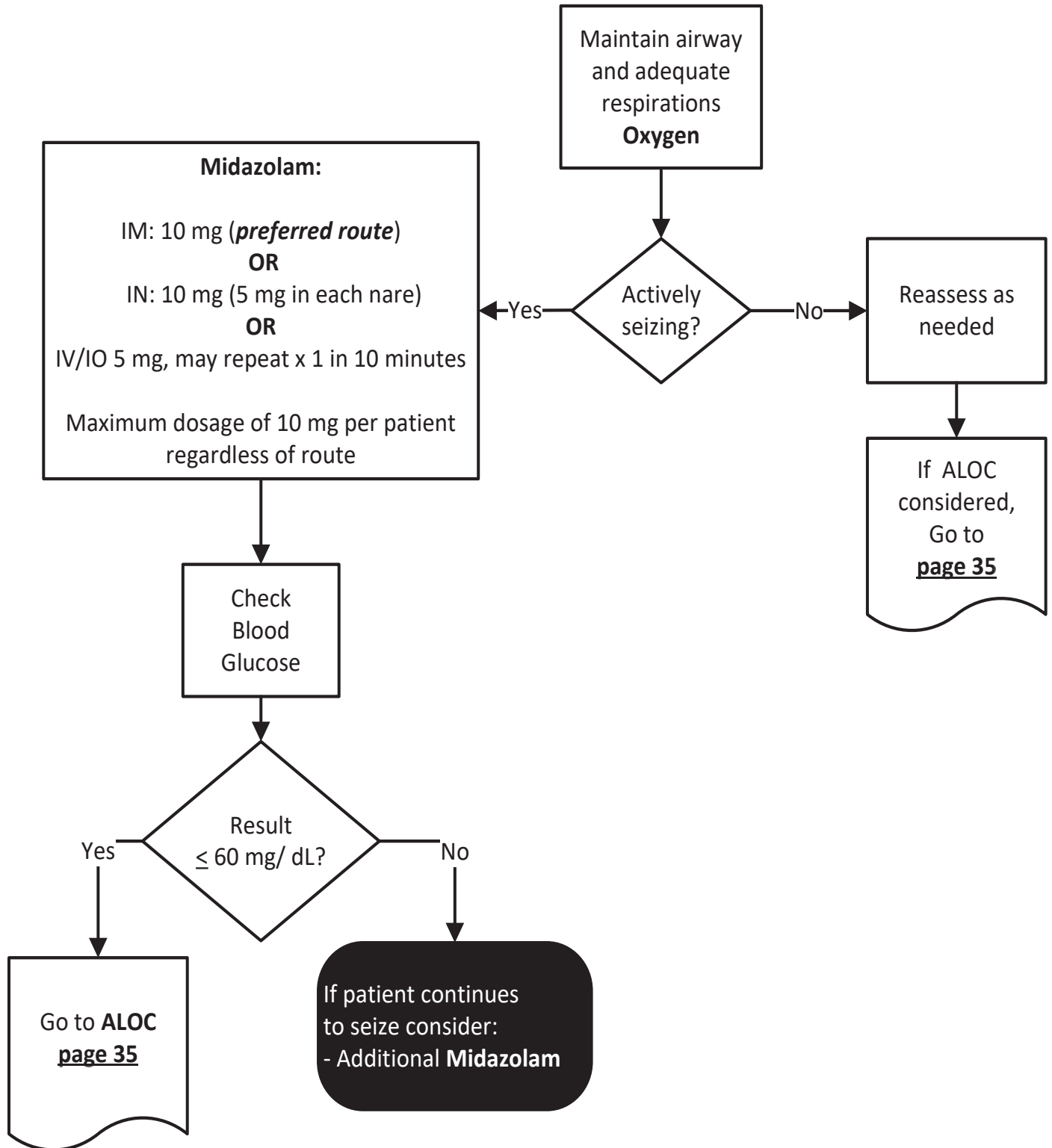
- Do not resuscitate in the setting of obvious death as outlined in **Determination of Death in the Field** protocol, mass casualty incidents, or if staging, extrication (without resuscitation) and/or transport exceeds 20 minutes.

**Special Considerations:**

1. Prioritize rapid transport
2. Consider strangulation/hanging or extreme domestic violence as causes of arrest and treat as a Medical Cardiac Arrest with SMR if suspected spinal cord injury and proceed to appropriate medical cardiac arrest protocol
3. ALS procedures in the field do not significantly improve outcomes for traumatic arrest patients
4. Provide spinal motion restriction if indicated by mechanism or signs of blunt head/neck trauma. A backboard may be helpful to support chest compressions and transport
5. Epinephrine administration:
  - Do **not** administer if arrest was caused by hypovolemia from exsanguination
  - Do administer for arrests caused by hanging, strangulation, submersion/drowning, or blunt cardiac trauma (commotio cordis – likely minimal signs of external chest trauma but VF/VT rhythm)
6. Destination choice:
  - Patient to **Trauma Center**:
    - Penetrating or Blunt trauma with significant hypovolemia from exsanguination
    - Submersion or Mechanical Asphyxiation (drowning, hanging, strangulation) **with** suspected head or spinal injury
  - Patient to **closest hospital**:
    - Submersion or Mechanical Asphyxiation (drowning, hanging, strangulation) **without** suspected head or spinal injury
7. Trauma is not a contraindication for the use of mechanical CPR device as long as it does not delay transport

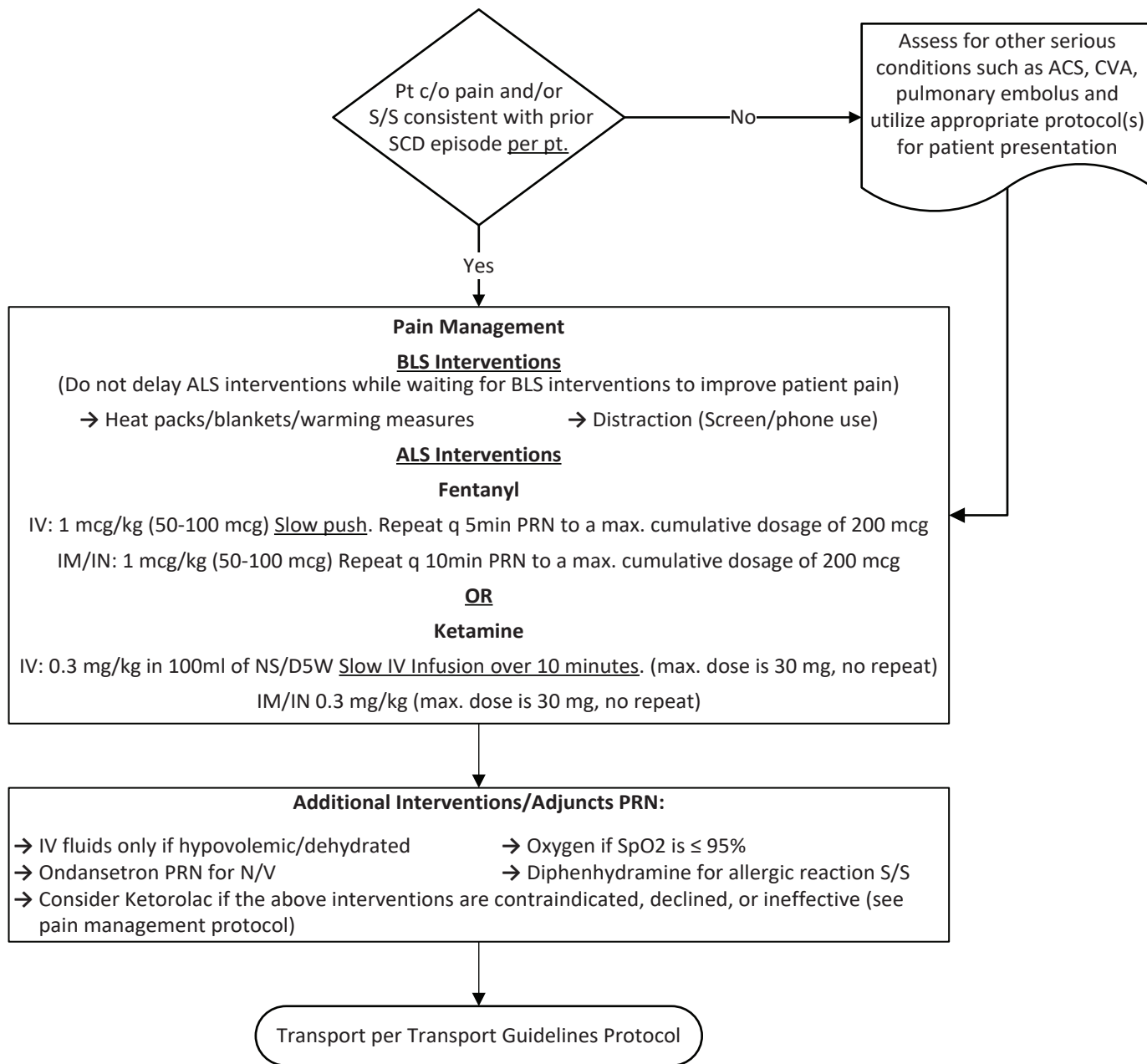
**SEIZURE**

- **Routine Medical Care**
- Midazolam should not be given unless the patient is actively seizing - 3 or more seizures in  $\leq 5$  minutes or any seizure lasting  $> 5$  minutes.
- Consider eclampsia if patient is in third trimester of pregnancy or up to six weeks postpartum. History of pre-eclampsia is not required for the development of eclampsia. Notify ED staff if any of these findings are suspected or known.
- Protect the patient from further injury by padding or moving objects as necessary; do not forcibly restrain the patient



## SICKLE CELL PAIN EMERGENCY

- Early and aggressive pain management is key to stopping the progression of ischemic processes associated with Sickle Cell emergencies.
- Patients with Sickle Cell Disease (SCD) are at higher risk for other serious conditions including ACS, CVA, pulmonary embolism, and sepsis. A high index of suspicion should be maintained for other serious etiologies to symptoms especially in the setting of patient reporting abnormal pain or S/S patterns.



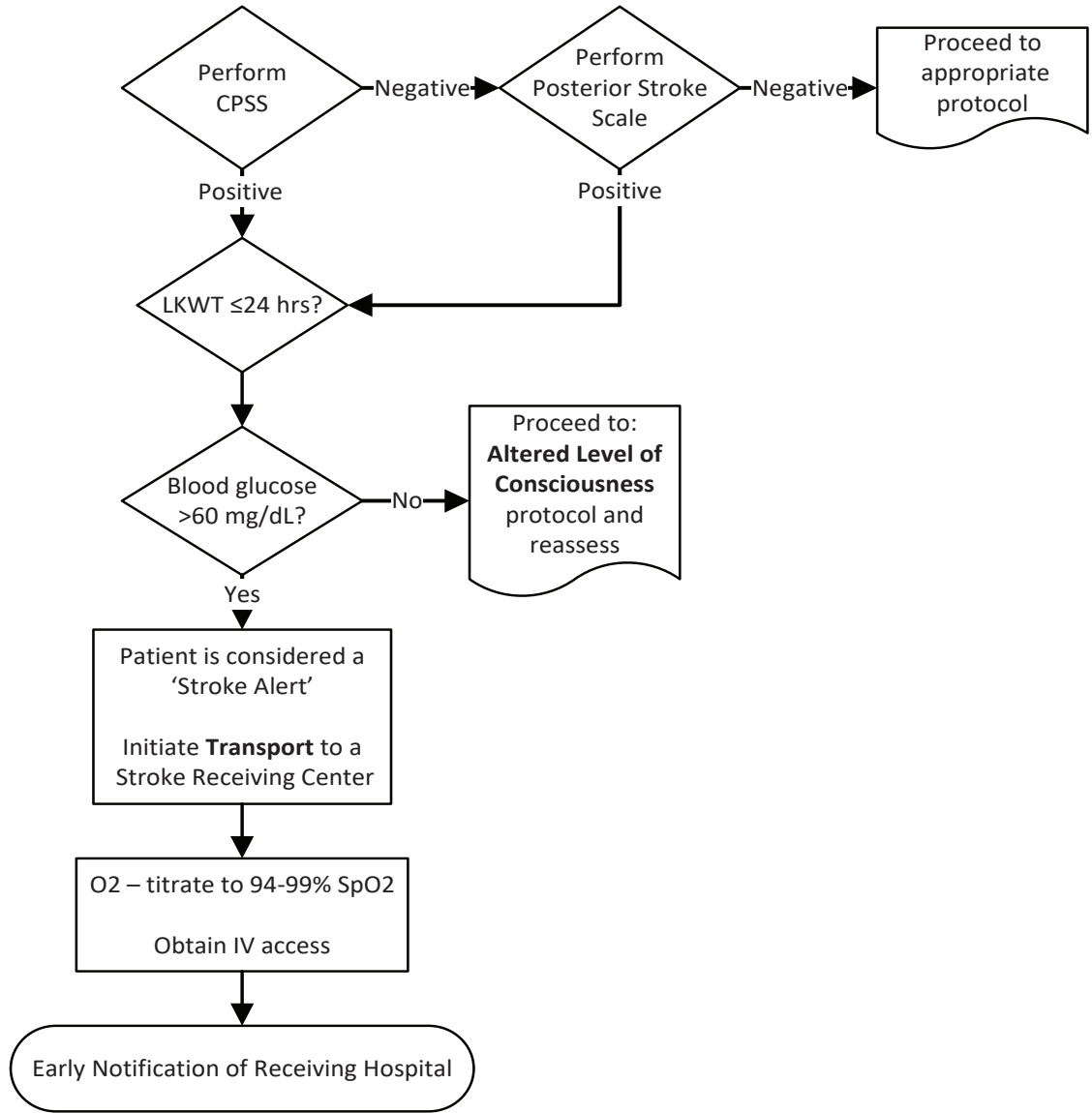
### Special Considerations:

- Absence of tachycardia/hypertension does not rule out sickle cell emergencies. Prompt and aggressive analgesia is always recommended for patients reporting pain
- Triggers for sickle cell emergencies can be infection, temperature changes, dehydration, stress/lack of sleep
- Priapism can be a presentation of sickle cell emergencies and should be treated with aggressive pain control
- Pregnancy is not a contraindication to opioid use in patients with sickle cell pain emergencies



### STROKE / CVA

- **Routine Medical Care**
- Rapidly identify signs of a stroke using the Cincinnati Prehospital Stroke Scale (CPSS) and Posterior Stroke Scale (PSS)
- For detailed information on obtaining a CPSS / PSS - See the Procedures Section - **Stroke Assessment Scales**
- Last Known Well Time (LKWT) must be obtained from a reliable patient or bystander. See note
- Limit on scene time to <15 minutes and initiate rapid transport for 'Stroke Alerts' to a designated Stroke Receiving Center

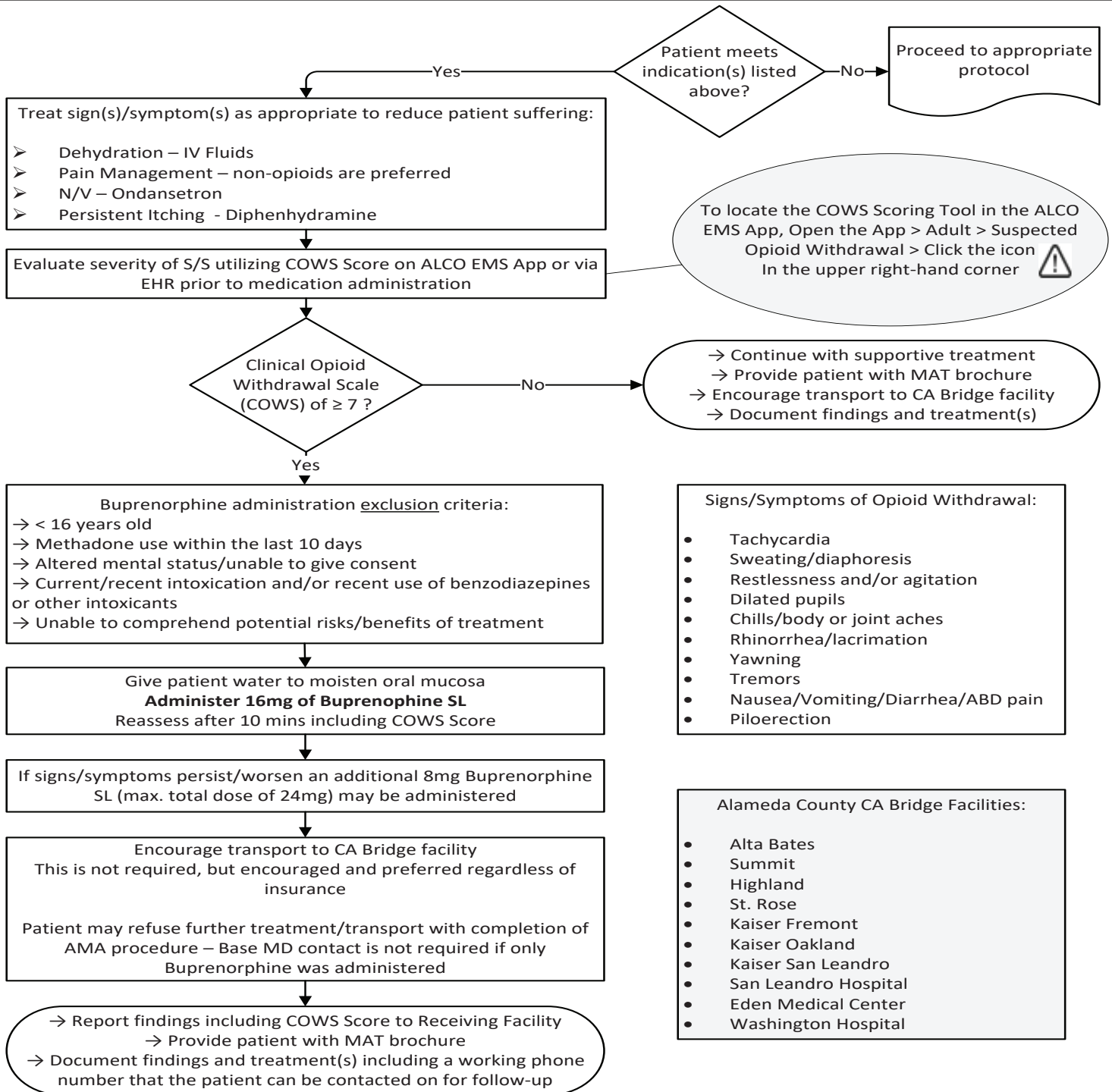


**Special Considerations:**

- The LKWT information must be provided by a reliable party or reported by a reliable patient. If the reliable party cannot accompany the patient to the receiving facility, a phone number for that party must be obtained
- The patient may be transported to their designated Stroke Receiving Center of choice, as long as this does not add more than 10 minutes to the transport time
- Determine if the patient has recently taken blood thinner medications and report this finding to the receiving facility
- For patients whose onset of S/S is between 6-24 hrs, consider not utilizing red lights and siren during transport

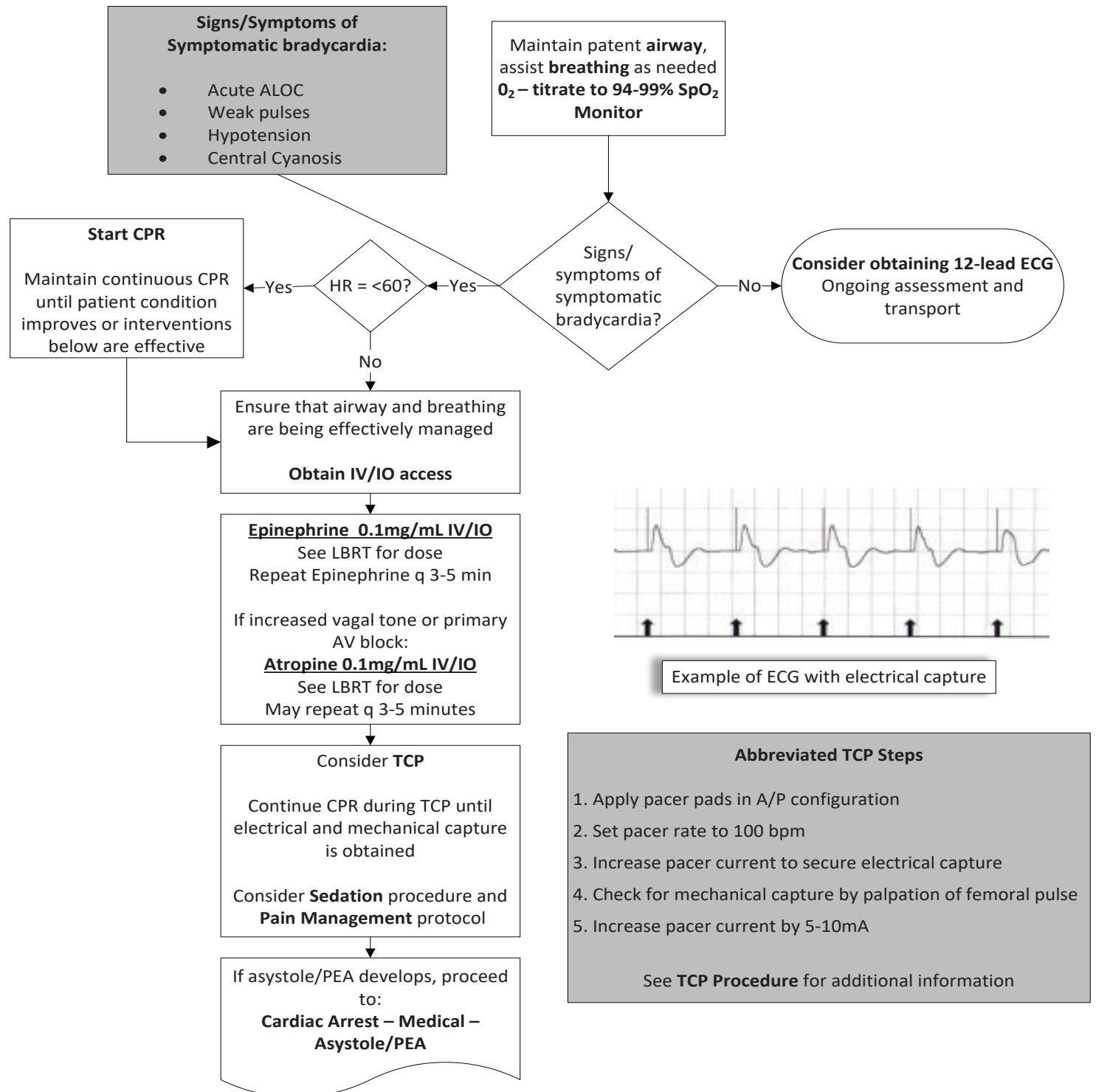
## SUSPECTED OPIOID WITHDRAWAL

**•Routine Medical Care**  
**•Indications:**  
 → Post Naloxone Administration with signs/symptoms of opiate withdrawal  
 → Patient stated complaint of opioid withdrawal or seeking assistance for Opioid Use Disorder (OUD)  
 → Patient presenting with signs/symptoms consistent with any positive score on the Clinical Opiate Withdrawal Scale (COWS)  
**•Goals:**  
 → Reduce patient suffering and;  
 → Patient entry into a CA Bridge Program ([www.cabridge.org](http://www.cabridge.org)) for treating Opioid Use Disorder

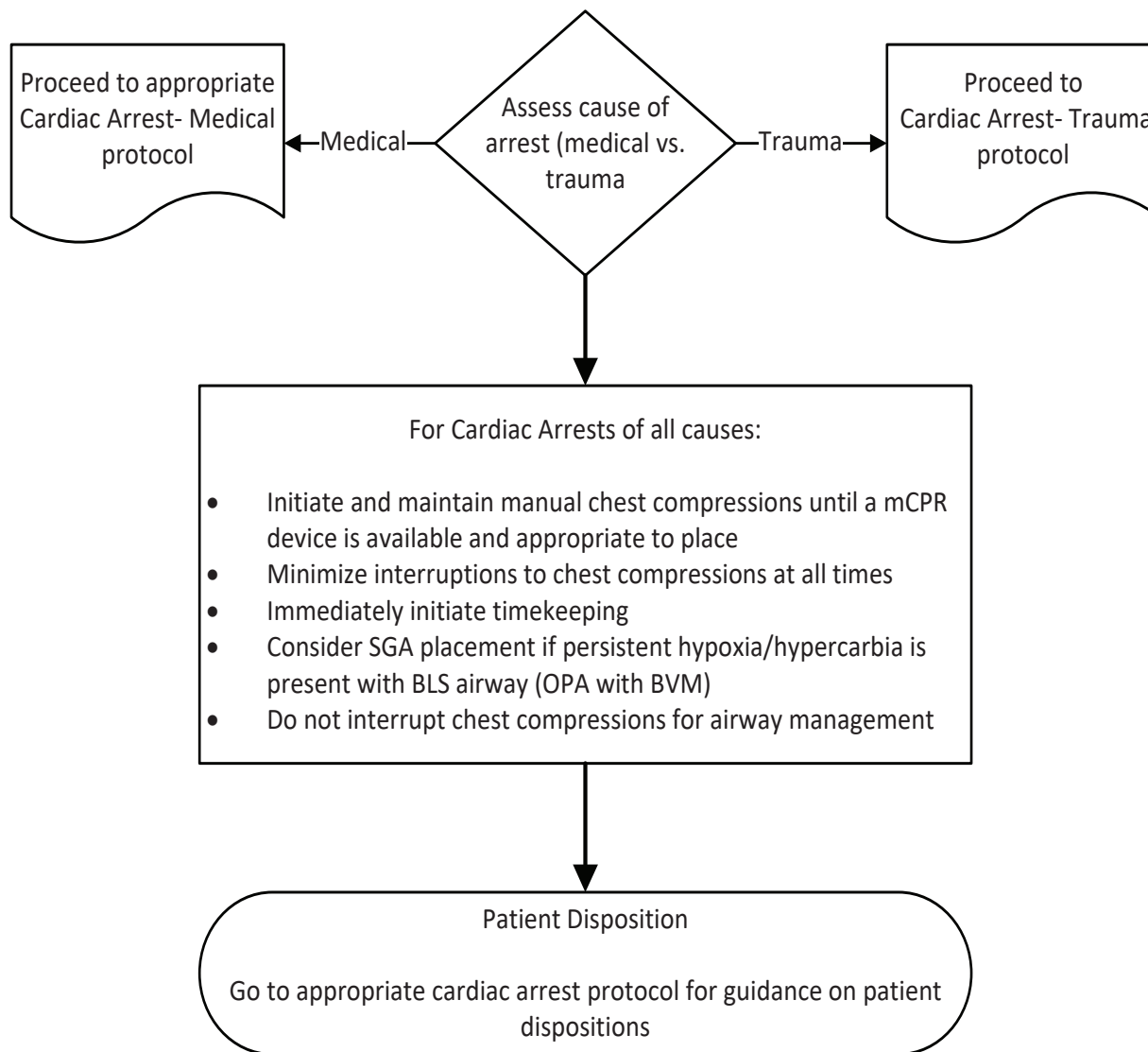


## BRADYCARDIA

- **Pediatric Routine Medical Care**
- **Consider and treat other possible causes:**
  - ➔ Hypoxia (**most common**)
  - ➔ Hypothermia
  - ➔ Head Injury
  - ➔ Heart Block
  - ➔ Toxins/ drugs
  - ➔ Beta Blockers or calcium channel blockers
- **Use an LBRT to determine pediatric medication dosages** - (Shown underlined on the algorithm)
- **Note:** TCP reserved for children with symptomatic bradycardia refractory to BLS and ALS interventions. Use pediatric electrodes if child weighs < 15 kg



**CARDIAC ARREST - GENERAL GUIDELINES**



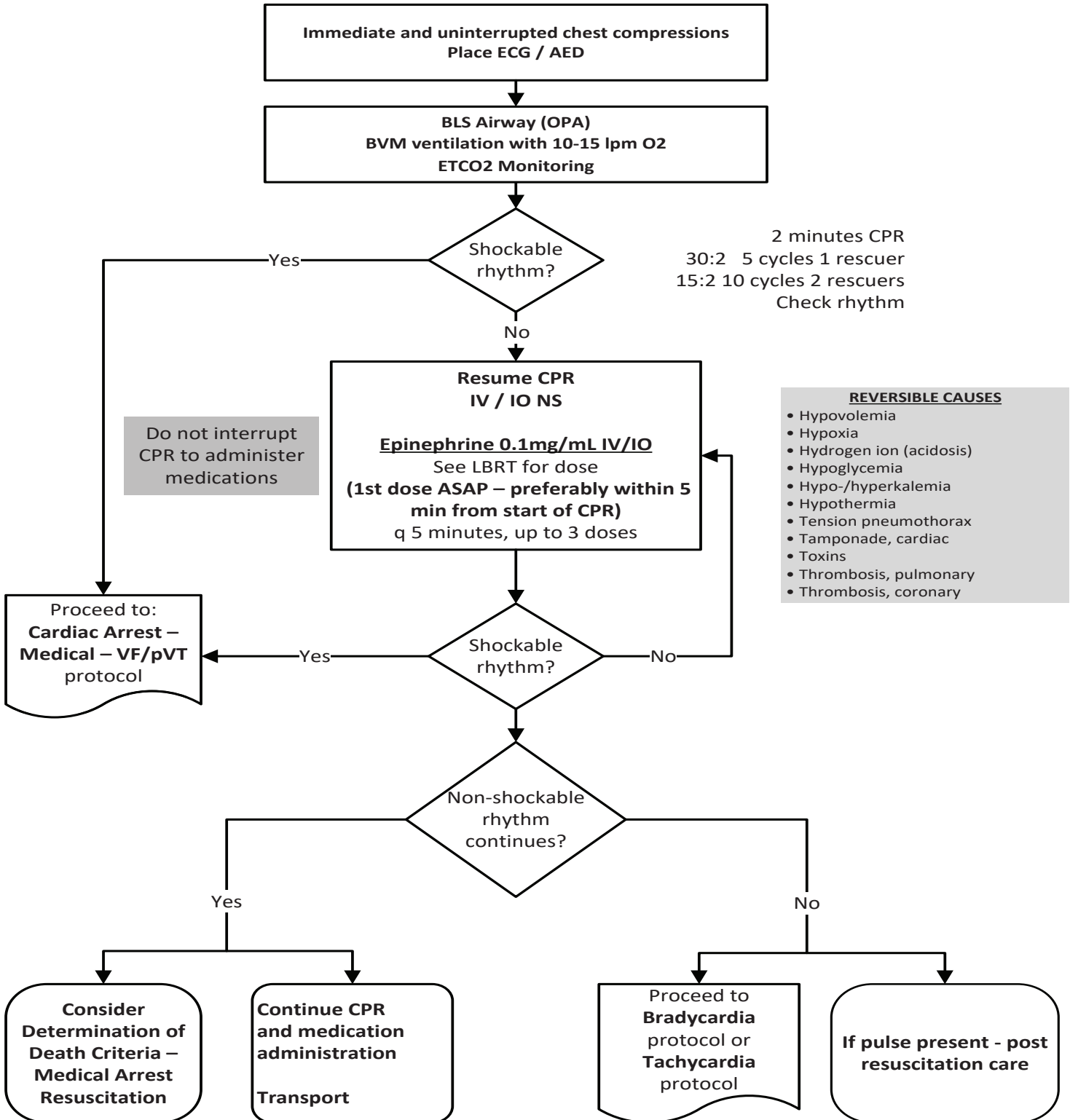
**Special Considerations:**

- BLS and ALS prehospital personnel are not required to initiate resuscitative measures in circumstances of obvious death, signed DNR/POLST form, or upon meeting **Family Discretion Criteria** as outlined in **Determination of Death in the Field** protocol.
- Consider strangulation/hanging or extreme domestic violence as causes of arrest and treat as a Medical Cardiac Arrest with SMR if suspected spinal cord injury.

**CARDIAC ARREST - MEDICAL - ASYSTOLE/PEA**

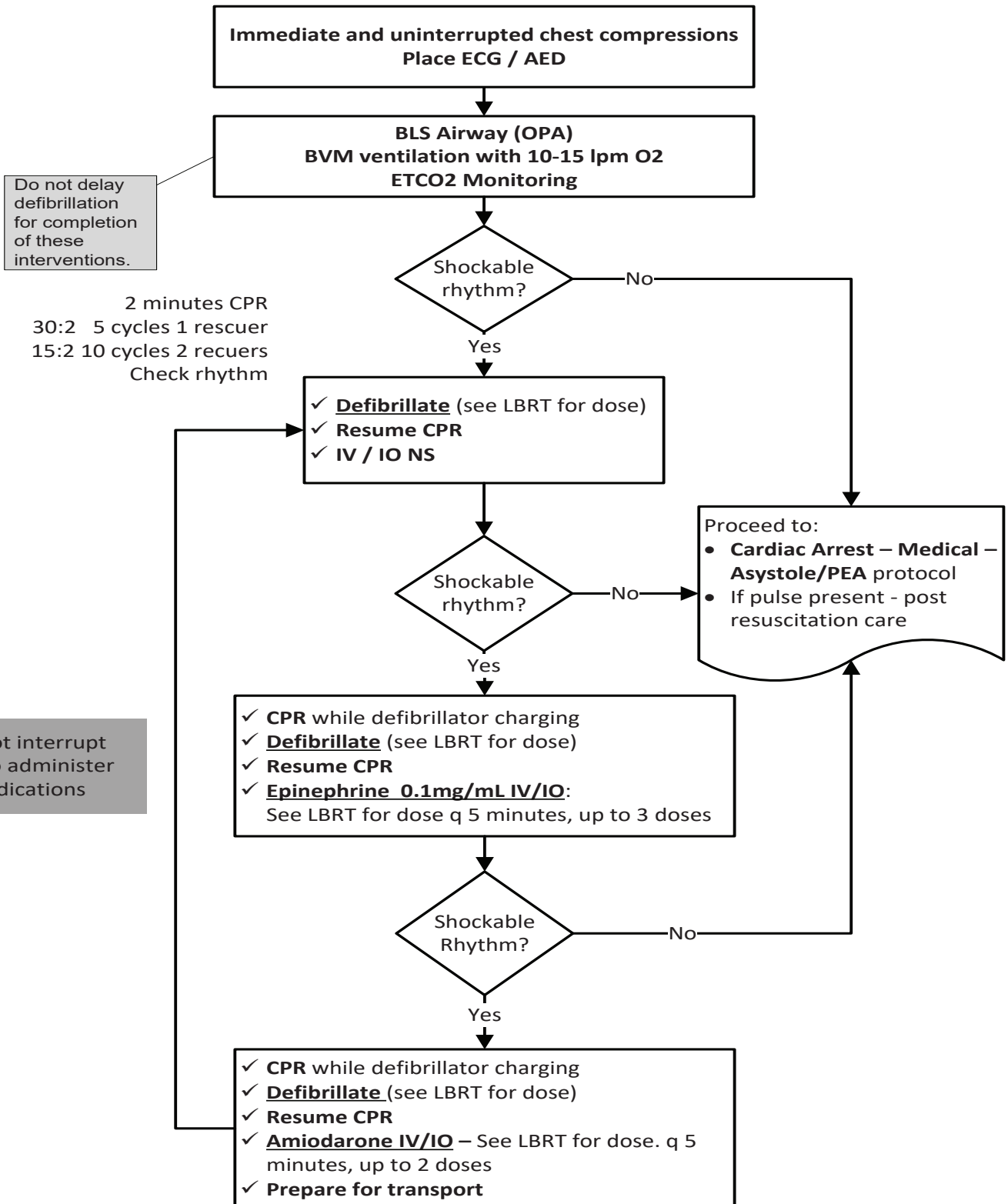
**•Pediatric Routine Medical Care**

- In PEA, identify other causes and treat (See CPR **page 10**)
- Use an **LBRT to determine pediatric medication dosages** - (Shown underlined on the algorithm)
- Note:** Manage the patient's airway with proper airway positioning, simple airway adjuncts, suctioning, and BVM ventilation as necessary. Consider Advanced Airway Management (**page 110**) if BVM ventilation is not adequate.



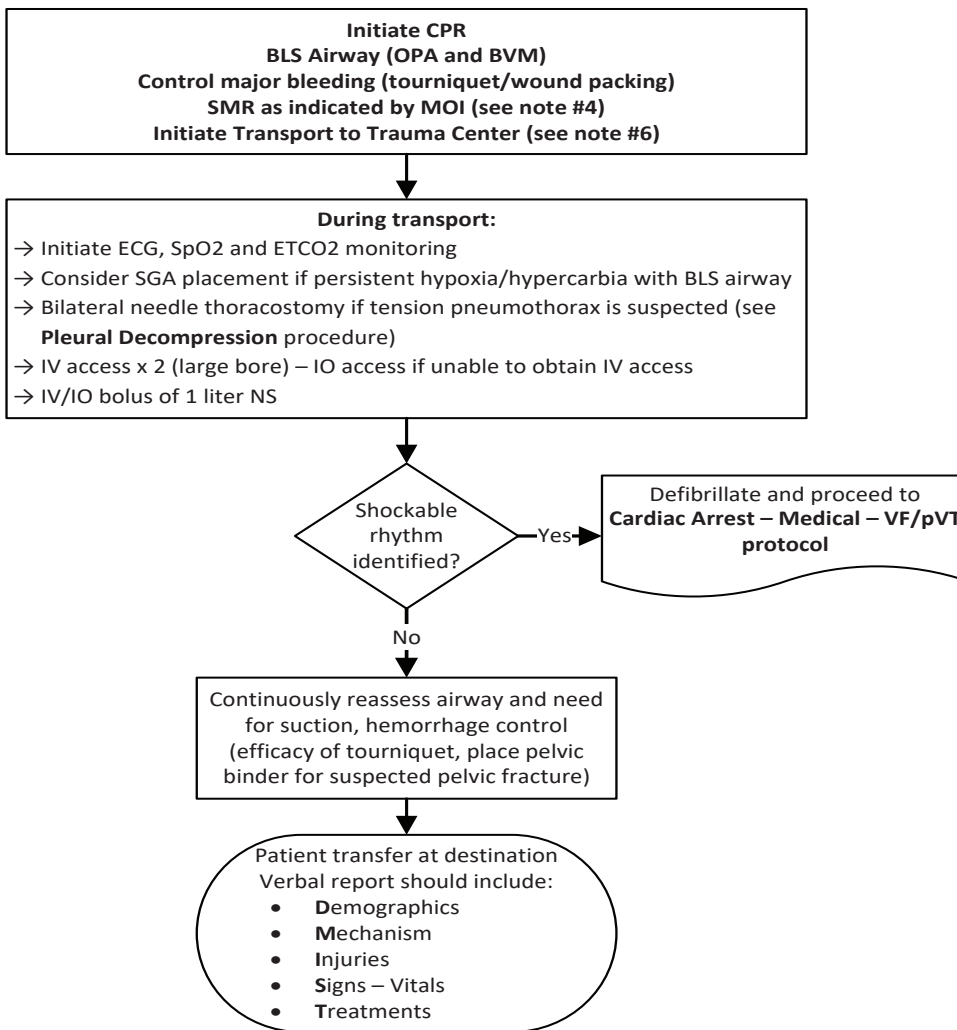
**CARDIAC ARREST - MEDICAL - VF/PVT**

- Pediatric Routine Medical Care
- Use an LBRT to determine pediatric medication dosages - (Shown underlined on the algorithm)
- Note: Manage the patient's airway with proper airway positioning, simple airway adjuncts, suctioning, and BVM ventilation as necessary. Consider Advanced Airway Management (page 110) if BVM ventilation is not adequate



## CARDIAC ARREST - TRAUMATIC

• Do not resuscitate in the setting of obvious death as outlined in Determination of Death in the Field, mass casualty incidents, or if staging, extrication (without resuscitation) and/or transport exceeds 20 minutes.



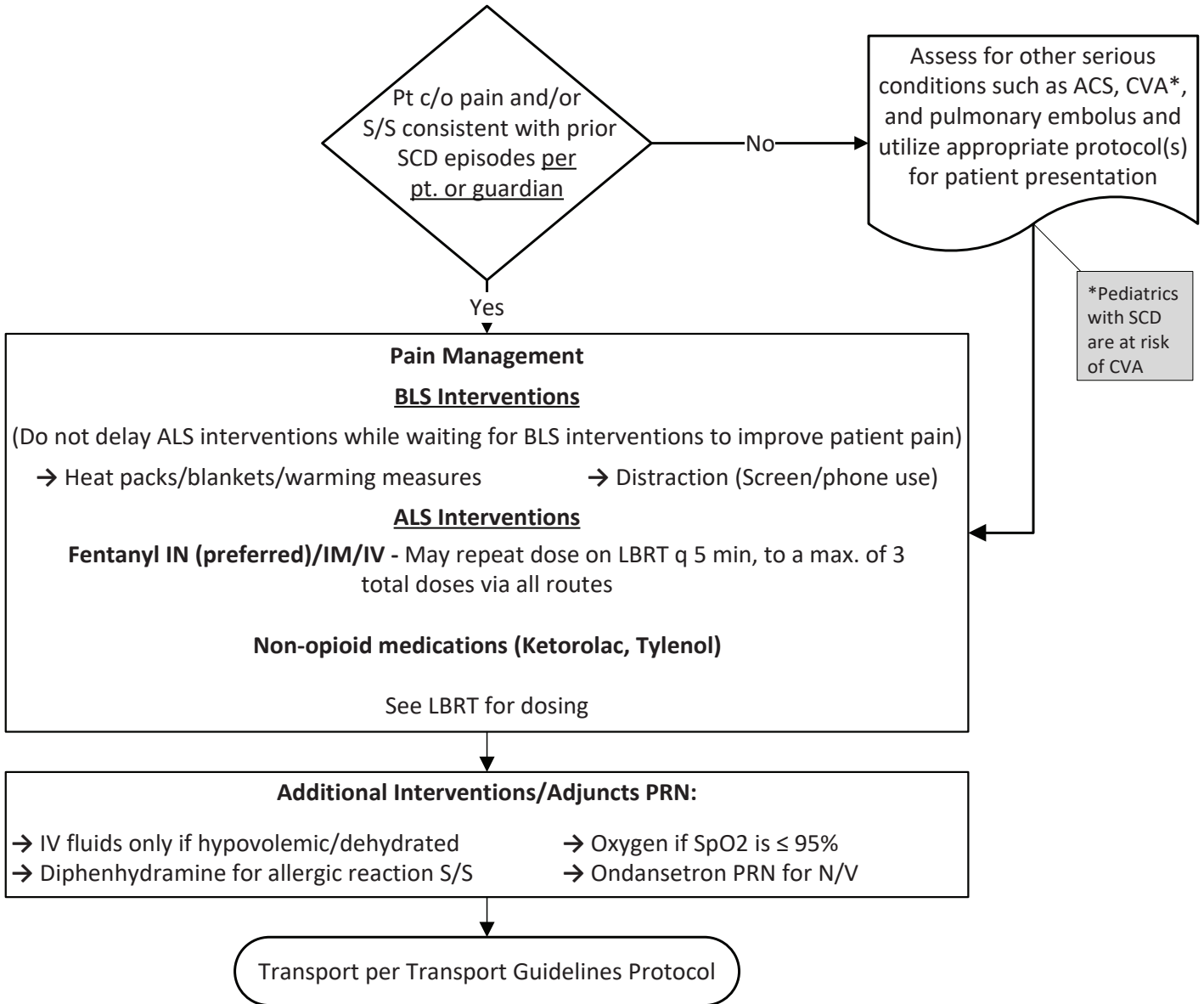
### Special Considerations:

1. Prioritize rapid transport
2. Consider strangulation/hanging or extreme domestic violence as causes of arrest and treat as a Medical Cardiac Arrest with SMR if suspected spinal cord injury and proceed to appropriate medical cardiac arrest protocol
3. ALS procedures in the field do not significantly improve outcomes for traumatic arrest patients
4. Provide spinal motion restriction if indicated by mechanism or signs of blunt head/neck trauma. A backboard may be helpful to support chest compressions and transport
5. Epinephrine administration:
  - Do **not** administer if arrest was caused by hypovolemia from exsanguination
  - Do administer for arrests caused by hanging, strangulation, submersion/drowning, or blunt cardiac trauma (commotio cordis – likely minimal signs of external chest trauma but VF/VT rhythm)
6. Destination choice:
  - Patient to Trauma Center:
    - Penetrating or Blunt trauma with significant hypovolemia from exsanguination
    - Submersion or Mechanical Asphyxiation (drowning, hanging, strangulation) **with** suspected head or spinal injury
  - Patient to closest hospital:
    - Submersion or Mechanical Asphyxiation (drowning, hanging, strangulation) **without** suspected head or spinal injury
7. Trauma is not a contraindication for the use of mechanical CPR device as long as it does not delay transport

## SICKLE CELL PAIN EMERGENCY

**•Pediatric Routine Medical Care**

- Early and aggressive pain management is key to stopping the progression of ischemic processes associated with Sickle Cell emergencies
- Patients with Sickle Cell Disease (SCD) are at higher risk for other serious conditions including ACS, CVA, pulmonary embolism, and sepsis. A high index of suspicion should be maintained for other serious etiologies to symptoms especially in the setting of patient reporting abnormal pain or S/S patterns



**Special Considerations:**

- Absence of tachycardia/hypertension does not rule out sickle cell emergencies. Prompt and aggressive analgesia is always recommended for patients reporting pain
- Triggers for sickle cell emergencies can be infection, temperature changes, dehydration, stress/lack of sleep
- Priapism can be a presentation of sickle cell emergencies and should be treated with aggressive pain control
- Pregnancy is not a contraindication to opioid use in patients with sickle cell pain emergencies



## DETERMINATION OF DEATH IN THE FIELD

---

### 1. INTRODUCTION

1.1 BLS and ALS prehospital personnel are not required to initiate resuscitative measures in any of the following circumstances:

▶ Signs of obvious death are present:

- Decomposition of body tissues
- Total decapitation
- Total incineration
- Total separation or destruction of the heart or brain
- Dependent pooling of blood resulting in skin discoloration indicating lividity
- Rigidity throughout the entire body, including the limbs, indicating rigor mortis
  - *Isolated tightness in the jaw is not sufficient for determining rigor mortis*
- In cases of traumatic arrest, if the staging and extrication time (without resuscitation) exceeds 20 minutes

▶ During multi-casualty incidents (MCIs); follow MCI triage principles

▶ Presence of a signed Do Not Resuscitate (DNR) order, or Physician Order for Life- Sustaining Treatment (POLST), an approved medical medallion inscribed with the words, "Do Not Resuscitate-EMS", or family discretion criteria

→ Family discretion criteria:

- In the absence of a valid DNR/POLST directive, if an identifiable immediate family member or spouse requests no resuscitation, with the unanimous agreement of others present, resuscitation efforts may be withheld or ceased if already initiated
- Copies or original forms of the signed DNR/POLST directives are acceptable
  - All forms require the patient's signature (or signature of appropriate surrogate) and the signature of the patient's physician to be valid
- For additional DNR/POLST special considerations see Section 5 of this policy

1.2 If any doubt exists, begin CPR immediately, and continue resuscitation efforts until it is determined the patient has signs of obvious death, meets determination of death criteria as outlined in this policy, a valid DNR/POLST is presented, or family discretion criteria

1.3 Contacting base should be reserved for cases of determining death in situations not addressed by this policy

### 2. Determination of Death Criteria – Medical Arrest Resuscitation

2.1 In the absence of obvious death, an MCI, a valid DNR/POLST, or family discretion criteria, adult and pediatric medical arrest resuscitation efforts may be terminated by ALS prehospital personnel after resuscitation efforts have continued for at least 20 minutes, and all of the following are present:

- Apnea
- No palpable carotid or femoral pulse for 10 seconds
- ECG reading of Asystole or PEA < 40 bpm
- ETCO<sub>2</sub> < 20 mmHg; advanced airway preferred
- ROSC never achieved (ROSC defined as consecutive 5 minutes of palpable pulses at any point)
- Patient has received ≤ 2 defibrillations
- Hypothermia is not suspected as the cause of arrest

2.2 If any of the Determination of Death Criteria for Medical Arrest Resuscitation are not met, continue resuscitation and contact base hospital

---

**DETERMINATION OF DEATH IN THE FIELD**

---

**3. Procedure After Determination of Death in the Field**

- 3.1 Reference the Death in the Field – Grief Support guidelines
- 3.2 Request the coroner and local public safety agency and remain with the deceased until either agency arrives
- 3.3 The public safety agency with local jurisdiction is responsible for the deceased. The deceased's body may not be moved or disturbed until a disposition is determined by the Alameda County Coroner's Bureau
- 3.4 Complete an EHR and attach a one-minute ECG rhythm strip of the final cardiac rhythm in two leads

**4. DNR/POLST Special Considerations**

- 4.1 If the patient is in cardiac arrest, the DNR/POLST directive should be honored, and resuscitation withheld
  - While family can reverse a DNR/POLST encouragement should be given to honor patient wishes
- 4.2 Correct identification of the patient is essential. After a good faith effort to identify the patient, the presumption should be that the identity is correct if proper documentation is present, and the circumstances are consistent. When available, a reliable witness may be used to identify the patient
- 4.3 If the patient is transported, a copy of the DNR/POLST directive should stay with the patient
  - If the patient arrests while in transit, do not start resuscitation. Continue transporting to the original destination
- 4.4 A copy of the DNR directive should be attached to the EHR. If a copy is unavailable, document the type of DNR directive, date the order was issued, and the name of the physician
- 4.5 If the patient's physician issued the DNR order verbally while on scene, document the name of the physician and have the physician sign the EHR
- 4.6 There are other valid forms of directives including Advanced Health Care Directive (AHCD), the California Natural Death Act, and living wills
  - The AHCD contains a "Health Care Instructions" section with the patient's resuscitation preferences
- 4.7 When a patient is not in cardiac arrest, has a DNR/POLST, and requests treatment, up to and including resuscitation, the request should be honored

---

## CONSENT AND REFUSAL GUIDELINES

---

### 1. PATIENT DEFINITION:

- 1.1 The definition of 'patient' is any individual that:
  - ▶ Requests evaluation for potential illness or injury
  - ▶ Medical assistance has been requested for the individual by another person
  - ▶ Has obvious evidence of illness or injury
  - ▶ Has experienced an acute event that could reasonably lead to illness or injury
  - ▶ Is in a circumstance or situation that could reasonably lead to illness or injury
  - ▶ A person who is deceased
  - ▶ A person who demonstrates impaired psychiatric function or suicidal intent

### 2. DOCUMENTATION OF NON-PATIENT / PATIENT CONTACTS

- 2.1 If a person does not meet the definition of a patient in Section 1, no detailed patient information is required to be documented in the EHR. If any assessment is performed (V/S, history taking, and/or physical examination) a person is now defined as a patient and detailed patient information is required to be documented on an EHR.
- 2.2 If a person meets the definition of a patient in Section 1, they shall be offered a treatment and/or transport after a complete assessment which shall include a full set of vital signs. Mentally competent patients/Designated Decision Makers (DDM) have the right to refuse any or all treatment(s) and/or transport as long as EMS personnel have explained the care and the patient/DDM demonstrates capacity as defined below.

### 3. PATIENTS WHO MAY LEGALLY GIVE CONSENT OR REFUSE MEDICAL TREATMENT ARE AS FOLLOWS:

- 3.1 Is an adult (18 years old or older)
- 3.2 A minor who is:
  - 3.2.1 Legally emancipated
  - 3.2.2 Lawfully married
  - 3.2.3 On Active Duty with the Armed Forces
  - 3.2.4 >12 years old seeking prevention or treatment of pregnancy or sexual assault
  - 3.2.5 >12 years old seeking treatment of rape, contagious diseases, alcohol, or drug abuse
- 3.3 A patient who has a Designated Decisions Maker (DDM)
  - 3.3.1 A Designated Decision Maker (DDM) is defined as: An individual to whom the patient or a court has given legal authority to make medical decisions concerning the patient's healthcare (a parent or Durable Power of Attorney DPOA)

### 4. ASSESS AND RELEASE (AAR) FROM EMS CARE DEFINITION:

- 4.1 A patient who, after assessment by EMS personnel, does not desire treatment and/or transport to an emergency department

### 5. ASSESS AND RELEASE (AAR) FROM EMS CARE CRITERIA:

- 5.1 **EMS clinician and the patient or DDM agree that the illness/injury does not require immediate treatment/transport via emergency/911 services**
- 5.2 In order to release care, a patient, parent, or guardian must have legal and mental decision-making capacity by meeting all of the following criteria:
  - 5.2.1 Understands the nature of the medical condition, and the risks and consequences of not seeking treatment now
  - 5.2.2 Exhibits evidence of decision-making capacity sufficient to understand the nature of the medical condition as well as the risks and potential consequences of not seeking additional medical care/transport
  - 5.2.3 Exhibits no evidence of:
    - ▶ Altered level of consciousness
    - ▶ Alcohol or drug ingestion that impairs decision-making capacity
- 5.3 EMS personnel should advise the patient/DDM of alternative care and transport options which may include:

---

## CONSENT AND REFUSAL GUIDELINES

---

5.3.1 Private transport to a clinic, physician's office, or an Emergency Department

5.3.2 Telephone consultation with a physician

### 6. ASSESS AND RELEASE (AAR) FROM EMS CARE DOCUMENTATION ESSENTIALS:

- 6.1 What the patient is refusing (i.e. medical care, transport)
- 6.2 Why the patient is refusing care and their plan for follow up care
- 6.3 The apparent capacity of the patient to refuse care
- 6.4 The presence or absence of impairment (i.e. drugs, alcohol, or significant head trauma)
- 6.5 Risk and consequence of refusing care as explained to the patient or legal representative
- 6.6 Statement that the patient understands the risks and consequences of refusing care
- 6.7 The patient understanding that they may re-access 911 if needed
- 6.8 Signature of patient or legal representative refusing care
- 6.9 Documentation that interpreter was used, when appropriate
- 6.10 Under "Reason for Refusal or Release" choose "Patient/Guardian states intent to transport by other means" or "Released following protocol guidelines" as disposition category in EHR

### 7. AGAINST MEDICAL ADVICE (AMA) DEFINITION:

- 7.1 A patient who after assessment by ALS personnel is recommended to accept treatment and/or transport, but refuses

### 8. AGAINST MEDICAL ADVICE (AMA) CRITERIA:

- 8.1 EMS clinician advises the patient or DDM to receive treatment and transport. The patient or DDM refuse medical care against the advice of the EMS clinician
- 8.2 In order to refuse care, a patient, parent, guardian, or DDM must have legal and mental decision-making capacity by meeting ALL of the following criteria:
  - 8.2.1 Understands the nature of the medical condition, and the risks and consequences of refusing care
  - 8.2.2 Exhibits evidence of decision-making capacity sufficient to understand the nature of the medical condition as well as the risks and potential consequences of not seeking additional medical care/transport
  - 8.2.3 Exhibits no evidence of:
    - ▶ Altered level of consciousness;
    - ▶ Alcohol or drug ingestion that impairs decision-making capacity;
    - ▶ Danger to self or others

### 9. AGAINST MEDICAL ADVICE (AMA) DOCUMENTATION ESSENTIALS:

- 9.1 What the patient is refusing (i.e. medical care, transport)
- 9.2 Why the patient is refusing care and their plan for follow up care
- 9.3 The apparent capacity of the patient to refuse care
- 9.4 The presence or absence of impairment (i.e. drugs or alcohol)
- 9.5 Risk and consequence of refusing care as explained to the patient or legal representative
- 9.6 Statement that the patient understands the risks and consequences of refusing care
- 9.7 The patient understanding that they may re-access 911 if needed
- 9.8 Signature of patient or legal representative refusing care
- 9.9 Documentation that interpreter was used, when appropriate
- 9.10 Under "Reason for Refusal or Release" choose AMA as disposition category in EHR

10. **BASE CONTACT:** Can be made to help convince the patient to receive treatment and/or transport when the refusal would cause potential harm or death to the patient

---

## CONSENT AND REFUSAL GUIDELINES

---

11. **PEDIATRIC CONSIDERATIONS:** Parents or guardians who refuse treatment and/or transport for pediatric patients whom the clinician feels should receive treatment and/or transport deserve special consideration

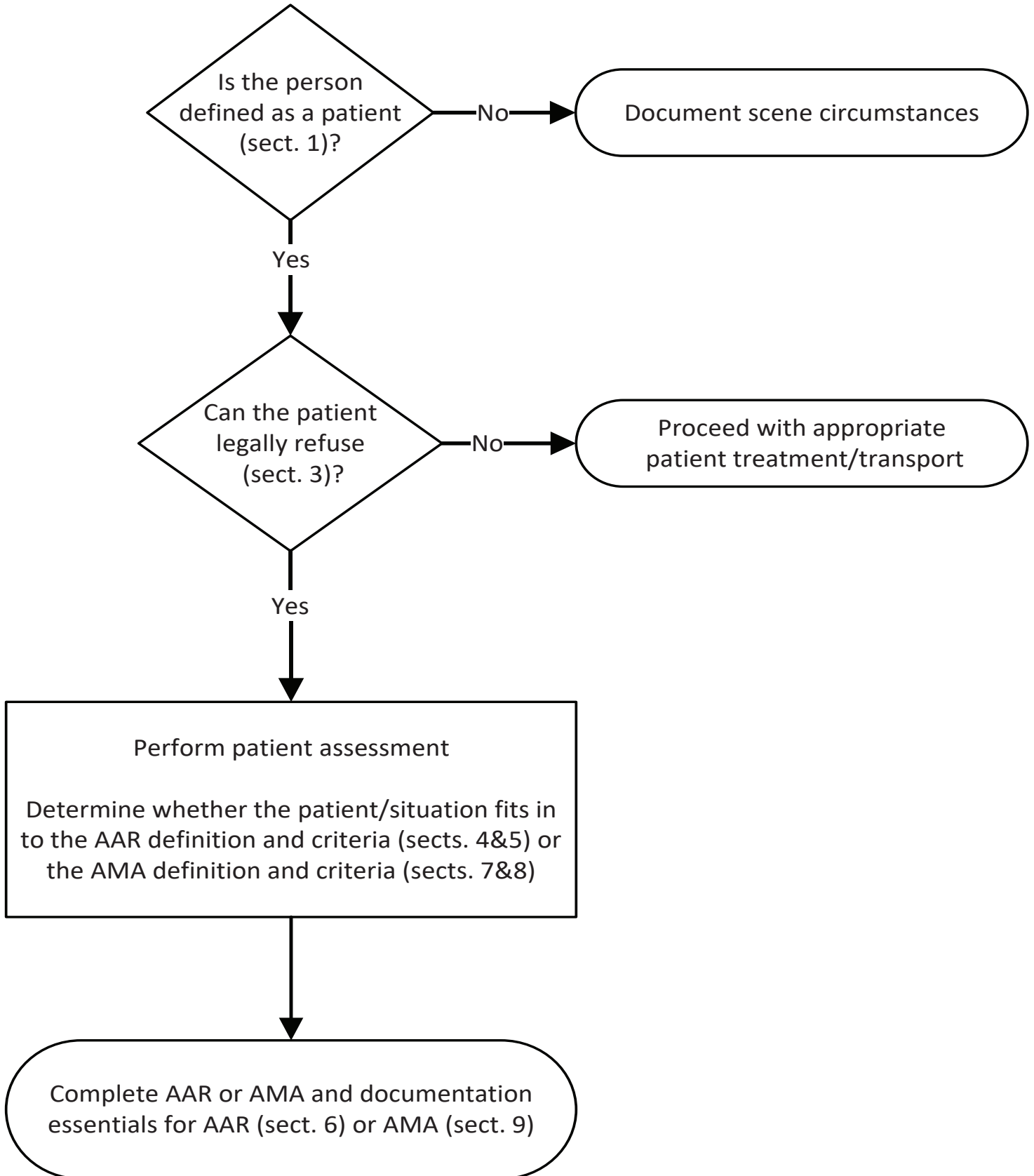
- 11.1 Base contact should be made, as well as considering law enforcement involvement to encourage treatment and/or transport.
- 11.2 Consider potential abuse or neglect of the child in the parent or guardian's refusal.

12. **SPECIAL CONSIDERATIONS:**

- 12.1 Consider early involvement of law enforcement if there is any threat to self, others or grave disability.
- 12.2 If the patient cannot legally refuse care or is mentally incapable of refusing care, document on the PCR that the patient required immediate treatment and/or transport, and lacked the mental capacity to understand the risks/consequences of the refusal (implied consent)
- 12.3 At no time are field personnel to put themselves in danger by attempting to transport or treat a patient who refuses. At all times, good judgment should be used, appropriate assistance obtained, and supporting documentation completed
- 12.4 An individual under arrest or incarcerated, or on a 5150 is legally capable of consenting or refusing medical care but cannot refuse transport.
- 12.5 If you cannot complete the refusal of service log due to scene safety issues or upon the insistence of another agency, complete an EMS Event form and send it to the EMS Agency

### CONSENT AND REFUSAL GUIDELINES

13. CONSENT AND REFUSAL GUIDELINES WORKFLOW:



## IMPEDANCE THRESHOLD DEVICE (ITD)

1. **INTRODUCTION:** ResQPOD® is an impedance threshold device (ITD) that enhances the vacuum in the chest that forms during the chest recoil phase of CPR. Studies have shown that this process draws more blood back to the heart (increases preload), and increases cardiac output, blood pressure, perfusion to vital organs and survival rates
2. **WARNINGS:** Contraindicated in patients where cardiopulmonary resuscitation (CPR) is not indicated. Never use on patients with pulse or spontaneous breathing. Remove immediately from ventilation circuit once CPR is discontinued
3. **INDICATIONS:** To be used on all patients  $\geq 8$  years of age in cardiac arrest
4. **CONTRAINDICATIONS:**
  - 4.1 Patients under the age of eight (8)
  - 4.2 Patients with a flail chest
5. **PROCEDURE:** The ResQPOD can be used for either basic or advanced life support during cardiac arrest, with a bag-valve mask attached to a face mask, an endotracheal (ET) tube, or other airway devices (e.g. - SGA)
  - 5.1 Select airway adjunct (tube or mask)
  - 5.2 Attach bag-valve to air intake port on ResQPOD
  - 5.3 Slide the Ventilation Timing Assist Light switch to on when using the ResQPOD in an intubated patient
  - 5.4 Begin CPR (**page 10**):
    - ▶ Allow for complete chest release/recoil after each compression
    - ▶ Follow recommended ventilation rates
    - ▶ **DO NOT** hyperventilate

ResQPOD® Impedance  
Threshold Device



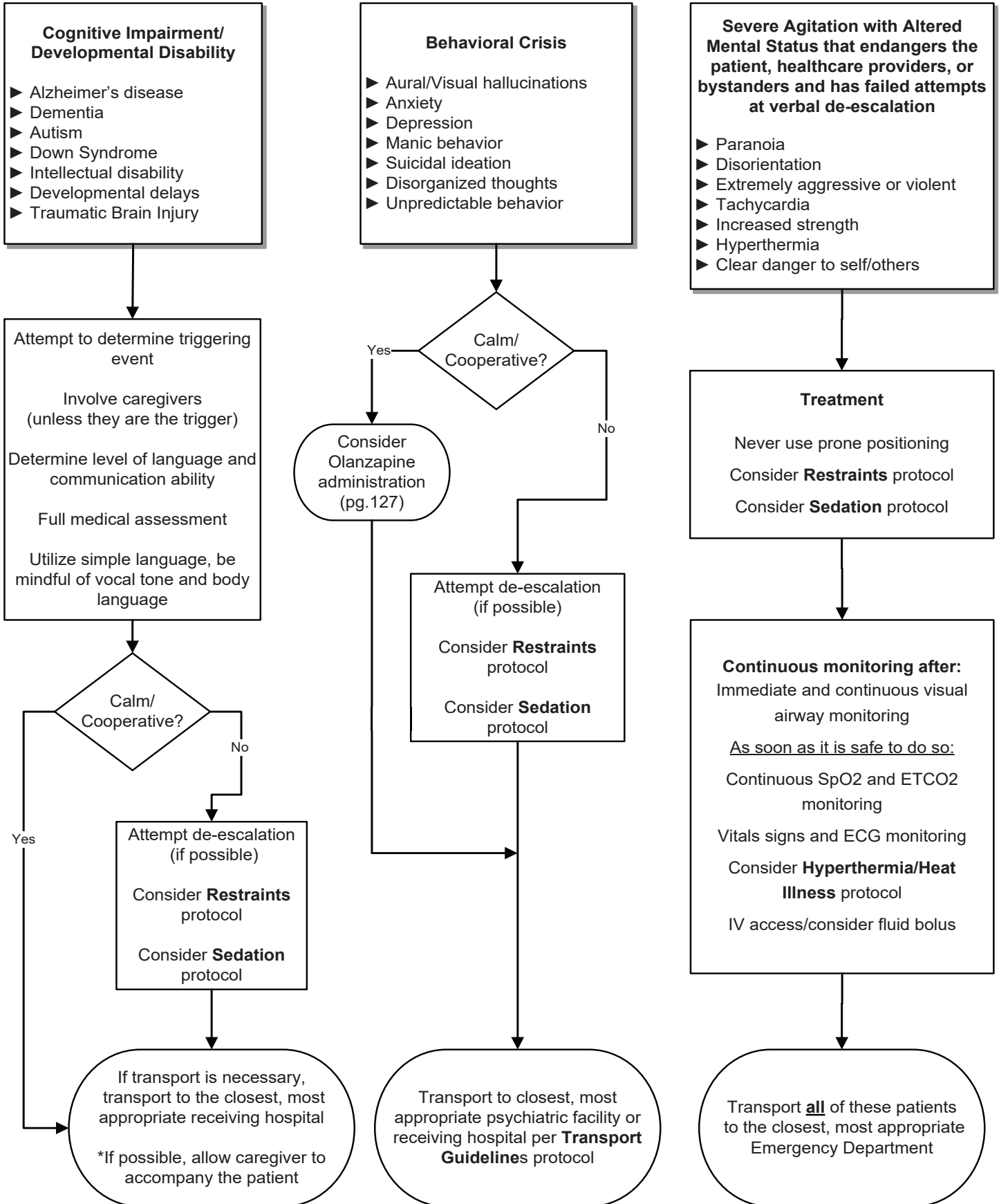
← Timing Light Switch

**\*Note:** the timing light ensures that ventilations do not exceed 8 - 10 per minute

- 5.5 Use 30:2 compressions:ventilation ratio (15:2 for infants and children with 2 rescuers) for basic life support when using a face mask. Ventilate intubated patients 8-10 breaths/minute with each breath lasting 1.5 seconds (maximum) to optimize CPR and ResQPOD efficacy. Excessive ventilation rates will reduce the effectiveness of the ResQPOD
- 5.6 Clean or suction vomit or secretions from the ResQPOD by removing from airway adjunct and shaking or blowing out debris using ventilation source.

**NOTE:** Discontinue use if correct function cannot be assured. After pulse and/ or spontaneous respirations have been restored, immediately remove ResQPOD from ventilation circuit and help patient breathe as needed

**PSYCHIATRIC AND BEHAVIORAL EMERGENCIES**





**STROKE ASSESSMENT SCALES (CPSS AND PSS)**

**1. PURPOSE:** To be used in conjunction with the **STROKE / CVA** Protocol for the assessment of suspected stroke / CVA

**Cincinnati Prehospital Stroke Scale (CPSS)**

Sign/Symptom	Testing Procedure	Normal	Abnormal
<b>Facial Droop</b>	Have the patient show their teeth or smile	Both sides of the face move equally	One side of the face does not move as well as the other
<b>Arm Drift</b>	The patient closes their eyes and extends both arms straight out for 10 seconds	Both arms move the same, or both do not move at all	One arm either does not move, or one arm drifts downward compared to the other
<b>Speech</b>	The patient repeats "The sky is blue in Cincinnati."	The patient says correct words with no slurring of words	The patient slurs words, says the wrong words, or is unable to speak

**Posterior Stroke Scale (PSS)**

Sign/Symptom	Testing Procedure	Normal	Abnormal
<b>Visual Fields</b>	Face the patient, ask them to look straight at your nose, move your fingers in each of the four visual quadrants (upper right/left, lower right/left), and ask the patient to state the side they see the fingers moving	Vision intact in all of the four quadrants	Missing vision in any of the four quadrants
<b>Finger-to-Nose</b>	Patient holds arms at their shoulder to 90 degrees with elbows flexed to 90 degrees, place your index finger at various locations in front of the patient at a distance that requires patient to extend their elbow to reach your finger, ask patient to use their index finger on one hand to touch their index finger to your finger, then touch their index finger to their own nose, then to your finger. Repeat several times moving their target finger each time. Patient repeats the process using the opposite hand's index finger	No weakness, wobbling, or shaking in either arm while attempting to make contact with your finger	Weakness, wobbling, or shaking in either arm while attempting to make contact with your finger ***When both arms are equally shaking or weak, this is not considered an abnormal finding***

## TRANSCUTANEOUS PACING - TCP

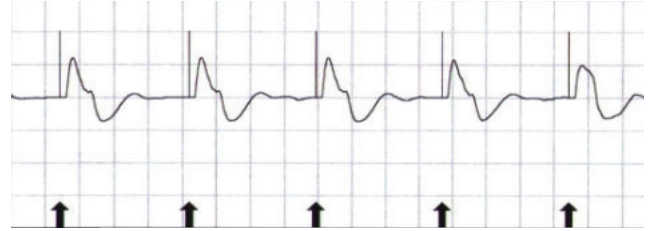
1. **INDICATIONS:** This procedure should be used on patients experiencing symptomatic bradycardia (see **Adult Bradycardia** or **Pediatric Bradycardia** protocols. This includes patients with “failed” pacemakers. Note: Bradycardia in children is usually due to respiratory causes

Consider alternate causes of the dysrhythmia and treat appropriately prior to initiation of TCP:

- ▶ Hypoxia
- ▶ Trauma
- ▶ Drug overdose
- ▶ Electrolyte imbalance (not treatable in the field setting)
- ▶ Hypothermia

2. **CONTRAINDICATIONS:**

- 2.1 Asystole
- 2.2 Bradyasystolic arrest
- 2.3 Hypothermia



Example of ECG with electrical capture

3. **PROCEDURE:**

- 3.1 Consider sedation with midazolam (See **Sedation** procedure) and/or appropriate **Pain Management** protocol for all conscious patients undergoing pacing. Hypotension is not an absolute contraindication in this setting. If unable to start IV, consider administering IM or IN
- 3.2 Place pads on the patient in anterior/posterior (A/P) position. If unable to place posterior pad, the pads can be placed in the anterior/lateral (A/L) position. Do not place pads over pre-existing implanted devices such as pacemakers or AICDs
- 3.3 Set pacing rate to:
  - 3.3.1 Adults ( $\geq 15$  y/o): 60-80 bpm (goal of  $>30$  bpm above patient's initial rate)
  - 3.3.2 Pediatrics ( $\leq 14$  y/o) set pacing rate at 100 bpm
- 3.4 Start pacer current output at 0 milliamps (mA). Increase milliamps until electrical capture is obtained on the ECG (Max 120mA)
- 3.5 Confirm mechanical pacer capture by palpation of a femoral pulse. A pulse should be associated with at least every paced QRS complex. (Note: assessment of carotid pulse is not recommended as pacing can cause muscle contractions that are difficult to distinguish from pulse)
- 3.6 If electrical/mechanical capture cannot be achieved at 120mA, change vector of pads and repeat above steps.
- 3.7 Pediatric patients: Continue CPR until able to achieve electrical/mechanical capture
- 3.8 Once both electrical and mechanical capture obtained, increase the pacer current by 5-10mA
- 3.9 Once electrical and mechanical capture is obtained, the pacing rate may be increased slowly to relieve patient's symptoms (acute ALOC, hypotension, weak pulses, or central cyanosis) from bradycardia

4. **SPECIAL CONSIDERATIONS:**

- 4.1 TCP should not be delayed for IV access, 12-lead ECG, or while waiting for atropine to take effect in an unstable patient
- 4.2 CPR is safe during TCP and should be performed in pediatric population
- 4.3 Electrical capture can occur without mechanical capture. Electrical capture can be assessed on the monitor with identification of QRS complexes after every pacer spike. Mechanical capture is evaluated with palpation of a femoral pulse with every QRS complex
- 4.4 TCP is safe to perform in pregnant patients