Sierra – Sacramento Valley EMS Agency
Regional Emergency Medical Advisory Committee (REMAC)

MEETING AGENDA

MEETING DATE & TIME INFORMATION

- **Wednesday, July 1, 2026, 9:00 am – 12:00 pm**

MEETING LOCATION & ALTERNATE ATTENDANCE INFORMATION

- **Primary Meeting Location:** 535 Menlo Drive, Suite A, Rocklin, CA 95675
- **Alternate Meeting Location:** 1255 East Street, 2nd Floor, Redding, CA 96001
- **Zoom:** Https://us02web.zoom.us/j/89420097820?pwd=s67WzS96jIEJS2M6Rzjpku5fPbBKJA.1
- **Telephone:** (669) 900-9128 **Meeting ID:** 894 2009 7820 **Passcode:** 1702

IMPORTANT NOTIFICATONS

Public comments on proposed policy/protocol actions listed on this agenda will be taken during the review/discussion of the applicable item. Individuals unable to attend the meeting may provide written public comment on any item listed on this agenda, no later than seven (7) calendar days prior to the scheduled meeting date, by sending an email to Jared.Gunter@ssvems.com.

Policy/protocol actions listed on this agenda may be approved by a majority vote of the REMAC members present at the meeting. If necessary, proposed policy/protocol actions may be continued to subsequent REMAC meetings until consensus is reached by the committee.

All REMAC approved policy/protocol actions shall also be approved by the S-SV EMS Medical Director and Regional Executive Director prior to implementation. S-SV EMS may make non-substantive corrections to approved policy/protocol actions to address any technical defect, error, irregularity, or omission prior to final publication.

EMS system participants will be notified of approved policy/protocol actions a minimum of 30 calendar days prior to the effective implementation date. Policy/protocol action updates are routinely published on a bi-annual basis as follows:

October & January meeting approved policy actions: April 1st implementation date.

March & July meeting approved policy actions: October 1st implementation date.

Some policy/protocol actions may require immediate action to maintain compliance with statutes/ regulations, or to preserve medical control/integrity of the EMS system. Policy/protocol actions of this type may be implemented by S-SV EMS as urgency measures and scheduled for discussion at the next regularly scheduled REMAC meeting, if necessary.

MEETING AGENDA		
ITEM	**TITLE**	**LEADER**
A	**Call to Order/Introductions**	**Chairperson**
B	**Approval of Previous Meeting Minutes**	**Chairperson**
C	**Approval of Meeting Agenda**	**Chairperson**
D	**Public Comment**	**Attendees**
E	**S-SV EMS Consent Policy/Protocol Action Items** These policies/protocols items are due for routine review, with no substantive changes recommended by S-SV EMS staff or the S-SV EMS Medical Director. All Consent Policy/Protocol Actions will be approved by a single vote. Anyone may ask to address specific Consent Policy/Protocol Action items prior to the committee acting, and the item(s) may be removed for additional discussion.	**Chairperson**
	441: Paramedic IFT Opt Skills Provider Agency Approval (with 441-A)	
	839: Physician On Scene	
	840: Medical Control for Transfers Between Acute Care Facilities	
	849: Transfer of Patient Care	
F	**S-SV EMS Discussion Policy/Protocol Action Items**	**S-SV EMS Staff**
	210: REMAC Bylaws	Poland
	341: Paramedic IFT Optional Skills Transferring Hospital Requirements	Quirk
	506: STEMI Receiving Center Designation Criteria	Moss
	507: Stroke Receiving Center Designation Criteria	Moss
	509: Trauma Center Designation Criteria	Moss
	605: EMS Documentation	Gunter
	622: Prehospital Provider Clinical Performance Standards (with 622-A)	Moss
	841: Paramedic IFT Optional Skills	Moss
	C-2: Return of Spontaneous Circulation (ROSC)	Gunter
	C-5: Ventricular Assist Device (VAD)	Moss
	M-8: Pain Management	Pohley

ITEM	TITLE	LEADER
	N-3: Suspected Stroke	Moss
	R-1: Airway Obstruction	Gunter
	R-1P: Pediatric Foreign Body Airway Obstruction (FBAO)	Gunter
	T-1: General Trauma Management	Moss
	T-4: Hemorrhage	Moss
G	**Discussion – Base Hospital Orders/Base Hospital Physician Orders**	**Attendees**
H	**EMS Aircraft Provider Reports**	**Attendees**
I	**EMS Ground Provider Reports**	**Attendees**
J	**Hospital Provider Reports**	**Attendees**
K	**Quality Improvement (QI) & Case Review**	**Pohley**
L	**S-SV EMS Agency Reports**	**S-SV EMS Staff**
	EMS Data System	McManus
	Regional Specialty Committees	Moss
	REMAC Committee Voting Member Discussion	Poland
	Operations	Comstock
	Regional Executive Director	Poland
	Medical Director	Falck, MD
	Next Meeting/Adjournment: October 14, 2026	**Chairperson**

Sierra – Sacramento Valley EMS Agency
Regional Emergency Medical Advisory Committee
(REMAC)

MEETING MINUTES

Meeting Date
Wednesday, April 8, 2026

A. Call to Order/Introductions

- Clayton Thomas called the meeting to order at 9:03 am, and all attendees introduced themselves.

B. Approval of Previous Minutes: January 14, 2026

- The minutes were unanimously approved by the committee with no changes.

C. Approval of Agenda

- The committee approved the agenda with no changes.

D. Public Comment

- Sutter Roseville will have a run review on 4/14, on pediatric cardiac disease and neonatal emergencies, at S-SV.

E. S-SV EMS Consent Policy/Protocol Action Items

Policy	Name	Motion	Second	Committee Vote
306	**Base/Modified Base Hospital Recording & Maintenance Of EMS Patient Care Committee** • There were no proposed changes.	Dr. Iwai	Jeremy Veldstra	Passed Unanimously
835	**Medical Control at the Scene of an Emergency** • There were no proposed changes.	Dr. Iwai	Jeremy Veldstra	Passed Unanimously
836	**Hazardous Materials Incidents** • There were no proposed changes.	Dr. Iwai	Jeremy Veldstra	Passed Unanimously
851	**EMS Care of Minor Patients** • There were no proposed changes.	Dr. Iwai	Jeremy Veldstra	Passed Unanimously
E-7	**Hazardous Material Exposure** • There were no proposed changes.	Dr. Iwai	Jeremy Veldstra	Passed Unanimously

F. S-SV EMS Discussion Policy/Protocol Action Items

Policy	Name	Motion	Second	Committee Vote
405	**Emergency Medical Dispatch EMD Programs** • There are significant changes on page 1-3 • AB645 requires every PSAP in California to provide minimum prearrival instructions (page 1, Item A, lines 12-17). • AB1639 – the drowning prevention act which would require a little more expansion of item A2. • AB2041 – would tie some of the PSAP funding to making sure they're providing the correct instructions. EMSAAC has some issues with this bill.	Rich Lemon	Debbie Madding	Passed Unanimously
853	**Tasered Patient Care & Transport** • On page 1, line 27, removed 'excited delirium' and added 'behavioral emergencies'. • On page 2, lines 5-6, added 'in the ambulance or follow the ambulance'. • A typo was pointed out on page 2, line 17, the first word should be 'Do'.	Rich Lemon	Jeremy Veldstra	Passed Unanimously
E-8	**Nerve Agent Treatment** • On page 3, all 3 yellow boxes, removed 'Pralidoxime chloride' and added '2-PAM'.	Dr. Iwai	Dr. Royer	Passed Unanimously
M-6	**General Medical Treatment** • The pages were renumbered because pages have been added. • Page 3 - This protocol is about education and permissive hypotension and its treatment. • This also refers to pain management.	Dr. Iwai	Jeremy Veldstra	Passed Unanimously
T-5	**Burns** • On page 1, under BLS, secondary actions, the first bullet point, added 'and in the absence of life threatening injuries'.	Dr. Iwai	Rich Lemon	Passed Unanimously

G. Ambulance Provider Rate Approval Process

- This concerns Policy 412, which has been in place for about a year.
- This was taken to the JPA Board in February for discussion.
- The policy was suspended and continues to be suspended.
- This goes back to the JPA Board on Friday for direction.
- This will be brought back to this committee after the JPA meeting.

H. EMS Aircraft Provider Reports

- REACH
  - Balloon transport pump is being used in Marysville now. They'd like to get everyone in northern California trained on this.

I. EMS Ground Provider Reports

- Mercy Redding
  - Several EMTs are graduating from Medic school and are being converted to medics.
  - They've been paying closer attention to some of the bravo responses secondary to EMD and have been diverting ALS ambulances to those BLS calls.
  - Videoscopes seem to be doing well.
  - Volume is currently down in Tehama County.
  - Gearing up for the summer season.
  - They've had a lot of difficulty with Mednet Channel 10 and have been using Mednet Channel 3. They're trying to resolve this.
- AMR Shasta
  - They're getting ready for some bilevel positive airway training.
- Butte County EMS
  - Intern season. They have 8 in their program, 7 of whom are former EMTs.
  - There are some staffing challenges.
  - Flightcare went live w/whole blood.
- BiCounty
  - They have EMTs that are upgrading to medics
  - They're hiring EMTs
  - They purchased some new training equipment for Trauma training for in-house as well as for other local providers.
- It was suggested to add '*Education Facilities*' to the agenda and to include them in the roundtable.

Educational Facilities

- Sierra College
  - They had their advisory board recently
  - They are graduating their first Paramedic cohort.
  - Applications for cohort #3 closed on 4/1. They received 141 applications for 20 spots.
  - They're always looking for part-time skills instructors
  - Their AEMT cohort #4 is in field time currently. 5 have finished and 9 more are on deck.
- ETNA Ambulance
  - They've been holding a hybrid EMT class for rural EMS with 3 different counties.
  - They will partner with Shasta College to include more rural areas going forward.

J. Hospital Provider Reports

- UC Davis
  - Construction continues.
- Sutter Roseville
  - They will be hiring in-patient nurses to help create more beds in the ED on 5/1
  - Measles – they had positive exposure last week. Pre-hospital should give a heads-up when bringing in patients (unvaccinated, fever, rash). They should not go into the ED; they'll go to a d-con room.
  - The MICNs can ask the medics about the patients.
- Rideout
  - They've had a change in leadership – they have a new Director.
  - They have a new manager as well.
- Mercy Redding
  - They had a big airport drill recently.
  - Med 10 is an issue.
- Auburn Faith
  - Measles walk-ins are a concern.
- Enloe
  - Cancer center will be ready soon and they will begin seeing patients in August.
  - There have been lots of drills with SWAT teams and Fire Departments.
  - They're getting ready for the MRSE that's coming up.

K. Quality Improvement (QI) Case Review

- Brittany reviewed airway tracking forms/data.
  - Some providers have their crews practice airways before every shift.
  - There was a lot of good discussion.
- Sutter Roseville/Roseville FD presented a pediatric case
- Butte County EMS presented a pediatric case
- There was a lot of good discussion.

L. S-SV EMS Agency Reports

- **EMS Data System**
  - There was a Schematron update on the 30th. Everyone failed because it came out late and didn't hit the Imagetrend systems until early morning. There is another update coming 5/1, please check with administrators.
  - V 3.5.1 – if you haven't already been upgraded to this version follow up with your vendors. Calls will fail in November if you haven't been upgraded.
  - A memo was sent out for the import review. This will be bi-annual – per EMSA. Notification will be sent out around July 1.
  - CEMSIS is being transitioned to a new system. S-SV is one of 3 LEMSAs that is piloting this starting next week. Everything will be transitioned by August 31st, to ensure that things are ready for the State's September 30th hard date.
- **Regional Specialty Committees**
  - The next Trauma QI meeting will be on May 14th. There are a few topics that may mean potential protocol changes. One of those will be push dose Epi used with trauma patients.
  - Stroke – there needs to be more participation. For state submissions, stay on top of those. If you need help, please let Jeff know.

- STEMI- looking at numbers, discrepancies in documentation between how the field is documented versus how the hospital is documenting on the same patient. The next meeting will be in September.

- **REMAC Committee Voting Member Appointments**
  - There are public north and South, and private north and south voting members.
  - Traditionally there are a lot more nominations from the Southern region of S-SV than from the northern region.
  - The current bylaws allow each of the member county EMCCs/EMAGs to have representatives on the committee as well. Out of the 8 EMCCs/EMAGs there is only representation on 2 of them.
  - For the north public, there was only one nomination submitted. For the north private, there are 3 nominations, which includes Jason Swann who is actually one of the EMAG representatives for Shasta/Tehama. He's the primary member.
  - For the private south, there is just one nomination. For public south there are 5 nominations.
  - Mr. Poland recommended getting rid of the private/public north/south, etc., and instead offer 14 pre-hospital voting positions.
  - The 2 HEMS providers would remain.
  - If the committee is interested in doing this, it will be placed on the next meeting agenda as a non-action item for discussion, and then to the meeting after that for a 2/3rd vote. This way, by the final meeting of the year, all 10 of today's nominees would be voting members.
  - The committee asked about including AEMTs in this.
  - This will be put on the July meeting agenda to begin the process of formally changing it.

    The following individuals were moved/seconded for the listed positions:
    - North Public: Teri Arrwood as Primary, Michael Long as Alternate
    - North Private: Rich Lemon as Primary, Michael Eliassen as Alternate
    - South Public: David Justus as Primary, Dane Meredith as Alternate
    - South Private: John Hughes as Primary, Captain Dillon Coward as Alternate

- **REMAC Committee Chairperson & Vice Chairperson Elections**
  - Chair: Dr. Royer was nominated by Clayton Thomas and seconded by Debbie Madding
  - Vice Chair: John Hughes volunteered and was motioned/seconded approved by the committee.

- **Operations**
  - The committee asked to bring back the APOT committee.
    - This will be voluntary, virtual, and hospital based.
    - Best practices will be discussed.
    - The meeting frequency will be decided by the committee.
  - All transport permits went out this week. All non-EOAs must renew their annual permit, these should be in by 5/31. They expire at the end of June.
    - If your EMSQIP has not been turned into Brittany, your permit will not be approved.
    - If you have not paid the fee, your permit will not be approved.
    - If your permit expires, you will not be allowed to transport.
  - EMSA changed their licensing program on 4/1. If you tried to reaccredit your Medic license there may have been a hiccup. This also affects the EMTs.
  - Visit the SSV website for more information on Strike Team Leader courses.
  - Patrick is working with Eric Engle to do a CHEMPACK training course, after fire season.
  - EMS Week is coming up in May. Please let SSV know of your events so staff can be there.
  - If providers have any training coming up, please let SSV know if you'd like staff to attend.

- **Regional Executive Director's Report**
  - Protecting Patient Access to Emergency Medications Act of 2017
    - The federal government, DEA, finally produced regulations that became effective on March 9th of this year
    - Only 19 states in the United States that currently authorized, that authorize their EMS providers to obtain EMS-specific DEA registration. California is not one of them.
    - The California Department of Consumer Affairs and Board of Pharmacy must implement statutory and regulatory changes that would allow an EMS provider in California to obtain an EMS specific DEA registration.
    - If you try applying as a private provider, you're going to lose your $888 that you're required to submit to them because it's non-refundable. So don't apply because it will be denied. There is a waiver of fees for the public providers and that'll be communicated better when we get to that point.
  - The California EMS Authority is basically taking several disparate platforms – IT, CEMSIS, the central registry, and merging it into one. It's an Amazon Web Services system and it's called CloudWick. Once this is actually up and running, it's going to be great because all of these systems will now communicate with each other.
  - S-SV has been participating with the EMS Authority from a pilot perspective on both the central registry and now the CEMSIS.
  - The California Patient Movement Plan, as was communicated over the last couple months, is being updated. The original version of that plan was in 2018. There were three tabletop functional exercises that happened over the last month that covered all six OES regions. It'll be finalized with a full-scale exercise in Sacramento at Mather on June 4-6. Mr. Poland and Jared Gunter will both be participating in this. The flyer is posted on the SSV website.
  - Glenn County is in the process of doing an EMS system assessment after the closure of the Glenn Medical Center. They're in the final stages of that process and will present that to SSV and the Board of Supervisors probably in the next month.
  - Mr. Poland attended the Colusa County Board of Supervisors meeting yesterday and gave a presentation. They're supportive of exercising the two-year AMR EOA extension that'll go from 2027-2029. This is the only extension granted in that contract. This will be followed up with an EMS assessment and a subsequent RFP process for Colusa.
  - Contract Renewals
    - S-SV is currently working on the Bi-County Ambulance Sutter and Yuba EOA renewals that expire on December 31, of this year.
    - In Nevada County, Sierra Nevada's grandfather EOA expires on December 31, of this year. SSV has already had some meetings with the providers and Sierra Nevada and will be working on getting that updated and in place prior to the expiration.
    - SSV is doing a competitive RFP process for the Placer County area currently serviced by AMR. That process is on track. SSV expects to have a draft RFP document released for public comment by mid-May. Then, it'll be open for about a 3-week public comment period before it's finalized and sent to the EMS Authority for their approval before it's released.
  - AB1639
    - California Drowning Prevention and Rescue Act

- This would clarify that pre-arrival CPR instructions required under the recently passed AB 645 legislation would include CPR instructions in both ventilation and chest compressions for calls that involve drowning victims.
- The bill would also require the State Department of Public Health, in cooperation with other specified state entities, to review and update the state's public communication efforts to ensure everyone in California is educated about the importance of CPR knowledge and how to obtain CPR training.

- AB1558
  - Uniform Emergency Volunteer Health Practitioners Act
  - This applies to out-of-state individuals. It's sponsored by Red Cross, and it's meant to enhance California's emergency response system by reducing administrative delays that prevent licensed out-of-state health professionals from helping in the aftermath of a disaster situation.
  - It's a new disaster healthcare volunteer system that the EMS authority would be responsible for managing and it would involve out of state individuals instead of in state.
  - 22 states have already passed similar legislation
- There's a hospital distress loan program bill that's making its way through. It would provide a second round of $300 million funding for distressed hospitals. The difference between the last version and the one that was a couple of years ago is it would be open to all hospitals, not just public hospitals.
- AB 2318
  - This would make it unlawful for law enforcement to deny, delay, obstruct or fail to facilitate access to a medical evaluation or treatment for an individual in custody or detention or under law enforcement control.
  - The bill would require law enforcement if disclosure would not compromise an ongoing investigation or officer safety, provide documentation identifying the basis for denying or delaying access to medical treatment to specified entities within 72 hours of the incidents, and it would authorize various punishments against law enforcement who violates those provisions, including among other things, administrative discipline and criminal prosecution.
- AB-24-05
  - It would require a law enforcement agency transporting a person to an emergency department to transport the person to the nearest appropriate emergency department. The bill would require each law enforcement agency to submit a quarterly report to the EMS authority containing specified information regarding transport conducted pursuant to these provisions, including among other things, the origin location of the transported person.
- SB 945
  - Initially, it would have required CPR and AED training as a requirement for high school graduation for all students.
  - Now it would only require the commission, when a physical education framework is next revised, to consider including content of the importance, performance, and use of CPR and AEDs. Because of that, the actual sponsor of the bill has removed their sponsorship.
- APOT
  - SSV is currently under the AB40 emergency regulations. There's a timeframe for transitioning into permanent regulations or else they go away and are not enforceable. June is the one-year timeframe.

- Chapter 1.2
  - Mr. Poland forwarded this to committee members last week
  - The fifth 15-day public comment period for these regulations
  - EMSAAC will be pushing back on some new language.
- Chapter 3
  - The commission approved oral Zofran for EMT administration
  - The EMS Authority is currently working on some draft language to incorporate this into the basic scope of practice.
- No movement on the community paramedicine and triage alternate destination.
  - There was a bill passed two years ago that updated this and added post discharge follow-up.
  - Two years later the EMS Authority hasn't moved forward with updating those regulations.
- Chapter 1
  - Delivering equitable and person-centered prehospital care EMS plans and EMS system design.
  - This is a new chapter of regulations.
  - These should be released for public comment in the near future.
- Responses to behavioral health emergencies
  - SSV implemented a policy regarding this.
  - EMSAAC successfully lobbied the EMS Authority to gather together a group of pertinent organizations.
  - Last week they had their first meeting at the EMS Authority. This included representatives from: EMSAAC, EMDAC, 911 Ambulance Providers Alliance, California Ambualnce Association, California Fire Chiefs Association, California Hospital Association, California Police Chiefs Association, and many others.
  - This first meeting was to establish some ground rules and understand the challenges and issues of these types of incidents.
  - The guiding discussion was building a shared EMS and law enforcement toolkit, which everyone wants.
  - EMSA shared that there were approximately 6 million EMS patient encounters. Encounters with a primary and secondary primary impression behavioral crisis accounted for 470K of those, which is about 8% of the total EMS volume, which is about 1300 encounters/day throughout the state.
  - There will be more meetings.

M. Medical Director's Report

- Dr. Falck was not present.
- Mr. Poland shared the following on his behalf. Dr. Falck has a schedule conflict for the next REMAC meeting (July1st). So, it was recommended to move the next meeting date to July 8th instead. Information will be sent to the committee regarding this change.
- *Rose Colangelo let the committee know that Mr. Poland received the prestigious Clinical Excellence Award from EMSA.*
  - *Rose read some of the comments from the nominations.*
  - *Mr. Poland's family was on hand and handed the certificate to him.*

N. **Next Meeting Date & Adjournment**

- The next meeting will be on July 8, 2026, at 9:00 am.
- The meeting was adjourned at 11:55 am.

Sierra – Sacramento Valley EMS Agency Program Policy		
Paramedic IFT Optional Skills Provider Agency Approval, Requirements & Responsibilities		
	Effective: DRAFT	Next Review: DRAFT	**441**
	Approval: Troy M. Falck, MD – Medical Director	DRAFT
	Approval: John Poland – Executive Director	DRAFT

PURPOSE:

A. To establish the provider agency application and approval process for utilization of any of the following paramedic interfacility transport (IFT) optional skills:

1. Monitoring of magnesium sulfate, nitroglycerin, heparin, &/or amiodarone infusions.
2. Monitoring of blood transfusions.
3. Utilization of an automatic transport ventilator (ATV).
4. Utilization of non-invasive High Flow Nasal Cannula (HFNC).

B. To establish the requirements and responsibilities of S-SV EMS authorized paramedic IFT optional skills providers.

AUTHORITY:

A. HSC, Division 2.5, § 1798.200, § 1798.206, § 1798.214, § 1797.218, § 1797.220, § 1798.2, § 1798.170, § 1798.172.

B. CCR, Title 22, ~~Chapter 4, Article 1, § 100145~~. *Chapter 3.3*.

POLICY:

A. Only S-SV EMS permitted ALS ambulance transport providers may be authorized to utilize paramedic IFT optional skills.

B. Only appropriately trained paramedics who are on duty with an authorized paramedic IFT optional skills provider may utilize paramedic IFT optional skills.

C. A provider agency requesting approval to utilize any of the paramedic IFT optional skills shall submit a 'Paramedic IFT Optional Skills Prehospital Provider Application' (441-A) to S-SV EMS. A complete application shall include all the following:

1. A letter of intent to utilize paramedic IFT optional skills, including a list of the optional skills that will be utilized.
2. The proposed paramedic IFT optional skills program implementation date, and the anticipated utilization frequency/volume of paramedic IFT optional skills.
3. The number of personnel to be trained to utilize paramedic IFT optional skills.

4. A description of the provider's paramedic IFT optional skills training program, which shall meet the following minimum requirements:
    a. Utilization of S-SV EMS approved training program curriculum, including a final written and skills examination.
    b. Utilization of physician or RN instructors to teach the approved curriculum.
        i. Paramedic personnel with appropriate knowledge and education may be approved to teach the required curriculum when necessary/appropriate.
    c. Utilization of all training equipment necessary to ensure a sound paramedic IFT optional skills training program (manikins, infusion devices, ATV, non-invasive HFNC device, etc.).
5. The CV/resume of the proposed physician, RN, or paramedic training instructor.
    a. If the provider is proposing to utilize a paramedic as the training instructor, a separate letter indicating the necessity/reason for utilizing a paramedic instructor must also be included.
6. The provider's optional skills utilization policies and procedures, which shall at a minimum address the following:
    a. Paramedic personnel shall obtain a copy of the transferring physician's orders and attach them to the electronic patient care report.
    b. Patients being administered magnesium sulfate, nitroglycerin, heparin, &/or amiodarone infusions shall have vital signs monitored and documented every 15 minutes and any time there is a change in patient condition.
    c. Patients being administered blood transfusions shall have vital signs monitored and documented every 15 minutes, and any time there is a change in patient condition or change in transfusion rate.
    d. Patients on an ATV or non-invasive HFNC shall have vital signs monitored and documented every 15 minutes and any time there is any change in patient condition or adjustment of the ATV or non-invasive HFNC settings. Continuous pulse oximetry, waveform capnography, and cardiac monitoring shall be maintained throughout transport, and values/rhythms shall be documented every 15 minutes and any time there is a change in patient condition.
7. A description of the provider's paramedic IFT optional skills utilization QI process.
    a. Provider agencies shall audit 100% of paramedic IFT optional skills utilization calls to assess compliance with physician orders and S-SV EMS policies.
8. A list of equipment brand name, model number and other pertinent information for the mechanical infusion pumps, non-invasive HFNC devices, and/or ATV devices that will be utilized.

D. Written program approval/disapproval shall be made by S-SV EMS to the applicant within thirty (30) calendar days of receipt of all required application documentation.

E. Paramedic IFT optional skills provider agencies shall notify S-SV EMS by the end of the next business day of any unusual occurrence or known/suspected patient harm associated with the use of a paramedic IFT optional skill.

F. Paramedic IFT optional skills provider agencies shall maintain a roster of their paramedic personnel authorized to utilize paramedic IFT optional skills and provide this information to S-SV EMS upon request.

	Paramedic IFT Optional Skills Provider Application	441-A

PREHOSPITAL PROVIDER INFORMATION	
Name of prehospital provider agency:	
Name of person completing application:	
Telephone #:	Email:

APPLICATION CHECKLIST		
Description	**Enclosed**	**Approved**
1. Letter of intent to provide paramedic IFT optional skills, including a list of the optional skills that will be utilized.		
2. Proposed paramedic IFT optional skills implementation date, and anticipated paramedic IFT optional skills utilization frequency/volume.		
3. Number of personnel to be trained to utilize paramedic IFT optional skills.		
4. Paramedic IFT optional skills training program.		
5. CV/resume of the proposed physician, RN, or paramedic IFT optional skills training program instructor.		
6. Paramedic IFT optional skills policies and procedures.		
7. A description of the paramedic IFT optional skills utilization QI process.		
8. Equipment brand name, model number, and pertinent information for the mechanical infusion pumps, non-invasive HFNC devices, and/or ATV devices that will be utilized.		

S-SV EMS USE ONLY	
Date application received:	Program approval date:
Reviewed/approved by:	

Sierra – Sacramento Valley EMS Agency Program Policy			
Physician On Scene			
	Effective: DRAFT	Next Review: DRAFT	**839**
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE:

To define patient care responsibilities when a physician is on the scene of a medical emergency.

AUTHORITY:

A. HSC, Division 2.5, § 1797.220, § 1798.2.

B. CCR, Title 22, Division 9.

POLICY:

A. EMS personnel encountering a physician on the scene of a medical emergency shall initiate and maintain responsibility for patient care, unless the physician assumes responsibility for patient care and accompanies the patient to the hospital (if required). EMS personnel may assist the physician as long as they operate within their applicable scope of practice.

B. If necessary, EMS personnel are responsible for confirming that the individual is in fact a California licensed physician. If needed, utilize the EMSA/CMA Physician on Scene Card included in this policy.

C. In the event of a conflict with a physician on scene, EMS personnel shall consult with the base/modified base hospital and document the events appropriately.

PROCEDURE:

A. Physician is a bystander:

1. If the physician wishes to do more than offer assistance, they must:

   a. Assume responsibility for the patient.

   b. Provide the care s/he wishes.

   c. Accompany the patient to the hospital (if safety allows).

2. If there is a conflict between the physician's requested treatment and the EMS personnel's scope of practice, EMS personnel shall explain that they can only treat within their applicable scope of practice.

3. If necessary, contact the base/modified base hospital and request the physician to discuss any issues directly with base/modified base hospital personnel.

B. Physician is patient's physician:

1. The physician may provide treatment prior to transfer of patient care to EMS personnel.
2. If there is a conflict between the physician's requested treatment and the EMS personnel's scope of practice following transfer of patient care, EMS personnel shall explain that they can only treat within their applicable scope of practice.
3. If necessary, contact the base/modified base hospital and request the physician to discuss any issues directly with base/modified base hospital personnel.
4. Patient care may be transferred to EMS personnel. There is no requirement for the physician to accompany the patient to the hospital in these circumstances.

EMSA/CMA PHYSICIAN ON SCENE CARD:

FRONT

NOTE TO PHYSICIANS ON INVOLVEMENT WITH EMS PERSONNEL

EMS personnel operate under standard policies and procedures developed by the Local EMS Agency and approved by their Medical Director under Authority of Division 2.5 of the California Health and Safety Code. The drugs they carry and procedures they can do are restricted by law and local policy.

If you want to assist, this can only be done through one of the alternatives listed on the back of this card. These alternatives have been endorsed by CMA, State EMS Authority and CCLHO.

Assistance rendered in the endorsed fashion, without compensation, is covered by the protection of the "Good Samaritan Code" (see Business and Professional Code, Sections 2144, 2395-2298 and Health and Safety Code, Section 1799.104).

BACK

ENDORSED ALTERNATIVES FOR PHYSICIAN INVOLVEMENT

After identifying yourself by name as a physician licensed in the State of California, and, if requested, showing proof of identity, you may choose one of the following:

1. Offer your assistance with another pair of eyes, hands or suggestions, but let EMS personnel remain under base hospital control; or,
2. Request to talk to the base station physician and directly offer your medical advice and assistance; or,
3. Take total responsibility for the care given by EMS personnel and physically accompany the patient until the patient arrives at a hospital (if safety allows) and responsibility is assumed by the receiving physician. In addition, you must sign for all instructions given in accordance with local policy and procedures.

Sierra – Sacramento Valley EMS Agency Program Policy			
Medical Control For Transfers Between Acute Care Facilities			
	Effective: DRAFT	Next Review: DRAFT	**840**
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE:

To assure medical control of patients during ambulance transfers between acute care facilities. This policy does not exempt any acute care hospital or physician from meeting their regulatory/statutory obligations for patient transfers. The medical/legal responsibility for the patient rests with the transferring physician.

AUTHORITY:

A. HSC, Division 2.5, § 1797.185, § 1797.194, § 1797.218, § 1797.220, § 1798.102, § 1798.170, § 1798.172.

B. CCR, Title 22, Division 9.

C. USC, Title 42, § 395dd (EMTALA Statute).

D. CFR 42, § 489.20 & § 489.24 (EMTALA Regulations).

POLICY:

A. Prior to accepting an acute care interfacility transfer patient, EMS personnel shall:

1. Obtain patient information to include diagnosis, history and any therapies received while in the hospital or within the previous four (4) hours, whichever is less.

2. Complete a physical assessment, including vital signs.

B. EMS personnel shall follow orders of the transferring physician; however they cannot provide care beyond the S-SV EMS approved scope of practice. Should medical consultation be required during transport, EMS personnel shall follow the S-SV EMS Base/Modified Base/Receiving Hospital Contact Policy (Reference No. 812).

C. If a patient is transferred outside of the S-SV EMS region or base/modified base hospital radio contact range, EMS personnel may provide care according to S-SV EMS standing order policies/protocols.

Sierra – Sacramento Valley EMS Agency Program Policy			
Transfer Of Patient Care			
	Effective: DRAFT	Next Review: DRAFT	**849**
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE

To establish requirements for transfer of patient care by EMS personnel.

AUTHORITY

A. HSC, Division 2.5, § 1791.220.

B. CCR, Title 22, Division 9, Chapters ~~1.5, 2, 3, and 4~~ *2.3, 3.1, 3.2, & 3.3.*

POLICY

A. The first on duty EMS personnel at the scene of a medical emergency shall initiate EMS assessment/treatment unless cancelled prior to patient contact. This individual shall be the EMS primary care provider and shall maintain that role until patient care is transferred to other EMS or receiving hospital personnel.

B. Transfer of patient care to higher level EMS personnel shall occur as soon as possible after their arrival at scene, unless cancelled prior to patient contact or it has already been determined by other EMS personnel that a higher level of EMS care is not required.

C. Other EMS personnel shall provide pertinent incident/patient information and assistance to the EMS primary care provider.

D. Base/modified base hospital consultation shall be utilized for any significant disagreement regarding EMS treatment or transfer of patient care.

PROCEDURE

A. EMS personnel are authorized to transfer patient care to other EMS personnel when determined appropriate and mutually agreed to.

1. Transfer of patient care to lower-level EMS personnel shall only occur if the patient condition permits, and the care required is within the scope of practice of the lower-level EMS personnel.

2. Prior to transfer of patient care to an EMT, AEMT/paramedic personnel shall perform an adequate patient assessment and obtain a patient history to confirm that AEMT/paramedic care is not required. In the event of subsequent changes to patient condition requiring a higher level of EMS care, AEMT/paramedic personnel shall re-assume primary patient care as soon as possible.

3. Transfer of care from AEMT/paramedic personnel to an EMT is not allowed for any of the following types of patients:
    a. Any patient who requires ALS/LALS management according to any S-SV EMS policies/protocols.
    b. Patients refusing EMS care (S-SV EMS Policy 850).
    c. Patients meeting trauma triage criteria (S-SV EMS Protocol T-1/T-1 (LALS)).
    d. Pregnant patients in active labor or greater than 20 week's gestation with an obstetric complaint.
4. If EMS personnel refuse to accept transfer of patient care due to the patient's condition or complexity of treatment, the initial EMS primary care provider shall maintain patient care and accompany the patient to the hospital, if transported.
5. Equivalent or higher-level EMS personnel shall not refuse transfer of patient care in the following situations:
    a. Transfer of patient care from EMS personnel functioning in a specialized role (tactical, fireline, ski patrol, bike team, special event, etc.).
    b. During a declared Multi Casualty Incident (MCI).
    c. Transfer of patient care from ground EMS to EMS aircraft personnel (unless safety reasons prevent such transfer). Patient care shall not be transferred to EMS aircraft personnel until they are safely ready to accept care of the patient.
6. EMS personnel transferring patient care to other EMS personnel shall:
    a. Provide pertinent patient assessment and treatment information to EMS personnel accepting responsibility for the patient.
    b. AEMT/paramedic personnel who transfer patient care shall ensure the completion of a PCR as required by S-SV EMS Prehospital Documentation policy (Reference No. 605). The PCR shall include the time of patient care transfer and the name/provider agency of the EMS personnel accepting transfer.

NAME:

The Committee shall be referred to as the Regional Emergency Medical Advisory Committee *(REMAC)*.

PURPOSE:

A. To represent the position of EMS system participants on EMS related issues and promote communication/coordination among EMS system participants.

B. To promote region-wide standardization of EMS system quality management, including quality assurance and quality improvement requirements, processes, and activities.

C. To monitor, evaluate and report on the quality of EMS training, care, and transportation.

D. To make recommendations related to EMS system data collection, evaluation, and dissemination.

E. To recommend policies, procedures, protocols, positions, and philosophy of EMS care to the Sierra-Sacramento Valley Emergency Medical Services Agency (S-SV EMS).

AUTHORITY:

The Committee is established by the S-SV EMS Medical Director, pursuant to the provisions of the Emergency Medical Services System and Prehospital Emergency Medical Care Personnel Act (HSC, § 1797 et seq.) and EMS Regulations (CCR, Title 22) and shall function as advisory to S-SV EMS.

MEMBERSHIP:

A. The Committee shall consist of the following members:

1. A base/modified base hospital medical director, or base/modified base hospital's appointed physician representative, from each S-SV EMS authorized base/modified base ~~or trauma base~~ hospital.

2. A base/modified base hospital coordinator, or base/modified base hospital's appointed nursing representative, from each S-SV EMS authorized base/modified base ~~or trauma base~~ hospital.

3. An emergency department medical director or appointed physician ~~or~~ *and* nursing representative from each acute care receiving hospital located within the S-SV EMS region.

~~4. A representative from each County Emergency Medical Care Committee (EMCC) or Emergency Medical Advisory Group (EMAG) within the S-SV EMS region.~~

~~5. One (1) paramedic, who actively practices in the field and is employed by an S-SV EMS authorized public ALS ground service provider and one (1) paramedic, who actively practices in the field and is employed by an S-SV EMS authorized private ALS ground service provider from each of the following county groups:~~

- ~~Colusa, Nevada, Placer, Sutter, and Yuba counties.~~
- ~~Butte, Glenn, Shasta, Siskiyou, and Tehama counties.~~

6. *The following prehospital members:*
   a. *14 paramedic or AEMT personnel who actively practice in the field and are employed by an S-SV EMS authorized ALS/LALS ground service provider.*
   b. Two (2) paramedic or RN personnel employed by S-SV EMS authorized HEMS aircraft service providers.

~~B. Each member shall have an alternate available to assume the member's responsibilities in their absence.~~

MEMBER APPOINTMENTS, ~~AND~~ TERMS, *AND VACANCIES*:

A. Base, modified base and receiving hospital members~~/alternates~~ are appointed by the applicable hospital and serve at the request of S-SV EMS until resignation, replacement, or removal.

~~B. EMCC/EMAG members/alternates are appointed by the applicable EMCC/EMAG and serve at the request of S-SV EMS until resignation, replacement, or removal.~~

C. ~~Ground paramedic and HEMS aircraft~~ *Prehospital* members~~/alternates~~ are appointed by the Committee and serve two (2) year terms commencing July 1st of the first year through June 30th of the second year, or until resignation~~, replacement,~~ or removal.

1. ~~Ground paramedic and HEMS aircraft~~ *Prehospital* members~~/alternates~~ will be appointed by Committee vote based on nominations received from EMS system participants within the S-SV EMS region.
2. *All previously designated public and private ALS ground service provider and EMCC/EMAG members, already appointed for the July 1, 2026 – June 30, 2028 term, will be automatically appointed to the new prehospital ground provider member positions upon approval of the revised bylaws, and will serve for the remainder of the current term, or until resignation or removal.* ~~If no nominations are received for one (1) or more of the ground paramedic positions, the Committee may appoint an EMT, AEMT, or paramedic, who actively practices in the field and is employed by any S-SV EMS authorized prehospital ground provider (public or private) to fill the applicable vacant position(s)~~.
3. *Prehospital member vacancies that occur during a term will be re-appointed in a timely manner by Committee vote based on nominations received from EMS system participants within the S-SV EMS region. Any subsequently appointed prehospital members will serve the remainder of the applicable term, or until resignation or removal.*

~~**MEMBER ATTENDANCE:**~~

~~A. Members/alternates are expected to attend all Committee meetings.~~

~~B. An absence is defined as failure of the member to notify the Committee Chairperson or S-SV EMS prior to the meeting.~~

~~C. An absence shall not be counted if the member's appointed alternate is present.~~

MEMBER ATTENDANCE AND REMOVAL:

A. Members are expected to attend all Committee meetings.

B. Members may be removed from the Committee for ~~either~~ any of the following reasons:

1. Excessive absences.
2. Disruption and/or rude behavior.
3. When requested by a chief officer of the representative's organization or the S-SV EMS Medical Director.

~~C. Members shall be removed from the Committee when requested by a chief officer of the representative's organization or the S-SV EMS Medical Director.~~

OFFICER ELECTIONS*,* ~~**AND**~~ **TERMS*, VACANCIES, AND RESPONSIBILITIES*:**

A. The Committee shall elect a Chairperson and Vice-Chairperson (Officers) utilizing the following procedures:

1. Officer nominations will be requested by the Chairperson. Any member may nominate any other member. The member nominated must accept the nomination for the nomination to be valid. Officers will be selected by Committee vote.
2. Officer terms shall be for a period of two (2) years, commencing July 1st of the first year through June 30th of the second year.

B. Officer vacancies:

1. If the Chairperson should vacate the office during the term, the Vice-Chairperson shall become Chairperson and preside over the elections of a new Vice-Chairperson.
2. If the Vice-Chairperson should vacate the office during the term, the Chairperson shall preside over the election process of a new Vice-Chairperson.

C. Officer ~~R~~*r*esponsibilities ~~of officers~~:

1. The Chairperson shall preside over Committee meetings.
2. The Vice Chairperson shall assume the responsibilities of the Chairperson in their absence.

MEETINGS:

A. Meetings shall be held on a regular basis, no less than four (4) times in a calendar year. Meeting dates and times will be set or modified as agreed to by the Committee.

B. Meetings shall be governed by Robert's Rules of Order and will be conducted in a fair and professional manner.

C. Closed session meetings will occur when business addressed by California Evidence Code § 1157.7 is being transacted. The Committee's § 1157.7 closed session business, records and minutes shall be considered confidential, and all members/ attendees are prohibited from any unauthorized disclosures.

QUORUM:

A quorum shall consist of a minimum of twelve (12) eligible Committee members. Committee business shall not be conducted unless a quorum is present.

VOTING:

A. Each base/modified base ~~or trauma base~~ hospital shall have one (1) vote.

B. Each receiving hospital shall have one (1) vote.

~~C. Each County EMCC/EMAG member shall have one (1) vote.~~

~~D. Each ground paramedic member shall have one (1) vote.~~

~~E. Each HEMS aircraft member shall have one (1) vote.~~

F. Each prehospital member shall have one (1) vote.

G. Votes shall be recorded as:

1. In Favor.
2. Opposed.
3. Abstain.

CONFLICT OF INTEREST:

Members/officers shall disclose any direct personal or pecuniary (monetary) interest in any subject or conversation before the Committee and will abstain from voting on any motion relative to that subject.

BYLAWS:

A. Any recommended Bylaws change will be initially placed on the agenda as a non-action item. The Bylaws may then be recommended for change by a two-thirds vote at the next Committee meeting.

B. Any Bylaws change requires S-SV EMS approval.

S-SV EMS STAFF PARTICIPATION:

A. S-SV EMS staff shall be present at each Committee meeting.

B. S-SV EMS staff are non-voting members of the Committee.

C. S-SV EMS staff shall have the right to be heard before the Committee on any matter on the agenda, after being recognized by the Chairperson.

S-SV EMS RESPONSIBILITIES:

A. Establish the agenda, in consultation with the Chairperson*/Vice-Chairperson*.

B. Record the proceedings and prepare appropriate meeting minutes.

C. Maintain Committee records including: an updated list of members and officers, member contact information, bylaws, and meeting minutes.

D. Distribute the meeting notice and any other Committee correspondence.

EFFECTIVE DATE:

Effective Date:	DRAFT
Approval: Troy M. Falck, MD – Medical Director	DRAFT
Approval: John Poland – Executive Director	DRAFT

Sierra – Sacramento Valley EMS Agency Program Policy			
Paramedic IFT Optional Skills Transferring Hospital Requirements			
	Effective: DRAFT	Next Review: DRAFT	**341**
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE:

To establish the transferring hospital requirements for the utilization of any of the following paramedic interfacility transport (IFT) optional skills:

A. Monitoring of magnesium sulfate, nitroglycerin, heparin, &/or amiodarone infusions.

B. Monitoring of blood transfusions.

C. Utilization of an Automatic Transport Ventilator (ATV).

D. Utilization of non-invasive High Flow Nasal Cannula (HFNC).

AUTHORITY:

A. HSC, Division 2.5, § 1798.200, § 1798.206, § 1798.214, § 1797.218, § 1797.220, § 1798.2, § 1798.170, § 1798.172.

B. CCR, Title 22, ~~Chapter 4, § 100146~~. *Chapter 3.3*.

POLICY:

A. Only prehospital provider agencies approved by S-SV EMS to utilize paramedic IFT optional skills are authorized to provide such services.

B. Only paramedics who have successfully completed an S-SV EMS approved paramedic IFT optional skills training program are authorized to utilize such skills.

C. The following criteria apply to patients who are candidates for the utilization of paramedic IFT optional skills:

1. Magnesium sulfate, nitroglycerin, heparin, &/or amiodarone infusions:

   a. The infusion should be running ~~in peripheral or central IV lines~~ for at least 10 minutes prior to transport.

   b. Patients should have maintained stable vital signs for the previous 30 minutes.

   c. Patients will not have more than two (2) medication infusions running, exclusive of potassium chloride concentrations authorized under the paramedic basic scope of practice, during transport.

2. Blood transfusions:
    a. Transfusions shall be pre-existing in peripheral or central IV lines.
3. ATV:
    a. Paramedics shall not initiate ventilator support.
4. Non-invasive HFNC:
    a. Paramedics shall not initiate non-invasive HFNC.
    b. Non-invasive HFNC should be utilized by the sending facility for at least one (1) hour prior to transport.

PROCEDURE:

A. The paramedic shall receive written orders from the transferring physician prior to leaving the transferring hospital. These orders shall include a telephone number where the transferring and/or base/modified base hospital physician can be reached during transport, in addition to the following information:
    1. Magnesium sulfate, nitroglycerin, heparin, &/or amiodarone Infusions:
        a. Type of solution.
        b. Dosage and rate of infusion.
    2. Blood Transfusions:
        a. Blood type and unit identifying number.
        b. Parameters for regulation of the transfusion rate.
    3. ATV:
        a. Parameters for maintaining and adjusting ventilations during transport.
    4. Non-invasive HFNC:
        a. Parameters for maintaining and titrating flow (LPM), FiO2, and SpO2 goals for transport.

B. The transferring hospital is responsible for mixing and labeling the infusion. If the existing infusion will not be sufficient for the transport duration, the hospital must provide additional clearly labeled pre-mixed infusion(s).

C. Transferring physicians must be aware of the general paramedic scope of practice as well as the parameters for utilization of paramedic interfacility transport optional skills contained in ~~applicable~~ *the* S-SV EMS *Paramedic Interfacility Transport (IFT) Optional Skills Policy (841)*. ~~policies (841, 842, 843, and/or 844)~~.

Sierra – Sacramento Valley EMS Agency Program Policy		
STEMI Receiving Center Designation Criteria, Requirements & Responsibilities		
	Effective: DRAFT	Next Review: DRAFT	**506**
	Approval: Troy M. Falck, MD – Medical Director	DRAFT
	Approval: John Poland – Executive Director	DRAFT

PURPOSE:

To establish STEMI receiving center (SRC) designation criteria, requirements and responsibilities.

AUTHORITY:

A. HSC, Division 2.5, § 1797.67, § 1797.88, § 1798.102, § 1798.150, § 1798.170, § 1798.172.

B. CCR, Title 13, § 1105 (c).

C. CCR, Title 22, Div. 9, Ch. ~~7.1~~ *6.2*.

DEFINITIONS:

A. **Percutaneous Coronary Intervention (PCI)** – A procedure used to open or widen a narrowed or blocked coronary artery to restore blood flow supplying the heart, usually done on an emergency basis for a STEMI patient.

B. **Primary PCI –** Urgent balloon angioplasty (with or without stenting), without the previous administration of fibrinolytic therapy or platelet glycoprotein IIb/IIIa inhibitors, to open the infarct-related artery during an acute myocardial infarction with ST-segment elevation.

C. **ST-Elevation Myocardial Infarction (STEMI)** – A clinical syndrome defined by symptoms of myocardial infarction in association with ST-segment elevation on EKG.

D. **STEMI Receiving Center (SRC)** – A licensed general acute care facility that has emergency interventional cardiac catheterization capabilities, meets the minimum STEMI care requirements contained in CCR (Title 22, Div. 9, Ch. ~~7.1~~ *6.2*), and is designated as a SRC by S-SV EMS.

E. **STEMI Referring Hospital (SRH)** – A licensed general acute care facility that does not have emergency interventional cardiac catheterization capabilities, and transfers STEMI patients to SRCs for PCI services when necessary.

POLICY:

A. Criteria for assessment, identification, treatment and transport of prehospital suspected STEMI patients shall be based on S-SV EMS Chest Pain/Suspected Symptoms of Cardiac Origin Protocol (C-6).

B. The following shall be met for a hospital to be designated as a SRC by S-SV EMS:

1. Be licensed by the California Department of Public Health Services as a general acute care hospital.
2. Have a special permit for basic or comprehensive emergency medical service pursuant to the provisions of CCR Title 22, Div. 5.
3. Be accredited by a Centers for Medicare and Medicaid Services approved deeming authority.
4. *Meet all requirements contained in California Code of Regulations Title 22, Div. 9, Ch. 6.2, for STEMI Receiving Centers.*
5. Have a cardiac catheterization laboratory (cath lab) license.
6. Have intra-aortic balloon pump capability.
7. ~~Have cardiovascular surgical services available on site. If cardiovascular surgical services are not available on site, the SRC must have a rapid transfer plan and written agreement in place with a facility that provides cardiovascular surgical services. The expectation is that for emergency cases, the patient will arrive at the cardiac surgical hospital within one (1) hour of the decision to operate.~~
8. ~~Be available for treatment of STEMI patients twenty-four (24) hours per day, seven (7) days per week, three hundred and sixty-five (365) days per year.~~
9. Have a communication system for notification of a prehospital suspected STEMI patient, including 12-lead EKG receiving capabilities.
10. ~~Have established protocols for triage, diagnosis, and cath lab activation following notification of a prehospital suspected STEMI patient.~~
11. ~~Maintain a STEMI team call roster (including a cardiologist with PCI privileges and other appropriate cath lab team members).~~
12. ~~Have a single call activation system to activate the cath lab team directly.~~
13. Ensure the cath lab team is immediately available. ~~within 30 minutes of call activation.~~
14. ~~Have written protocols in place for the identification of STEMI patients.~~
15. ~~Have a process in place for the treatment and triage of simultaneously arriving STEMI patients.~~
16. Agree to accept all prehospital suspected STEMI patients according to applicable S-SV EMS policies/protocols.
17. Agree to accept all STEMI patients from adjacent SRHs and have transfer plans/ agreements in place to ensure rapid transport of these patients to the SRC.

18. Perform a minimum of 36 Primary PCI and 200 total PCI procedures annually.
19. Have the following STEMI Program oversight staff:
    a. One STEMI Program Medical Director who is a physician board certified/ eligible in interventional cardiology with active PCI privileges at the SRC, and one STEMI Program Medical Co-Director who is a physician board certified/ eligible in emergency medicine with active privileges to practice in the emergency department at the SRC. STEMI Program Medical Director/Co-Medical Director responsibilities include:
        i. Oversight of STEMI program patient care.
        ii. Participation in development of STEMI Program clinical practice guidelines/ protocols.
        iii. Coordination of STEMI program staff and services.
        iv. Authority/accountability for STEMI Program quality and performance improvement.
        v. Establish and monitor STEMI Program quality control.
        vi. Regular participation in S-SV EMS Regional STEMI QI Committee activity.
    b. One STEMI Program Manager, who is an RN, trained/certified in critical care nursing and affiliated with the cardiac catheterization laboratory at the SRC, and one STEMI Program Co-Manager who is an RN trained/certified in critical care nursing and affiliated with the emergency department at the SRC. STEMI Program Manager/Co-Manager responsibilities include:
        i. Support the STEMI Program Medical Director/Co-Medical Director functions.
        ii. Acts as the STEMI Program EMS liaison.
        iii. Assures EMS-SRC STEMI data sharing.
        iv. Manages EMS-SRC STEMI QI activities.
        v. Authority/accountability for STEMI Program quality and performance improvement.
        vi. Regular participation in S-SV EMS Regional STEMI QI Committee activity.
20. ~~Have job descriptions and an organizational structure clarifying the relationship between the STEMI medical directors, STEMI program manager, and the STEMI team and hospital administration.~~
21. Have a quality improvement (QI) process in place to track and improve treatment (acutely and at discharge) with American College of Cardiology (ACC) and American Heart Association (AHA) guidelines-based Class 1 therapies. At a

minimum, this process will evaluate performance in meeting the following AHA/ ACC STEMI Receiving Center Achievement Measures:

a. Fibrinolysis within 30 minutes of ED arrival, if administered.

b. SRC Arrival to PCI ≤90 minutes for patients arriving by non-EMS modes of transport.

c. EMS First Medical Contact (FMC) to PCI ≤90 minutes, or ≤120 minutes when transport time is prolonged (≥45 minutes).

22. Have a QI process in place to provide ongoing feedback to adjacent SRHs on patients transferred for STEMI services. At a minimum, this QI process shall evaluate and provide SRH feedback of the following:

a. SRH STEMI patient door-to-first ECG time (goal <10 minutes).

b. SRH STEMI patient door-to-transfer time (goal <30 minutes).

c. SRH STEMI patient door-to-fibrinolysis time, if applicable (goal <30 minutes).

d. Operational issues related to STEMI patient transfer delays.

e. Proportion of STEMI patients receiving fibrinolysis prior to transport when the system cannot achieve times consistent with ACC/AHA guidelines for primary PCI.

f. Proportion of STEMI-eligible patients receiving any reperfusion (PCI or fibrinolysis) therapy.

23. Conduct regularly scheduled multidisciplinary team meetings to evaluate outcomes and quality improvement data. Operational issues should be reviewed, problems identified, and solutions implemented.

24. Provide CE opportunities, minimum of four (4) hours per year, for EMS personnel in areas of 12-lead EKG acquisition and interpretation, as well as assessment and management of STEMI patients.

25. Provide public education about STEMI warning signs and the importance of early utilization of the 9-1-1 system.

26. Comply with all requirements contained in S-SV EMS SRC agreements.

27. Pay the S-SV EMS SRC designation fees

C. SRC diversion of STEMI patients shall only occur during times of an internal disaster or when the cath lab is otherwise unavailable.

1. Notification shall be made to the following entities at least 24 hours prior to any planned event, or as soon as possible for any unplanned event, resulting in the cath lab being unavailable:
    a. S-SV EMS.
    b. SRC emergency department – to include a status posting on EMResource indicating that the cath lab is unavailable.
    c. Appropriate adjacent SRC(s).
    d. Appropriate prehospital provider agencies.
2. All appropriate entities shall be notified as soon as possible when the cath lab is subsequently available.
3. An S-SV EMS ambulance patient diversion form describing such events shall be submitted by email to DutyOfficer@ssvems.com by the end of the next business day.

PROCEDURE:

A. The SRC applicant shall be designated after satisfactory review of written documentation and an initial site survey conducted by S-SV EMS representatives or designees and completion of a contract between the hospital and S-SV EMS.

B. Designated SRCs shall have verification reviews by S-SV EMS representatives or designees conducted every three (3) years.

C. Failure to comply with the criteria and performance standards outlined in this policy and/or SRC contracts may result in probation, suspension or rescission of SRC designation. Compliance will be solely determined by S-SV EMS.

Sierra – Sacramento Valley EMS Agency Program Policy		
Stroke Receiving Center Designation Criteria, Requirements & Responsibilities		
Effective: DRAFT	Next Review: DRAFT	**507**
Approval: Troy M. Falck, MD – Medical Director		DRAFT
Approval: John Poland – Executive Director		DRAFT

PURPOSE:

To describe the S-SV EMS stroke critical care system and define stroke receiving center designation criteria, requirements, and responsibilities.

AUTHORITY:

A. HSC, Division 2.5, § 1797.67, § 1797.88, § 1798.102, § 1798.150, § 1798.170, § 1798.172.

B. CCR, Title 13, § 1105 (c).

C. CCR, Title 22, Div. 9, Ch. ~~7.2~~ *6.3*.

DEFINITIONS:

A. **Acute Stroke Patient** – An EMS patient who meets assessment criteria for a suspected stroke in accordance with S-SV EMS Suspected Stroke Protocol (N-3).

B. **Comprehensive Stroke Center** – An acute care hospital with specific abilities to receive, diagnose and treat all stroke cases and provide the highest level of care for stroke patients.

C. **EMS Receiving Hospital** – An acute care hospital authorized by S-SV EMS to receive ambulance transported patients, which is not designated for stroke critical care services but is able to provide a minimum level of care for stroke patients in the emergency department.

D. **Primary Stroke Center** – An acute care hospital that treats acute stroke patients and identifies patients who may benefit from transfer to a higher level of care when clinically warranted.

E. **Stroke** – A condition of impaired blood flow to a patient's brain resulting in brain dysfunction, most commonly through vascular occlusion or hemorrhage.

F. **Stroke Critical Care System** – A subspecialty care component of the EMS system developed by a local EMS agency (LEMSA). This critical care system links prehospital and hospital care to deliver optimal treatment to the population of stroke patients.

G. **Stroke Receiving Center** – An acute care hospital which meets all requirements contained in CCR (Title 22, Div. 9, Ch. *6.3* ~~7.2~~) for the applicable level of stroke receiving center designation, obtains/maintains Joint Commission Accreditation as a

'Primary Stroke Center', 'Thrombectomy Capable Stroke Center', or 'Comprehensive Stroke Center' (unless waived by S-SV EMS for valid reasons), and enters into a written agreement with S-SV EMS designating them as a stroke receiving center.

H. **Thrombectomy-Capable Stroke Center** – A primary stroke center with the ability to perform mechanical thrombectomy for the ischemic stroke patient when clinically warranted.

POLICY:

A. Criteria for assessment, identification, treatment, and transport of EMS suspected acute stroke patients shall be based on S-SV EMS Suspected Stroke Protocol (N-3).

B. No health care facility located in the S-SV EMS jurisdictional region shall advertise in any manner or otherwise hold itself out to be affiliated with a stroke critical care system or a stroke center unless they have been designated as such by S-SV EMS in accordance with this policy and California Code of Regulations, Title 22, Division 9, Chapter ~~7.2~~ *6.3*.

C. The following shall be met for a hospital to be designated as a stroke receiving center by S-SV EMS:

1. Be licensed by the California Department of Public Health Services as a general acute care hospital.
2. Have a special permit for basic or comprehensive emergency medical service pursuant to the provisions of CCR Title 22, Div. 5.
3. Be accredited by a Centers for Medicare and Medicaid Services approved deeming authority.
4. Meet all requirements contained in CCR (Title 22, Div. 9, Chapter ~~7.2~~ *6.3*) for the applicable level of stroke receiving center designation.
5. Be available for treatment of acute stroke patients twenty-four (24) hours per day, seven (7) days per week, three hundred and sixty-five (365) days per year.
6. Have a communication system for notification of an EMS suspected stroke patient.
7. Have established protocols for triage and diagnosis following notification of an EMS suspected acute stroke patient.
8. Agree to accept all EMS suspected acute stroke patients according to applicable S-SV EMS policies/protocols.
9. Agree to accept the transfer of all acute stroke patients whose clinical condition requires a higher level of care than can be provided at the sending facility, unless the stroke receiving center is on diversion or internal disaster.
10. ~~Submit all required stroke patient data to the S-SV EMS selected stroke registry~~

- ~~The hospital stroke patient care elements shall be consistent with the U.S. Centers for Disease Control and Prevention, Paul Coverdell National Acute Stroke Program Resource Guide, dated October 24, 2016:~~

  ~~https://emsa.ca.gov/wp-content/uploads/sites/71/2019/02/USCDCP-Paul-Coverdell-Nation-Acute-Stroke-Prog-Resource-Guide-10-24-16.pdf~~

11. Actively participate in the S-SV EMS regional stroke critical care system quality improvement (QI) process which shall include, at a minimum:
    a. Evaluation of program structure, process, and outcome.
    b. Review of stroke-related deaths, major complications, and transfers.
    c. A multidisciplinary Stroke Quality Improvement Committee, including both prehospital and hospital members.
    d. Participation in the QI process by all designated stroke centers and prehospital providers involved in the stroke critical care system.
    e. Evaluation of regional integration of stroke patient movement.
    f. Participation in the stroke data management system.
    g. Compliance with the California EVID, § 1157.7 to ensure confidentiality, and a disclosure-protected review of selected stroke cases.
12. Provide CE opportunities, minimum of four (4) hours per year, for EMS personnel in areas of assessment and management of acute stroke patients.
13. Provide public education about stroke warning signs and the importance of early utilization of the 9-1-1 system.
14. Comply with all requirements contained in S-SV EMS stroke receiving center agreements.
15. Pay the S-SV EMS stroke receiving center designation fees.

D. Diversion of EMS suspected acute stroke patients shall only occur during times of an incapacitating internal disaster or when the CT scanner is otherwise unavailable.
    1. Notification shall be made to the following entities at least 24 hours prior to any planned event resulting in the CT scanner being unavailable:
        a. Stroke receiving center emergency department – to include a status posting on EMResource indicating that the CT scanner is unavailable.
        b. Appropriate adjacent stroke receiving center(s).
        c. Appropriate prehospital provider agencies.

2. All entities listed in this section shall also be notified as soon as possible in the case of an unplanned event causing the CT scanner to be unavailable as well as when the CT scanner is subsequently available.

3. An S-SV EMS ambulance patient diversion form describing such events shall be submitted to S-SV EMS by the end of the next business day.

PROCEDURE:

A. The stroke receiving center applicant shall be designated after satisfactory review conducted by S-SV EMS representatives or designees and completion of a written agreement between the hospital and S-SV EMS.

B. Designated stroke receiving centers shall have verification reviews by S-SV EMS representatives or designees conducted every three (3) years.

C. Failure to comply with the criteria and performance standards outlined in this policy and/or individual stroke receiving center written agreements may result in probation, suspension or rescission of stroke receiving center designation. Compliance will be solely determined by S-SV EMS.

Sierra – Sacramento Valley EMS Agency Program Policy			
Trauma Center Designation Criteria, Requirements & Responsibilities			
	Effective: DRAFT	Next Review: DRAFT	**509**
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE:

To establish Trauma Center designation criteria, requirements, and responsibilities.

AUTHORITY:

A. HSC § 1797.67, § 1797.88, § 1798.102, § 1798.150, § 1798.170, § 1798.172.

B. CCR, Title 22, Div. 9, Ch. 6.1.

DEFINITIONS:

A. **Level I Trauma Center –** A Level I Trauma Center has the greatest amount of resources and personnel for care of the injured patient. Typically, it is also a tertiary medical care facility that provides leadership in patient care, education, and research for trauma, including prevention programs.

B. **Level II Trauma Center –** A Level II Trauma Center offers similar resources as a Level I Trauma Center, differing only by the lack of research activities required for Level I Trauma Center designation.

C. **Level I and II Pediatric Trauma Center –** Level I and II Pediatric Trauma Centers focus specifically on pediatric trauma patients. Level I Pediatric Trauma Centers require some additional pediatric specialties and are research and teaching facilities.

D. **Level III Trauma Center –** A Level III Trauma Center is capable of assessment, resuscitation, and emergency surgery, if warranted. Injured patients are stabilized before transfer, if indicated, to a facility with a higher level of care according to pre-existing arrangements.

E. **Level IV Trauma Center –** A Level IV Trauma Center is capable of providing 24-hour physician coverage, resuscitation and stabilization to injured patients before they are transferred, if indicated.

POLICY:

A. Criteria for identification, treatment and transport of prehospital trauma patients shall be based on S-SV EMS General Trauma Management Protocol (T-1).

B. S-SV EMS will perform a trauma system needs assessment prior to designating any additional trauma centers in the S-SV EMS region.

C. The following criteria shall be met for a hospital to be designated as a Trauma Center by S-SV EMS:

1. Be licensed by the California Department of Public Health Services as a general acute care hospital.
2. Have a special permit for basic or comprehensive emergency medical service, pursuant to the provisions of CCR Title 22, Div. 5.
3. Be accredited by a Centers for Medicare and Medicaid Services approved deeming authority.
4. Meet all requirements contained in California Code of Regulations Title 22, Div. 9, Ch. 6.1, for the applicable level of Trauma Center designation.
5. Continuously meet the minimum standards published in the current edition of the American College of Surgeons Committee on Trauma (ACS-COT) Resources for Optimal Care of the Injured Patient document.
6. Continuously meet the ACS-COT and/or S-SV EMS Trauma Center Verification *and designation* requirements contained in this policy.
7. Agree to accept the transfer of major trauma patients whose clinical condition requires a higher level of care than can be provided at the sending facility unless the Trauma Center is on trauma diversion or internal disaster.
8. Have a written transfer agreement with a higher-level Trauma Center, if applicable, providing for the transfer of trauma patients whose clinical condition requires a higher level of care than can be provided at their facility.
9. Enter all required trauma patient data into the S-SV EMS regional trauma registry.
    - Each trauma center shall submit trauma patient data in an agreed upon format, and within the time requirements published in the most current edition of the ACS-COT Resources for the Optimal Care of the Injured Patient document.
    - Each trauma center shall ensure that the data entered into the S-SV EMS regional trauma registry is valid and without known errors.
    - Level I, II and III trauma centers located within the S-SV EMS region shall provide S-SV EMS with their American College of Surgeons Trauma Quality Improvement Program (ACS TQIP®) Benchmark Report on a bi-annual basis.
10. Submit all required trauma patient data to the California EMS Authority data management system, as required by CCR (Title 22, Div. 9, Ch. 6.1).
11. Actively participate in the S-SV EMS regional trauma system quality improvement (QI) process, which includes required attendance at S-SV EMS Trauma QI meetings by the Trauma Medical Director and Trauma Program Manager.

12. Have a QI process in place to, at a minimum:
    a. Provide ongoing feedback related to trauma care for:
        i. Transferring hospitals who transfer patients for trauma services.
        ii. EMS provider agencies for patients who meet trauma triage criteria.
    b. Promptly resolve and/or develop Process Improvement Plans (PIPs) to address QI issues identified through the following processes:
        i. Deficiencies/Opportunities for Improvement (OFI) identified by the ACS-COT during routine site reviews.
        ii. S-SV EMS QI process.
        iii. Internal QI process.
13. Provide CE opportunities, a minimum of four (4) hours per year, for EMS personnel in areas of trauma care.
14. Maintain active injury prevention programs targeted at reducing preventable injuries in the community.
15. Pay the applicable S-SV EMS Trauma Center designation fees.

D. Trauma Center diversion of patients meeting trauma triage criteria shall only occur during times of an internal disaster, or when emergent trauma services are otherwise unavailable.
    1. The following entities shall be notified as soon as possible of any event resulting in trauma services being unavailable, and when trauma services are subsequently available:
        a. S-SV EMS.
        b. Trauma center emergency department – to include a status posting on EMResource indicating trauma services are unavailable.
        c. Appropriate adjacent trauma centers.
        d. Appropriate prehospital provider agencies.
    2. An S-SV EMS ambulance patient diversion form describing such events shall be submitted to S-SV EMS by the end of the next business day.

PROCEDURE:

A. Any hospital seeking initial Trauma Center designation or currently designated S-SV EMS Trauma Centers seeking to change their designation level shall submit a letter of intent to the S-SV EMS Regional Executive Director. The letter of intent shall be on hospital letterhead and include a minimum of the following:

1. The requested level of Trauma Center designation and anticipated start date for the provision of trauma services.
2. Identification of the Trauma Program Medical Director, Trauma Program Manager Trauma PI RN, and Trauma Program Registrar.
3. Confirmation of commitment and support by hospital administration and physician staff for the applicable level of Trauma Center designation, including signatures of the hospital Chief of Staff and Chief Executive Officer.

B. Within 90 calendar days of receiving a letter of intent that complies with the criteria listed in this section of the policy, S-SV EMS will perform a trauma system needs assessment. The S-SV EMS Regional Executive Director will consequently make a designation recommendation to the S-SV EMS JPA Governing Board of Directors based on the results of the trauma system needs assessment.

C. Upon direction from the S-SV EMS JPA Governing Board of Directors to proceed with the Trauma Center designation process, the following will occur:

1. S-SV EMS will establish a Trauma Center contract with the hospital.
2. Hospitals seeking initial S-SV EMS Trauma Center designation shall complete a Trauma Center consultative review:
    a. An ACS-COT Consultative Review is required for any hospital requesting Level I, II or III Trauma Center designation.
    b. An S-SV EMS Consultative Review is required for any hospital requesting Level IV Trauma Center designation.
3. The S-SV EMS Regional Executive Director, in consultation with the S-SV EMS Medical Director, will make a recommendation to the S-SV EMS JPA Governing Board of Directors to grant or deny initial S-SV EMS Trauma Center designation based on the results of the consultative review, or based on the trauma needs assessment for Trauma Centers seeking to change their designation level.
4. Hospitals seeking initial S-SV EMS Trauma Center designation shall obtain ACS-COT or Level IV S-SV EMS Verification within three (3) years of completion of the consultative review to maintain S-SV EMS Trauma Center designation.

D. Failure to maintain ACS-COT or Level IV S-SV EMS Verification or comply with any of the criteria/standards contained in this policy, applicable statutes/regulations and/or S-SV EMS Trauma Center contracts may result in probation, suspension, denial, or revocation of S-SV EMS Trauma Center designation.

E. The S-SV EMS JPA Governing Board of Directors shall have final authority in any Trauma Center designation matters.

Sierra – Sacramento Valley EMS Agency Program Policy			
EMS Documentation			
	Effective: DRAFT	Next Review: DRAFT	**605**
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE:

To specify EMS patient care report (PCR) documentation and data requirements.

AUTHORITY:

A. HSC, Division 2.5, § 1797.202, § 1797.204, § 1797.220, § 1797.227, § 1798.

B. CCR, Title 22, Div. 9, Ch. 3.1, Ch. 3.2, Ch. 3.3.

POLICY:

A. BLS non-transport providers shall complete a PCR for any EMS incident that results in a patient refusal of EMS care without ALS/LALS involvement.

B. BLS non-transport providers shall complete an electronic PCR (ePCR) compliant with current California Emergency Medical Services Information System (CEMSIS) and the National Emergency Medical Services Information System (NEMSIS) data standards or S-SV EMS BLS Skills Utilization PCR (605-A)~~(if available)~~, to document the utilization of any of the following prior to ALS/LALS arrival:

1. Defibrillation (AED shock delivered).
2. BLS optional skills included in S-SV EMS Policy No. 477.

C. ALS/LALS non-transport providers and all transport providers shall utilize an ePCR software system, compliant with current CEMSIS/NEMSIS standards, for EMS documentation as follows:

1. ALS/LALS non-transport personnel shall complete an ePCR for any EMS incident that results in their arrival at scene, unless patient contact was limited to BLS assessment and/or oxygen administration only, and patient care was assumed by a transport provider.
2. Transport personnel shall complete an ePCR for any EMS incident that results in their arrival on scene. If the non-transport and transport personnel are from the same agency, a single ePCR by the appropriate unit is adequate.
3. For multiple patient incidents, an ePCR shall be completed for each individual patient (including patients who are determined to be deceased on scene).

4. ~~For multiple casualty incidents (MCIs), the Medical Group Supervisor (or designee) shall complete a separate ePCR documenting pertinent incident information (MCI type, incident details, patient count/triage categories, etc.).~~

D. A PCR is a legal medical record. EMS personnel shall provide clear, legible, concise, complete, and accurate patient care documentation. Any form of misrepresentation is a serious infraction, which may result in disciplinary action.

E. *The use of artificial intelligence (AI) tools integrated within an approved ePCR system is permitted. When using AI to generate fields within the ePCR system, EMS personnel shall review, verify, and make necessary edits to confirm that the documentation accurately reflects the patient encounter. The integrated AI feature is a documentation support tool and does not replace the EMS personnel's judgment, assessment, or responsibility for the completeness and accuracy of the final ePCR.*

F. EMS providers who fail to comply with EMS documentation laws, regulations, and/or policies may be suspended from providing service until they comply.

PROCEDURE:

A. All applicable/required PCR data fields shall be accurately completed*, to include:*

1. EMS ~~procedures and/or medication administrations~~ *interventions, including total volume of IV/IO fluid infused,* ~~including~~ specific *medication* dose*(s)*~~,~~ *and* route*(s)*, and response*(s)* to *the intervention(s)* ~~treatment~~ as applicable, shall be ~~adequately~~ documented in the Treatment/Procedures section. ALS/LALS personnel shall also document all pertinent ~~procedures/medications~~ *interventions* utilized by bystanders or BLS personnel (including prior to their arrival on scene) in the Treatment/Procedures section.

2. ~~The total volume of IV/IO fluid infused shall be adequately documented in the Treatment/Procedures and/or Narrative section.~~

3. All ~~pertinent~~ vital signs, including applicable cardiac rhythm interpretations, shall be ~~adequately~~ documented in the *Vitals* ~~Signs~~ section. Vital signs shall be obtained/documented *at or near* ~~as close as possible to~~ initial patient contact, a minimum of every 15 minutes ~~during~~ *throughout* patient care (or more frequently if clinically indicated *and at least twice during transport), following any intervention with anticipated physiologic impact,* and ~~as close as possible to~~ *at or near* transfer of patient care ~~at the receiving hospital~~. *Vital signs include, but are not limited to:*

   a. *Mental Status (GCS, AVPU)*

   b. *Heart rate, blood pressure, respiratory rate/quality, SpO_2, temperature (when clinically indicated), and $EtCO_2$ (when clinically indicated).*

   c. *Pain scale (if applicable)*

4. *Chief complaint: a subjective statement as communicated to EMS personnel by the patient, witness, or other reporting party.*

5. *Primary Impression: a working diagnosis that serves as the basis for clinical decision-making.*
6. *Focused history relevant to presentation.*
7. *A thorough head-to-toe physical assessment shall be performed and documented for all patients where such as assessment is appropriate based on the patient's clinical condition, chief complaint, or mechanism of injury. At a minimum, a focused physical assessment must be performed and documented for the affected body part or organ system(s) related to the patient's chief complaint or mechanism of injury. Any unusual findings identified during a focused assessment shall be detailed in the assessment summary section of the PCR.*
8. *Presentation-specific Assessments*
    a. *Altered Mental Status*
        i. *Blood glucose value*
        ii. *Neurologic assessment (GCS or equivalent)*
        iii. *Baseline mentation (if known)*
    b. *Cardiac or Respiratory*
        i. *Chest pain characteristics (location, quality, severity, etc.)*
        ii. *Cardiac assessment (rate/rhythm, heart sounds, etc.)*
        iii. *Lung sounds*
        iv. *Work of breathing*
        v. *$EtCO_2$ monitoring*
    c. *Suspected Sepsis*
        i. *Temperature*
        ii. *$EtCO_2$ monitoring*
        iii. *Neurologic assessment (GCS or equivalent)*
        iv. *Perfusion assessment*
    d. *Suspected Stroke*
        i. *CPSS stroke assessment*
        ii. *Blood glucose value*
        iii. *Pupillary assessment*
        iv. *Motor/Sensory findings*

v. *Last Known Well Time (LKWT)*

e. *Traumatic Injury*

i. *Mechanism of injury*

ii. *Primary survey elements (airway, breathing, circulation)*

iii. *Secondary survey findings (focused assessment)*

iv. *Bleeding assessment including estimated blood loss*

v. *Hemorrhage control measures*

vi. *Neurologic assessment (GCS or equivalent)*

9. The Narrative section shall be completed utilizing one of the following formats:
   a. SOAP (Subjective, Objective, Assessment, and Plan).
   b. CHART (Complaint, History, Assessment, Rx/pt. medications, and Treatment).
   c. Chronological order.
10. Response, patient care, and/or transport delays shall be adequately documented in the appropriate section(s) of the PCR.
11. A written or electronic legal signature of the individual completing the PCR is required.

B. The following information, when available, shall be documented on an interim PCR (605-B or equivalent), and left with the receiving nurse or physician at the time of patient delivery:
   1. Basic incident and patient demographic information.
   2. Chief complaint, time of symptom onset, pertinent medical history, medications, and medication allergies.
   3. Pertinent vital signs.
   4. EMS treatment rendered (time, type, dose, route, response, etc.).
   5. Relevant patient care related documents (DNR/POLST forms, 12 Lead EKGs, cardiac monitor rhythm strips, etc.).
   6. Name, title, and ID of EMS personnel completing the documentation.

C. PCRs shall be completed within twenty-four (24) hours after completion of the patient encounter (NEMSIS ~~V3.5~~ data element eTimes.13 – 'Unit Back in Service Date/Time'), and shall be distributed as follows:
   1. If a BLS optional skill was utilized, a copy of the completed PCR shall be provided/ available to S-SV EMS within seven (7) calendar days of the incident.

2. PCRs shall be provided/available to the applicable receiving, base, and/or modified base hospital upon completion, but no later than twenty-four (24) hours after completion of the patient encounter.

D. Any EMS provider required to complete/submit ePCR data pursuant to this policy, and who chooses not to utilize the S-SV EMS ImageTrend ePCR software system, shall submit EMS data to S-SV EMS in the following manner:

1. EMS data shall be continually compliant with current CEMSIS/NEMSIS standards and the current S-SV EMS data schematron.

2. EMS data for all incidents required by this policy shall be submitted to the EMS data system utilized by S-SV EMS within twenty-four (24) hours after completion of the patient encounter. Any ePCR record that fails to import shall be identified, corrected, and successfully submitted to the EMS data system utilized by S-SV EMS within seventy-two (72) hours after completion of the patient encounter.

E. PCRs for adult and emancipated minor patients shall be preserved for at least seven (7) years. PCRs for unemancipated minor patients shall be preserved for at least one (1) year after such minor has reached the age of 18 years old and, in any case, not less than seven (7) years.

Sierra – Sacramento Valley EMS Agency Program Policy			
Prehospital Provider Clinical Performance Standards			
	Effective: DRAFT	Next Review: DRAFT	**622**
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE:

To establish clinical performance standards for prehospital ground provider agencies, to ensure consistent, equitable, safe, and high-quality EMS patient care and documentation.

AUTHORITY:

A. HSC, Div. 2.5, § 1797.

B. CCR, Title 22, Div. 9.

POLICY:

A. Each provider agency shall meet or exceed the applicable clinical performance standards identified in attachment 622-A.

B. Provider agencies shall maintain an internal Quality Improvement (QI) process that monitors required clinical performance standards, implements corrective actions when standards are not met, and demonstrates sustained compliance.

C. Measurement of clinical performance standards shall be based on objective data sources, including but not limited to the following (as applicable):

   a. Patient care report (PCR) documentation.

   b. Cardiac monitor downloads/documentation.

   c. Defibrillator logs.

   d. Destination/transfer of patient care documentation.

   e. Allied agency feedback.

   f. Base, modified base, and/or receiving hospital feedback.

D. Documentation must be sufficient to support clinical decision-making and compliance with S-SV EMS policies/protocols and applicable EMS regulations.

E. Failure to meet clinical performance standards minimum thresholds may result in further S-SV EMS review and/or corrective action in accordance with this policy.

F. If there is a conflict with this policy and the requirements contained in an emergency ground ambulance provider exclusive operating area (EOA) agreement, the EOA agreement requirements shall prevail.

PROCEDURE:

A. Provider agencies shall designate a QI lead (or equivalent role), who shall be responsible for the following:

1. Clinical performance standards data tracking and review:
2. Clinical performance standards data submission to S-SV EMS (when required).
3. Corrective action implementation and tracking (when required).

B. Provider agencies shall measure all clinical performance standards identified in attachment 622-A on a minimum of a calendar quarter basis ('measurement period').

C. When requested/required, provider agencies shall submit clinical performance standards data to S-SV EMS, which shall include the following minimum information:

1. Measurement period and denominator definition (eligible encounters).
2. Numerator definition (compliant encounters).
3. Threshold comparison (met/not met).
4. Narrative summary of trends, contributing factors, and actions taken.

Supporting source documentation shall be available to S-SV EMS upon request (e.g., de-identified case review summaries, monitor strips, training rosters, policy changes).

D. Exceptions Clause Documentation:

1. Where attachment 622-A includes an Exception Clause, exceptions must be clearly documented in the PCR with sufficient detail to justify exclusion or variance.
2. Exceptions do not eliminate the requirement to provide patient care consistent with S-SV EMS policies/protocols and clinical judgment; they address measurement fairness when patient/scene factors prevent achieving the metric.

E. Non-Compliance Corrective Actions:

1. Level 1 Finding: defined as any occurrence where one (1) or more clinical performance standards falls below the minimum performance threshold during a single measurement period. In such instances, the provider shall:
    a. Identify driver(s), including but not limited to training gaps, documentation workflow issues, equipment issues, or protocol knowledge deficiencies.

b. Implement corrective action, including but not limited to targeted education, checklist or process changes, QA feedback loops, or equipment remediation.

c. Re-measure performance during the next measurement period and document the provider's improvement plan.

2. Level 2 Finding: defined as any occurrence where one (1) or more of the same clinical performance standards falls below the minimum performance threshold for two (2) consecutive measurement periods. In such instances, the provider shall:

   a. Notify S-SV EMS no later than the 15th calendar day of the month following the end of the applicable measurement period.

   b. S-SV EMS may require the provider to implement additional corrective actions, including but not limited to focused audits, directed training, and/or submission of a written corrective action plan to S-SV EMS.

3. Level 3 Finding: defined as any occurrence where one (1) or more of the same clinical performance standards falls below the minimum performance threshold for three (3) consecutive measurement periods, or there is a significant deviation from one (1) or more clinical performance standard with a finding by the S-SV EMS Medical Director that indicates a threat to patient safety. In such instances, the provider shall:

   a. Notify S-SV EMS no later than the 15th calendar day of the month following the end of the applicable measurement period.

   b. S-SV EMS may require/implement additional corrective actions, including but not limited to a formal written Performance Improvement Plan (PIP) with timelines, increased reporting frequency, onsite evaluation, or other appropriate administrative remedies.

4. Additional non-compliance corrective actions (penalties, liquidated damages, other administrative remedies, etc.) may also apply, as indicated in applicable provider agency contracts/agreements.

Attachment A

Clinical Measures Under Consideration for Monitoring

The following four pages list clinical measures that S-SV EMS is considering for ongoing monitoring. This list is being shared in advance of the REMAC meeting so that providers and agencies have time to review it.

Please Note

- The measures listed in Attachment A are a proposed set, not a final requirement. They remain subject to change before the REMAC discussion.
- S-SV EMS does not expect agencies to begin reporting on all of these measures at once. Implementation will be phased.
- Timelines, reporting expectations, and the rollout sequence will be discussed and finalized at the REMAC meeting on July 1, 2026.

Questions about timeline or implementation?

Please hold these for the REMAC meeting on July 1, 2026, where they will be addressed as part of the broader discussion. This will allow questions to be answered consistently for all agencies at the same time.

The four-page attachment follows this page.

Attachment A – Clinical Performance Standards

Domain	Level	Standard	Inclusion Criteria	Metric	Threshold	Measurement	Exception Clause
Documentation	BLS/ ALS	1. Required PCR Fields Completion	All patients	EMS personnel shall complete all mandatory NEMSIS and LEMSA-required fields, including all required supplemental forms (e.g., airway form).	≥95%	Percentage of PCRs with all mandatory NEMSIS and LEMSA (S-SV EMS schematron) required fields completed, including applicable supplemental forms.	
Documentation	ALS	2. Decision-Making Capacity Documentation	Patients who refuse evaluation, treatment or transport	EMS personnel shall assess and document the patient's decision-making capacity at the time of refusal, sufficient to demonstrate the patient's ability to understand, appreciate, and communicate an informed decision	≥95%	Percentage of refusal/AMA encounters in which the PCR documents whether the patient was determined to have decision-making capacity, including capacity assessment, discussion of risks and benefits, and the patient’s refusal decision.	Exceptions must be documented and may include patient elopement, unsafe scene conditions, or inability to complete assessment.
Airway/Respiratory	ALS	3. First-Pass Advanced Airway Success	Patients receiving advanced airway attempts	EMS personnel shall achieve successful placement of an advanced airway using the least number of attempts necessary, with emphasis on first-pass success when an advanced airway is attempted.	≥85%	Percentage of advanced airway encounters in which successful placement of an endotracheal tube (ETT) or supraglottic airway (SGA) is achieved on the first documented attempt. An attempt is defined as introducing an airway device (ETT, SGA) into the orophaynx with the intent to place the device. Successful placement is defined as avanced airway placement confirmed by waveform capnography and documented clinical findings.	Anatomical difficulty or emergent clinical deterioration, must be documented as contributing factors to be considered for exception.
Airway/Respiratory	ALS	4. Waveform Capnography	Patients with advanced airway in place (ETT/ SGA)	EMS personnel shall apply and document continuous waveform capnography for all patients with an advanced airway in place, unless a documented exception exists.	≥95%	$ETCO_2$ documented before/after all advanced airway attempts and at a minimum q5m following advanced airway placement.	Patient factors preventing reliable waveform (e.g., copious secretions, severe bronchospasm); extremely short transport; immediate life-threatening priorities; must be documented to be considered for exception.

Domain	Level	Standard	Inclusion Criteria	Metric	Threshold	Measurement	Exception Clause
Airway/Respiratory	BLS/ ALS	5. BVM Quality	Non-cardiac arrest patients receiving BVM ventilation	EMS personnel shall ventilate patients receiving BVM ventilation at a rate appropriate for patient age and clinical condition as evidenced by documented ventilation rate, SpO_2, and $ETCO_2$ ($ETCO_2$ ALS only).	≥90%	Percentage of non–cardiac arrest patients receiving BVM ventilation wth PCR documentation that includes, at a minimum: Ventilation rate within the age-appropriate range for clinical condition SpO_2 ≥94% $ETCO_2$ 35-45mmHg (35-39mmHg for suspected moderate/severe TBI) ($ETCO_2$ ALS only). Capnography use: Continuous $ETCO_2$ applied and documented at initiation of BVM ventilation and at a minimum five (5) minute interval thereafter while BVM ventilation continues (ALS only).	Absence of documented ventilation rate, or patient factors preventing reliable $ETCO_2$ or SpO_2 monitoring shall be considered non-compliant.
Assessment	BLS/ ALS	6. Patient Assessment/ Documentation	All patients	EMS personnel shall document patient assessment findings appropriate to the patient's chief complaint, mechanism of injury, or clinical presentation that demonstrate clinical reasoning, identification of life threats, and reassessment of patient response to care.	≥95%	Percentage of patient care reports in which documentation includes all required assessment elements applicable to the patient's clinical presentation, as defined in Exhibit A. Failure to document a required element without a documented exception shall be considered non-compliant.	Immediate life threats, patient refusal or inability to cooperate, altered mental status, unsafe scene conditions, or extremely short transport time; must be documented to be considered for exception..
Assessment	ALS	7. 12-Lead Acquisition	Patients with a primary impression consistent with indications in S-SV EMS Protocol PR-1.	EMS personnel shall acquire and document a 12-lead ECG for patients who meet protocol-defined indications.	≥95%	12-lead ECG acquired within 10 minutes of patient contact and documented in the PCR, including time acquired, interpretation, and whether one or more STEMI criteria were met.	Patient refusal; immediate life-threatening condition; extremely short transport time; must be documented to be considerd for exception.
Cardiac Arrest/Resuscitation	BLS/ ALS	8. Defibrillation Timing	Patients in Cardiac Arrest with CPR initiated by EMS and a shockable rhythm identified.	EMS personnel shall deliver the first defibrillation shock within two (2) minutes of patient contact for patients with a shockable rhythm.	≥90%	Elapsed time between documented "At Patient" contact on the PCR and the time of first defibrillation shock recorded on the cardiac monitor printout.	Delayed patient access; scene safety concerns; immediate life-saving interventions required prior to rhythm analysis; must be documented.

Domain	Level	Standard	Inclusion Criteria	Metric	Threshold	Measurement	Exception Clause
Cardiac Arrest/Resuscitation	ALS	9. $ETCO_2$ Use During CPR	Patients in Cardiac Arrest with CPR initiated by EMS	EMS personnel shall apply and document continuous $ETCO_2$ monitoring during CPR.	≥95%	$ETCO_2$ documented at initiation of CPR and at a minimum of every five (5) minutes during resuscitation.	Short resuscitation duration or rapid ROSC; must be documented.
Trauma Care/Pain Management	BLS/ ALS	10. Hemorrhage Control - Tourniquet	Patients with applied prehospital hemorrhage control utilizing a tourniquet.	EMS personnel shall utilize and assess tourniquets in accordance with S-SV EMS Protocol T-4.	≥95%	Documentation of assessment of initial appropriateness and ongoing need for tourniquet use in the PCR	Patient anatomy or injury pattern preventing effective placement; patient refusal; immediate life-threatening priorities; must be documented.
Trauma Care/Pain Management	ALS	11. Hemorrhage Control - TXA	Patients with prehospital hemorrhage meeting TXA criteria.	EMS personnel shall administer TXA in accordance with S-SV EMS Protocol T-4 when inclusion criteria are met, no exclusion criteria exist, and a base/modified base hospital order has been approved.	≥95%	Documentation of TXA administered at the appropriate dose when indicated, with PCR documentation of physician name and time of order, or documented denial of request including physician name and time.	Failure to meet inclusion criteria; presence of exclusion criteria; physician denial; patient refusal; inability to obtain IV/IO access; time-critical transport; must be documented.
Trauma Care/Pain Management	ALS	12. Analgesia When Indicated (Including Ongoing Pain Management)	Patients with an initial pain score ≥6 using numeric, FLACC, or Wong-Baker scale, with decision-making capacity, and pain management appropriate per S-SV EMS Protocol M-8.	EMS personnel shall manage pain in accordance with S-SV EMS Protocol M-8 and reassess pain and vital signs within 10–15 minutes following analgesic administration when feasible.	≥90%	Percentage of eligible patients who were administered analgesia or had a documented reason analgesia was not administered (e.g., refusal, contraindication, clinical deferral).	Patient refusal; contraindication or allergy; hemodynamic instability or altered mental status; clinical deferral; extremely short transport time; must be documented.
Pediatric	ALS	13. Pediatric Weight-Based Dosing	Pediatric patients (age 0-14 years) receiving any medication.	EMS personnel shall calculate and administer pediatric medication doses based on patient weight in accordance with protocol-defined dosing ranges.	≥95%	Documentation in the PCR of the source of patient weight (measured, caregiver/patient-reported, length-based tape, provider estimate, approved app) and accurate calculation and administration of the weight-based medication dose.	
Mission Lifeline (Stroke/STEMI)	ALS	14. AHAEMS4.1 Stroke Screen Performed and Documented	Patients aged 18 years and older with a primary or secondary impression of stroke.	EMS personnel shall perform and document the findings of a stroke screening.	≥95%	Documentation in the PCR that a stroke screen was performed and the score (severity) documented in eVitals.30 and eVitals.29	Patient unable to complete or refused must be documented.

Domain	Level	Standard	Inclusion Criteria	Metric	Threshold	Measurement	Exception Clause
Mission Lifeline (Stroke/STEMI)	ALS	15. AHAEMS2.1 Documentation of Last Known Well for Patients with Positive Stroke Screen	Patients aged 18 years and older with a positive stroke screen.	EMS personnel shall document the Last Known Well date/time.	≥95%	Documentation in the PCR that Last Known Well date/time is documented during the EMS encounter in eSituation.18.	Unable to complete or refused must be documented.
Mission Lifeline (Stroke/STEMI)	ALS	16. AHAEMS3.1 Evaluation of Blood Glucose for Patient with Suspected Stroke	Patients aged 18 years and older with a primary or secondary impression of stroke.	EMS personnel shall evaluate blood glucose during the EMS encounter.	≥95%	Documentation in the PCR of blood glucose evaluation and level in eVitals.18.	Unable to complete or refused must be documented.
Mission Lifeline (Stroke/STEMI)	ALS	17. AHAEMS1.1 Pre-Arrival Notification for Positive Stroke Screen	Patients aged 18 years and older with a a positive stroke screen and assessment occurred <24 hours since last know well date/time.	EMS personnel shall activate a pre-arrival alert for stroke patients with a positive stroke screen.	≥95%	Documentation in the PCR of pre-arrival alert for stroke in eDisposition.24.	Last known well ≥24 hours prior to assessment, unable to complete must be documented.
Mission Lifeline (Stroke/STEMI)	ALS	18. AHAEMS5.1 12-Lead EKG Performed within 10 Minutes	Patients aged 18 years and older with a primary or secondary impression related to cardiac chest pain or heart attack.	EMS personnel shall perform a 12-Lead EKG within 10 minutes of ALS first medical contact.	≥95%	Documentation in the PCR of 12-Lead EKG performed in eVitals.04	Cardiac arrest, the need for advanced airway management, hemodynamic instability requiring stabilization prior to 12-Lead EKG and patients who refuse care must be documented.
Mission Lifeline (Stroke/STEMI)	ALS	19. AHAEMS7.1 Pre-Arrival Notification of STEMI within 10 Minutes of Positive EKG	Patients aged 18 years and older who meet S-SV EMS Protocol C-6 STEMI criteria.	EMS personnel shall activate a pre-arrival alert for patients who meet STEMI criteria.	≥95%	Documentation in the PCR of pre-arrival alert for stroke in eDisposition.24.	Cardiac arrest, the need for advanced airway management, hemodynamic instability requiring stabilization prior to 12-Lead EKG, patients who refuse care or first EKG performed is not STEMI-positive must be documented.
Mission Lifeline (Stroke/STEMI)	ALS	20. AHAEMS13.0 /14.0 At-Patient Time to Departure within 15 Minutes for Stroke/STEMI	Patients aged 18 years and older with a primary or secondary impression related to cardiac chest pain, heart attack or stroke.	EMS personnel shall have a scene time for stroke/STEMI patients <15 minutes.	≥95%	Documentation in the PCR of eTimes.09 minus eTimes.07 <15 minutes.	Cardiac arrest, the need for advanced airway management, hemodynamic instability requiring stabilization prior to 12-Lead EKG, patients who refuse care or first EKG performed is not STEMI-positive or any other non-system reasons for delay (extrication, language barrier, patient access, safety, multiple patient triage, etc.) must be documented.

Sierra – Sacramento Valley EMS Agency Program Policy			
Paramedic Interfacility Transport (IFT) Optional Skills			
	Effective: DRAFT	Next Review: DRAFT	**841**
	Approval: Troy M. Falck, MD – Medical Director		DRAFT
	Approval: John Poland – Executive Director		DRAFT

PURPOSE:

To establish parameters for the utilization of the following paramedic interfacility transport (IFT) optional skills:

A. Monitoring of magnesium sulfate, nitroglycerin, heparin, and/or amiodarone infusions.

B. Monitoring of blood transfusions.

C. Utilization of automatic transports ventilators (ATVs).

D. Utilization of high-flow nasal cannula (HFNC) therapy.

AUTHORITY:

A. HSC, Div. 2.5, § 1797.220.

B. CCR, Title 22, Ch. 3.3.

POLICY:

A. Only appropriately trained paramedics who are on duty with an S-SV EMS approved paramedic IFT optional skills provider may utilize paramedic IFT optional skills.

B. Monitoring of magnesium sulfate, nitroglycerin, heparin, and/or amiodarone infusions:

1. Patients will have pre-existing infusions that have been running for at least 10 minutes ~~in peripheral or central IV lines~~ prior to transport. Paramedics will not initiate infusions.

~~2. Infusions should have been running for at least 10 minutes prior to transport.~~

3. Patients should have maintained stable vital signs for the previous 30 minutes and will have no more than two (2) medication infusions running, except for potassium chloride concentrations authorized under the paramedic basic scope of practice.

C. Monitoring of blood transfusions:

1. Paramedic monitoring of blood transfusions is limited to circumstances when there are no RN staffed Critical Care Transport/Specialty Care Transport (CCT/SCT) units available or when air ambulance transport is not appropriate/available.

2. Patients will have pre-existing blood transfusions in peripheral or central IV lines prior to transport. Paramedics will not initiate blood transfusions.

D. Utilization of ATVs:

1. Patients will be on ventilator support prior to transport. Paramedics will not initiate ventilator support.

2. Provider agencies utilizing ATV equipment shall follow the manufacturer instructions for use, maintenance, cleaning, and regular testing. At a minimum, ATV equipment shall undergo annual preventative testing/maintenance by qualified manufacturer's representative personnel.

3. Paramedics must be adequately trained/retrained on ***the specific ATV equipment utilized by the provider agency*** ~~use~~. Such training shall occur no less than annually and shall be documented.

E. Utilization of HFNC therapy:

1. Patients will be on HFNC therapy prior to transport. Paramedics will not initiate HFNC therapy.

2. Provider agencies utilizing HFNC equipment shall follow the manufacturer instructions for use, maintenance, cleaning, and regular testing. At a minimum, HFNC equipment shall undergo annual preventative testing/maintenance by qualified manufacturer's representative personnel.

3. Paramedics must be adequately trained/retrained on ***the specific HFNC equipment utilized by the provider agency*** ~~use~~. Such training shall occur no less than annually and shall be documented.

PROCEDURE:

A. Monitoring of magnesium sulfate, nitroglycerin, heparin, and/or amiodarone infusions:

1. All patients shall be maintained on a cardiac monitor, and a non-invasive blood pressure monitor throughout transport.

2. The paramedic shall receive written orders from the transferring physician prior to leaving the transferring hospital. These orders shall include a telephone number where the transferring and/or base/modified base hospital physician can be reached during transport, in addition to the type of solution, dosage and rate of infusion. These written orders shall be attached to the completed PCR.

3. Patients will be hemodynamically stable at time of transport.

4. If medication administration is interrupted, the paramedic may restart the infusion as delineated in the transfer orders.

5. All infusions, except for potassium chloride concentrations authorized under the paramedic basic scope of practice, will be monitored by a mechanical pump

familiar to the paramedic ***and shall be verified with the sending RN following changeover to the mechanical EMS transport pump.*** In cases of pump malfunction that cannot be corrected, the infusion shall be discontinued and the transferring physician and/or base/ modified base hospital notified as soon as possible. S-SV EMS shall be notified of any mechanical pump malfunction no later than the end of the next business day.

6. The paramedic shall document in the PCR the total volume infused throughout the duration of the transport.

7. Magnesium sulfate infusion parameters:

   a. Regulation of the infusion rate will be within parameters defined by the transferring physician.

   b. If the patient develops signs/symptoms of magnesium toxicity, the medication drip shall be discontinued, and the transferring physician and/or base/modified base hospital will be notified as soon as possible. Signs/symptoms of magnesium toxicity include:

      i. Thirst.

      ii. Diaphoresis.

      iii. DTR's (Deep Tendon Reflexes) – depressed or absent.

      iv. Hypotension.

      v. Flaccid paralysis.

      vi. Respiratory depression.

      vii. Circulatory depression or collapse.

      viii. CNS depression.

      ix. Urine output <30 ml/hr.

      x. Chest pain or pulmonary edema.

   c. Vital signs, including DTR's, shall be monitored and documented every 15 minutes and any time there is a change in patient condition or medication adjustment.

8. Nitroglycerin infusion parameters:

   a. Infusion fluid will be D5W.

   b. Medication concentration will be 50 mg/250 mL.

   c. Regulation of the infusion rate will be within parameters defined by the transferring physician, but in no case will changes be greater than 10 mcg/ minute increments every 5 - 10 minutes. In cases of severe hypotension, the

medication drip will be discontinued, and the transferring physician and/or base/modified base hospital will be notified as soon as possible.

d. Vital signs shall be monitored and documented, ***at a minimum***, every 15 minutes and any time there is a change in patient condition or medication adjustment.

9. Heparin infusion parameters:
   a. Infusion fluid will be D5W or NS.
   b. Medication concentration shall not exceed 100units/mL of IV fluid (25,000 units/ 250 mL).
   c. Infusion rates ~~shall be verified with the sending RN following changeover to the mechanical EMS transport pump and~~ will remain constant during transport. No regulation of the rate will be performed by the paramedic except to turn off the infusion completely.
   d. Vital signs shall be monitored and documented, ***at a minimum***, every 15 minutes and any time there is a change in patient condition.
10. Amiodarone infusion parameters:
   a. Medication concentration must be a minimum concentration of 150 mg/250 mL (0.6 mg/mL).
   b. Infusion rates may vary between 0.25 - 1 mg/min.
   c. Infusion rates will remain constant during transport. No adjustment of the rate will be performed by the paramedic except to turn off the infusion completely.
   d. Vital signs will be monitored and documented, ***at a minimum***, every 15 minutes and any time there is a change in patient condition.
   e. Y-Injection incompatibility; the following will precipitate with amiodarone hydrochloride:
      i. Heparin.
      ii. Sodium bicarbonate.
   f. Amiodarone hydrochloride intravenous infusion monitoring is not approved for patients less than 14 years old without base/modified base physician contact.
   g. For infusions greater than one hour, amiodarone hydrochloride concentrations should not exceed 2 mg/mL unless a central venous catheter is used.

B. Monitoring of blood transfusions:

1. All patients will be maintained on a cardiac monitor, ***waveform capnography*** and a non-invasive blood pressure monitor throughout transport.
2. The paramedic shall receive written orders from the transferring physician prior to leaving the transferring hospital. These orders shall include a telephone number where the transferring and/or base/modified base hospital physician can be reached during the patient transport in addition to the transfusion rate. These written orders shall be attached to the completed PCR.
3. Patients will be hemodynamically stable at the time of transport.
4. Paramedic personnel must be knowledgeable in the operation of the specific blood delivery/warming equipment.
5. Regulation of the transfusion rate will be within the parameters defined by the transferring physician.
6. Verify the patient and blood with the sending RN by checking the patient ID band against the blood label(s) and blood order for name, blood type and unit identifying number.
7. Vital signs will be monitored and documented, ***at a minimum***, every 15 minutes and any time there is a change in patient condition or change in transfusion rate.
8. Monitor the patient for any signs and symptoms of a transfusion reaction. Monitor temperature for adverse effects if transport time exceeds 15 minutes. The following are the most common types of transfusion reactions that may occur:
    a. Hemolytic reactions: Hemolytic reactions are the most life-threatening. Clinical manifestations may vary considerably: fever, headache, chest or back pain, pain at infusion site, hypotension, nausea, generalized bleeding or oozing from surgical site, shock. The most common cause is from ABO incompatibility due to a clerical error or transfusion to the wrong patient. Chances of survival are dose dependent therefore it is important to stop the transfusion immediately if a hemolytic reaction is suspected. Administer a fluid challenge.
    b. Febrile non-hemolytic reaction: Chills and fever (rise from baseline temperature of 1°C or 1.8°F). Document and report to hospital on arrival.
    c. Allergic reaction: Characterized by appearance of hives and itching.
    d. Anaphylaxis: May occur after administration of only a few ml's of a plasma containing component. Symptoms include coughing, bronchospasm, respiratory distress, vascular instability, nausea, abdominal cramps, vomiting, diarrhea, shock, and loss of consciousness.
    e. Volume overload: Characterized by dyspnea, headache, peripheral edema, coughing, frothy sputum, or other signs of congestive heart failure occurring during or soon after transfusion. Restrict fluid.

9. If a suspected transfusion reaction occurs:
    a. Stop the transfusion immediately.
    b. Contact the transferring and/or base/modified base hospital physician.
    c. Consult appropriate treatment protocol(s).
    d. Document any suspected transfusion reactions.
    e. Report to hospital staff immediately upon arrival.
10. The paramedic shall document in the PCR the total volume infused throughout the duration of the transport.

C. Utilization of ATVs:

1. Written transfer orders from the transferring physician shall be obtained prior to transport. These orders must provide for maintaining and adjusting ventilations via ATV settings during transport and shall include a telephone number where the transferring and/or base/modified base hospital physician can be reached during the patient transport. These written orders shall be attached to the completed PCR.
2. Ventilator support must be regulated by an ATV familiar to the paramedic.
3. If an ATV equipment failure occurs and cannot be corrected, the paramedic shall discontinue use of the ATV, initiate ventilation by bag-valve device, and notify the transferring physician and/or base/modified base hospital as soon as possible. S-SV EMS shall also be notified of any ATV failure by the end of the next business day.
4. Paramedics shall continually observe the patient and document patient response to any changes while the ATV is operational.
5. Initial ATV settings and any subsequent changes shall be documented in the PCR.
6. The paramedic is responsible for airway management and must frequently reassess tracheostomy/endotracheal tube placement, including after each patient movement.
7. Non-invasive BP monitoring equipment shall be utilized. Vital signs shall be monitored and documented every 15 minutes and any time there is any change in patient condition or adjustment of the ATV setting.
8. Continuous pulse oximetry, waveform capnography, and cardiac monitoring shall be maintained throughout transport, and values/rhythms shall be documented every 15 minutes and any time there is a change in patient condition.
9. The ATV equipment must be able to match the existing ventilator settings, and shall include the following minimum features (including circuit):
    a. Modes:

i. Assist Control (AC).

ii. Synchronized Intermittent Mandatory Ventilation (SIMV).

b. Ventilation rate control.

c. Tidal volume control.

d. FiO_2 control.

e. Positive End-Expiratory Pressure (PEEP) control.

f. Inspiratory (I) time control.

g. Peak airway pressure gauge.

h. Alarms:

i. Peak airway pressure.

ii. Disconnect.

D. Utilization of HFNC therapy:

1. Written transfer orders from the transferring physician shall be obtained prior to transport. These orders must provide for maintaining and titrating flow (LPM), FiO2 and SpO2 goals for HFNC therapy during transport and shall include a telephone number where the transferring and/or base/modified base hospital physician can be reached during the patient transport. These written orders shall be attached to the completed PCR.

2. HFNC therapy must be administered utilizing HFNC equipment familiar to the paramedic.

3. If a HFNC equipment failure occurs and the paramedic is unable to maintain HFNC therapy, the paramedic shall discontinue use of HFNC therapy, provide appropriate oxygenation/ventilation support, and notify the transferring physician and/or base/modified base hospital as soon as possible. S-SV EMS shall also be notified of any HFNC equipment failure by the end of the next business day.

4. Paramedics shall continually observe the patient and document patient response to treatment and any changes while the HFNC equipment is operational.

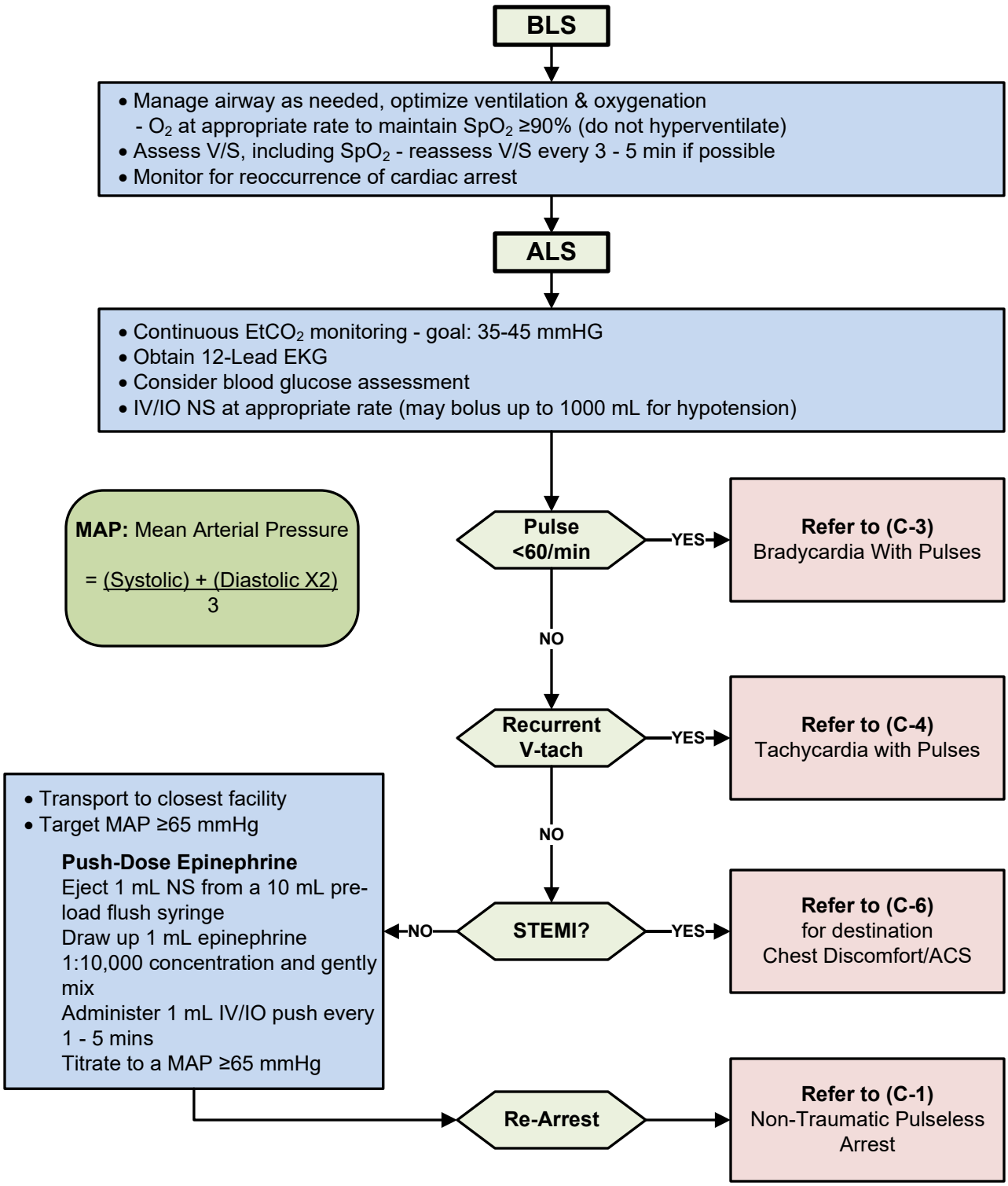
5. Initial HFNC settings and any subsequent changes shall be documented in the PCR.

6. The paramedic is responsible for airway management and must frequently reassess respiratory effort for effectiveness of HFNC therapy.

7. Non-invasive BP monitoring equipment shall be utilized. Vital signs shall be monitored and documented every 15 minutes and any time there is any change in patient condition or adjustment of the HFNC equipment settings.

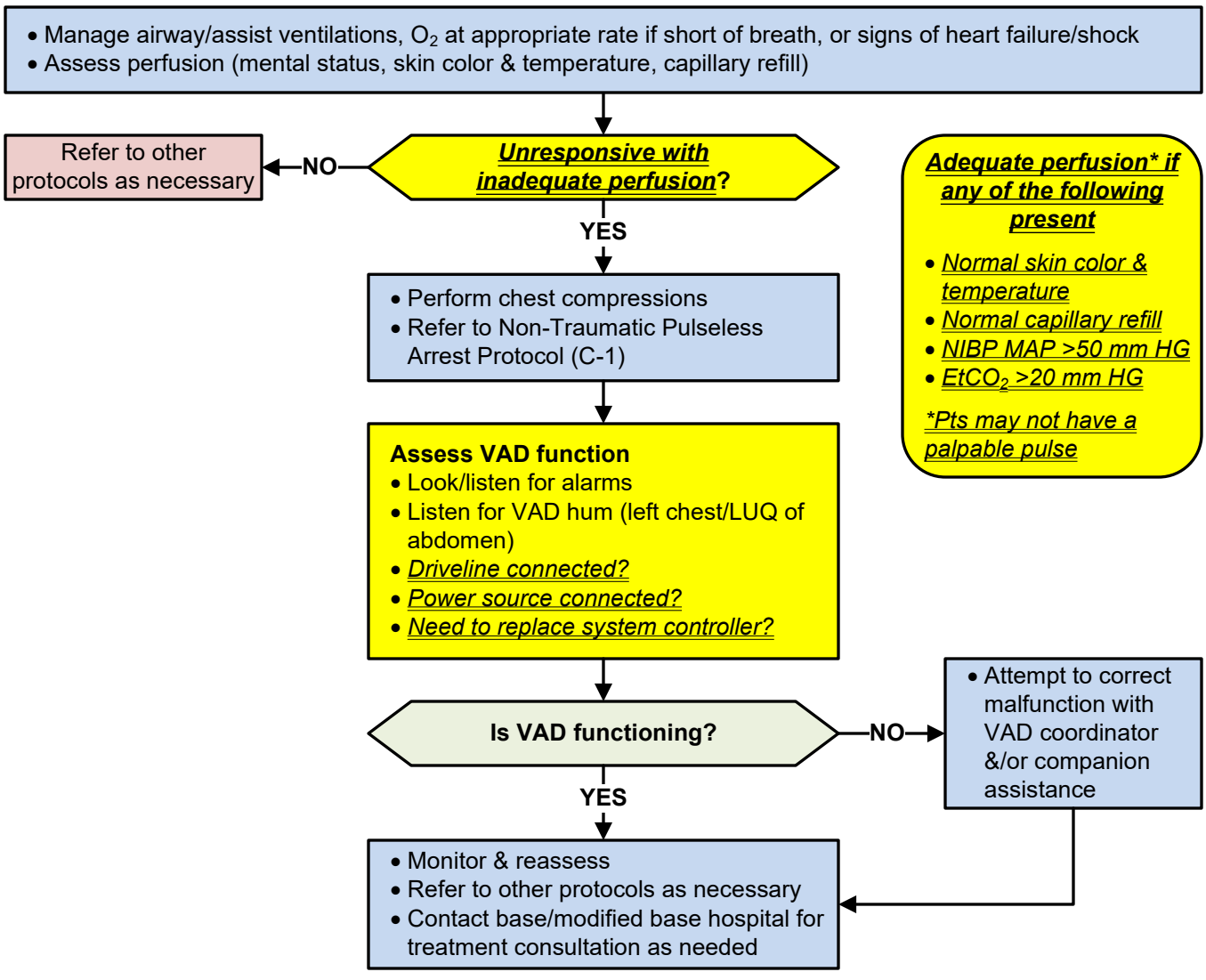
8. Continuous pulse oximetry and cardiac monitoring shall be maintained throughout transport, and values/rhythms shall be documented, ***at a minimum***, every 15 minutes and any time there is a change in patient condition.

Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-2
Return Of Spontaneous Circulation (ROSC)	
Approval: Troy M. Falck, MD – Medical Director	Effective: DRAFT
Approval: John Poland – Executive Director	Next Review: DRAFT



Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-5
Ventricular Assist Device (VAD)	
Approval: Troy M. Falck, MD – Medical Director	Effective: DRAFT
Approval: John Poland – Executive Director	Next Review: DRAFT

- VAD pts may also have an Implanted Cardioverter-Defibrillator (ICD) or a Pacemaker/ICD.
- VAD pts may not have a palpable pulse as these are continuous flow devices. Utilize a cardiac monitor to accurately establish the pt's heart rate/rhythm. Arrhythmias with signs of inadequate perfusion should be treated according to applicable S-SV EMS protocols. If defibrillation or cardioversion is indicated, follow the applicable treatment protocol (the pump is insulated so that electrical therapy should not be an issue).
- VAD pts may not have a blood pressure obtainable by standard EMS measurement methods. An accurate blood pressure is typically obtained via doppler, however, auscultation or NIBP readings may be possible.
- SpO_2 may not be measurable or accurate. $EtCO_2$ monitoring should be utilized.
- ***In any emergency involving a VAD patient, contact the VAD coordinator as soon as possible*.** VAD patients and companions are instructed to call 911 and page the coordinator, whose contact information is usually attached to or located inside the patient's VAD equipment bag.
- VAD pts should be transported to the nearest appropriate VAD center. If the pt's condition does not warrant transportation to the VAD center, the base/modified base hospital shall be consulted for pt destination. The VAD equipment bag, power source, battery & charger shall be brought with any transported VAD pt.



Sierra – Sacramento Valley EMS Agency Treatment Protocol	M-8
Pain Management	
Approval: Troy M. Falck, MD – Medical Director	Effective: 10/01/2025
Approval: John Poland – Executive Director	Next Review: 07/2028

- All pts with a report of pain shall be appropriately assessed and treatment decisions/interventions shall be adequately documented on the PCR.
- A variety of pharmacological and non-pharmacological interventions may be utilized to treat pain. Consider the pt's hemodynamic status, age, and previous medical history/medications when choosing analgesic interventions.
- Treatment goals should be directed at reducing pain to a tolerable level; pts may not experience complete pain relief.
- **Acute Pain-** Sudden, short-term pain usually caused by injury, illness, or a specific event.
- **Non-Acute Pain-** Ongoing or long-term pain that persists over time and is not immediately severe or emergency-related.

BLS

- Assess V/S including pain scale & SpO_2, every 15 mins or as indicated by pt's clinical condition
- Assess/document pain score using standard 1-10 pain scale before and after each pain management intervention and at a minimum of every 15 mins
- O_2 at appropriate rate if SpO_2 <94% or pt is short of breath
- Utilize non-pharmacological pain management techniques as appropriate, including:
  - Place in position of comfort and provide verbal reassurance to minimize anxiety
  - Apply ice packs &/or splints for pain secondary to trauma

Pain not effectively managed with non-pharmaceutical pain management techniques

Review/consider Medication Contraindications & Administration Notes below & proceed to pg. 2

Medication Contraindications & Administration Notes

ⓘ Clinical judgement shall be utilized to determine appropriate doses within allowable protocol ranges
ⓘ All slow IVP medications contained in this protocol shall be administered over 60 seconds

Acetaminophen
ⓘ Do not administer to pts with any of the following:
- Severe hepatic impairment
- Active liver disease

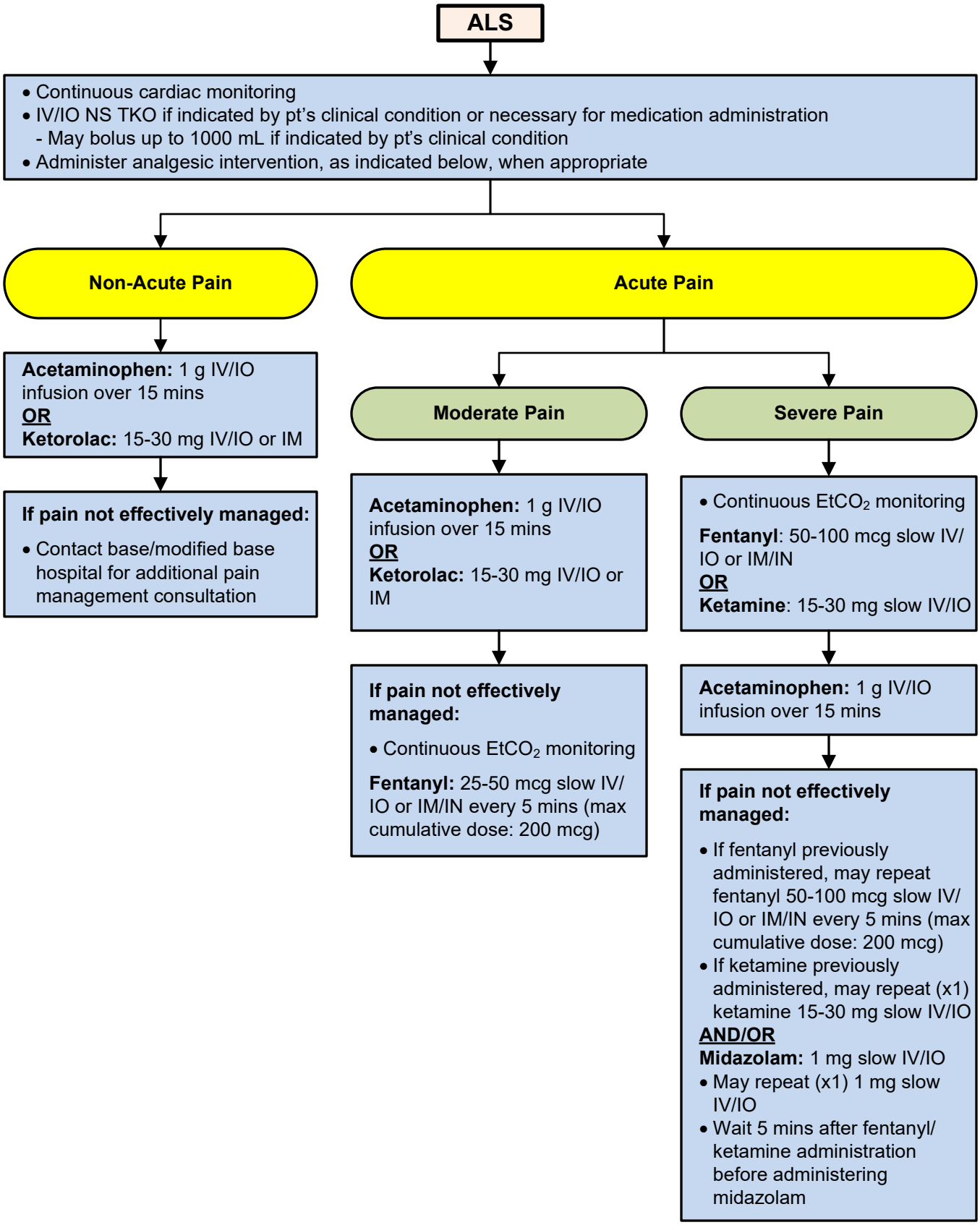
ⓘ Discontinue infusion if SBP drops to <100

Ketamine
ⓘ Do not administer to pregnant pts

Ketorolac
ⓘ Do not administer to pts with any of the following:
- ≥65 yo
- Pregnancy
- NSAID allergy
- Active bleeding
- Multi-system trauma
- ALOC or suspected moderate/severe TBI
- Current use of anticoagulants or steroids
- Hx of asthma, GI bleeding, ulcers
- Hx of renal disease/insufficiency/transplant

Fentanyl/Midazolam
ⓘ Do not administer to pts with any of the following:
- SBP <100
- SpO2 <94% or RR <12
- ALOC or suspected moderate/severe TBI

ⓘ Consider reduced fentanyl doses for pts ≥65 yo
ⓘ There is an increased risk of deeper level of sedation & airway/respiratory compromise when administering midazolam to pts receiving fentanyl


ALS
• Continuous cardiac monitoring
• IV/IO NS TKO if indicated by pt's clinical condition or necessary for medication administration
- May bolus up to 1000 mL if indicated by pt's clinical condition
• Administer analgesic intervention, as indicated below, when appropriate
Non-Acute Pain
Acute Pain
Acetaminophen: 1 g IV/IO infusion over 15 mins
OR
Ketorolac: 15-30 mg IV/IO or IM
If pain not effectively managed:
• Contact base/modified base hospital for additional pain management consultation
Moderate Pain
Severe Pain
Acetaminophen: 1 g IV/IO infusion over 15 mins
OR
Ketorolac: 15-30 mg IV/IO or IM
If pain not effectively managed:
• Continuous EtCO2 monitoring
Fentanyl: 25-50 mcg slow IV/IO or IM/IN every 5 mins (max cumulative dose: 200 mcg)
• Continuous EtCO2 monitoring
Fentanyl: 50-100 mcg slow IV/IO or IM/IN
OR
Ketamine: 15-30 mg slow IV/IO
Acetaminophen: 1 g IV/IO infusion over 15 mins
If pain not effectively managed:
• If fentanyl previously administered, may repeat fentanyl 50-100 mcg slow IV/IO or IM/IN every 5 mins (max cumulative dose: 200 mcg)
• If ketamine previously administered, may repeat (x1) ketamine 15-30 mg slow IV/IO
AND/OR
Midazolam: 1 mg slow IV/IO
• May repeat (x1) 1 mg slow IV/IO
• Wait 5 mins after fentanyl/ketamine administration before administering midazolam

Sierra – Sacramento Valley EMS Agency Treatment Protocol	N-3
Suspected Stroke	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2024
Approval: John Poland – Executive Director	Next Review: 10/2027

Suspect stroke for any of the following:

- New onset symptoms with abnormal CPSS
- New onset altered state (GCS <14) with unidentifiable etiology
- CPSS is normal, but patient/bystander report stroke symptoms within previous 24 hrs
- ***Wake-up stroke definition:** Pt awakens with stroke symptoms that were not present prior to falling asleep

Cincinnati Prehospital Stroke Scale (CPSS) *(Score 0-3)*

Component	Normal Result *(0 point ea.)*	Abnormal Result *(1 point ea.)*
Facial Droop (Ask pt to show teeth or smile)	Both sides of face move equally	One side of face does not move as well as the other side
Arm Drift (Ask pt to close eyes & hold both arms out with palms up)	Both arms move the same, or both arms do not move	One arm does not move, or one arm drifts down compared with the other
Speech (Ask pt to say "you can't teach an old dog new tricks")	Pt uses correct words with no slurring	Pt slurs words, uses the wrong words, or is unable to speak

BLS

- Assess V/S, including SpO_2
- O_2 at appropriate rate if hypoxemic (SpO_2 <94%) or short of breath
- Perform CPSS assessment
- Determine time of onset of symptoms (pt last known normal)
  - When possible, obtain and relay to the receiving hospital the name/contact information of the individual who can verify the time of onset of symptoms (pt last known normal)
- Check blood glucose (if glucometer available)

ALS

- Consider advanced airway if GCS ≤8 or need for airway protection
- Cardiac monitor, consider 12-lead EKG (do not delay transport to perform 12-lead EKG)
- Obtain blood draw if requested by stroke receiving center
- IV/IO NS TKO (may bolus up to 1000 mL)

Are both the following present?

- Onset of symptoms ≤24 hrs (including wake-up stroke*)
- ≤45 minute transport time to a stroke receiving center

NO →

- Transport to closest appropriate hospital
- Contact base/modified base hospital for destination consultation if necessary

YES →

- Transport to closest stroke receiving center

OR

- *If CPSS >1: Contact closest stroke receiving center for destination consultation due to concern for Large Vessel Occlusion (LVO)*
- Advise of "Stroke Alert" & time pt. last known normal

Sierra – Sacramento Valley EMS Agency Treatment Protocol	R-1
Airway Obstruction	
Approval: Troy M. Falck, MD – Medical Director	Effective: 12/01/2023
Approval: John Poland – Executive Director	Next Review: 09/2026

- **Signs of severe airway obstruction:**
  - Poor air exchange
  - Increased breathing difficulty
  - Silent cough
  - Cyanosis
  - Inability to speak/breathe

BLS

- Assess V/S, including SpO_2
- O_2 at appropriate rate if SpO_2 <94% or short of breath
- Suction as needed, be prepared to support ventilation with airway adjuncts

Signs of severe airway obstruction?

NO → **ALS**

YES

Foreign Body (FB)

- Repeated cycles of 5 back blows followed by 5 abdominal thrusts.
- Begin CPR if pt becomes unresponsive
- Check mouth & remove any visible FB, do not perform blind finger sweeps

ALS

If continued airway obstruction on an unresponsive pt:
- Perform direct laryngoscopy and remove any visible FB with magill forceps

Infection

- Position of comfort
- Consider humidified O_2
- Assist ventilation with BVM as necessary
- Avoid airway visualization & use of an OPA

ALS

If inadequate ventilation:
- Consider **nebulized epinephrine** (1:1000, 5 mg/5 mL) **OR racemic epinephrine** (0.5 mL vial of 2.25% inhalation solution mixed with NS to = 5 mL of total volume) via HHN, mask, or BVM
- Consider advanced airway

Anaphylaxis

Go to Allergic Reaction/ Anaphylaxis Protocol (M-1)

ALS

- Cardiac monitor
- Establish vascular access at appropriate time (may bolus up to 1000 mL NS)

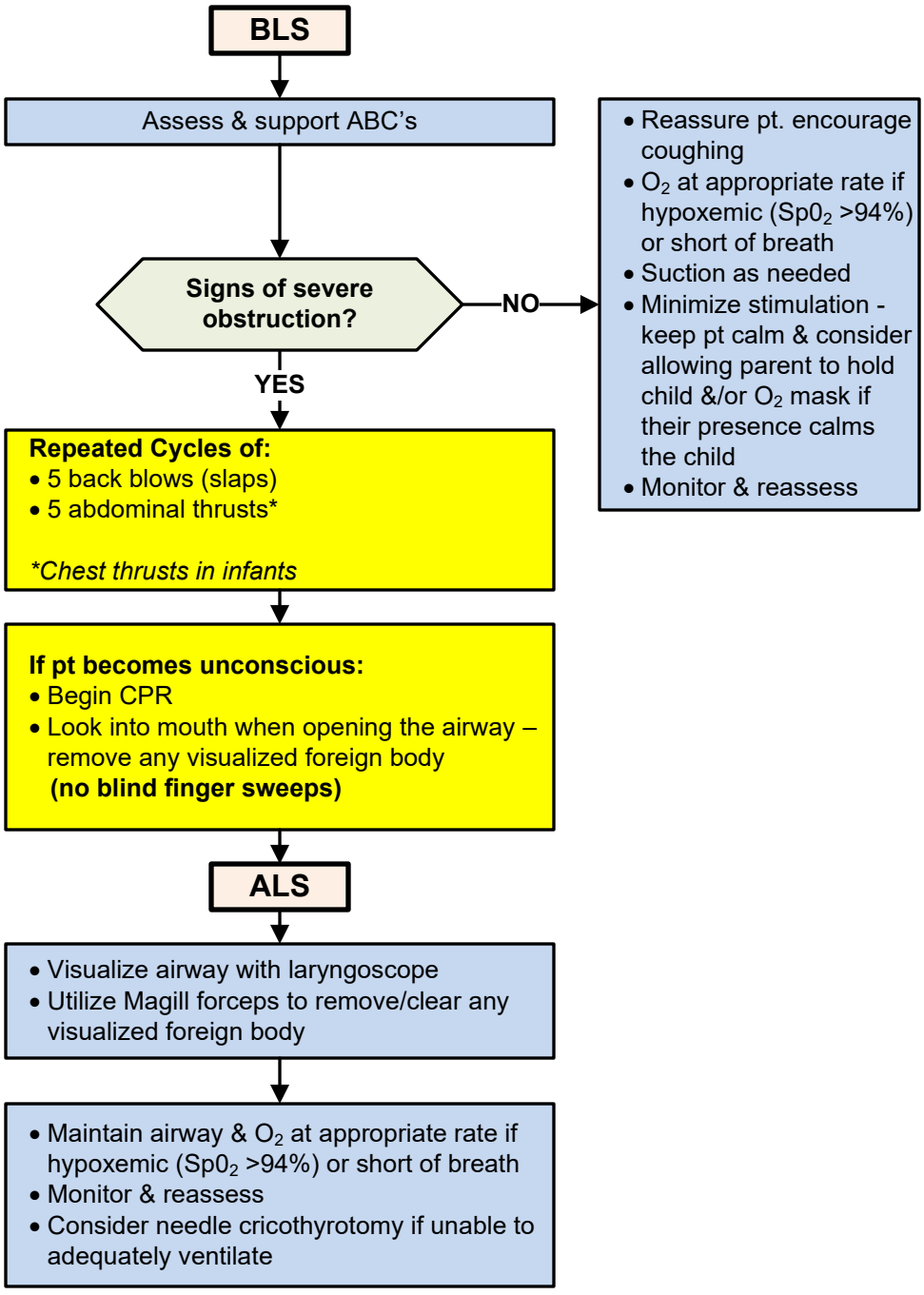
If continued inadequate ventilation, consider needle cricothyrotomy:
If soft tissue of neck begins to balloon after insertion, remove catheter

Sierra – Sacramento Valley EMS Agency Treatment Protocol	R-1P
Pediatric Foreign Body Airway Obstruction (FBAO)	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2024
Approval: John Poland – Executive Director	Next Review: 04/2027

- Signs/symptoms of FBAO: sudden onset of respiratory distress with coughing, gagging, stridor, or wheezing.
- Do not use tongue/jaw lift or perform blind finger sweep.
- Do not perform deep suctioning. Oropharyngeal suctioning should be performed while visualizing the FBAO.

Signs of severe obstruction:

- Poor air exchange - Silent cough - Increased breathing difficulty - Inability to speak or breathe - Cyanosis



Sierra – Sacramento Valley EMS Agency Treatment Protocol	T-1
General Trauma Management	
Approval: Troy M. Falck, MD – Medical Director	Effective: 04/01/2025
Approval: John Poland – Executive Director	Next Review: 01/2028

- **Limit on scene procedures for pts meeting Field Trauma Triage Criteria to:**
  - Pt assessment - Airway management - Hemorrhage control - Immobilization/splinting - SMR
- **Transport pts with known/apparent third trimester pregnancy in left-lateral position.**
- **Notify receiving hospital of a 'Trauma Alert' as soon as possible for pts meeting Field Trauma Triage Criteria.**

BLS

- Assess & support ABCs
- Assess V/S, including SpO_2
- O_2 at appropriate rate if hypoxemic (SpO_2 <94%) or short of breath
- Control hemorrhage & immobilize/splint injuries as needed
- Initiate spinal motion restriction (SMR) if indicated (see page 3)
- Maintain body temperature, keep warm

ALS

- Consider advanced airway if indicated
- Consider $EtCO_2$ monitoring if indicated (see protocol T-3 or T-3P)
- Consider application of a pelvic binder if indicated (see page 2)
- Cardiac monitor
- Establish vascular access if indicated (see page 2)
- Consider pain management if indicated (see protocol M-8 or M-8P)

Field Trauma Triage Criteria (TTC) Pt Destination (see page 4 for TTC details)

Unmanageable Airway? — YES → **Transport to Closest Hospital**

NO ↓

Meets RED TTC? — YES →

Adult (>14yo)
- If level I or II trauma center is closest, transport to that facility
- If level III or IV trauma center is closest, contact that facility (prior to transport) for destination consultation

Pediatric (≤14yo)
- Transport to pediatric trauma center if transport time ≤45 min
- Follow adult criteria if transport time to pediatric trauma center >45 min
- Contact closest trauma center for destination consultation if needed

NO ↓

Meets YELLOW TTC? — YES →

- Contact closest trauma center for destination consultation if transport time to that facility is ≤45 min
- Contact base/modified base hospital for destination consultation if transport time to a trauma center is >45 min

Vascular Access

Need or anticipated need for fluid or medication administration?

NO → Vascular access not indicated

YES ↓

IV/IO – NS or LR

Initiate vascular access on all pts meeting Field Trauma Triage Criteria

Initiate second vascular access on adult pts presenting with hypotension (SBP <90 for pts <65 years of age, or SBP <100 for pts ≥65 years of age), or if thoracic/abdominal pain is present

Fluid resuscitation guidelines:

Adult pts:

Do not aggressively administer fluids – control volume resuscitation:

- For patients in hemorrhagic shock from trauma target SBP 80-100

- For patients in hemorrhagic shock with suspected moderate/severe TBI or spinal cord injury target SBP >100

Pediatric pts:

- Administer 20 mL/kg fluid boluses for signs of hypoperfusion/shock
- Reassess hemodynamic parameters, respiratory status and lung sounds after each bolus
- Titrate fluid boluses to age appropriate SBP (max: 60 mL/kg)

Commercial Pelvic Binder

- Approved Commercial Pelvic Binders: Any commercial pelvic binder currently recommended by the Committee on Tactical Combat Casualty Care (CoTCCC).
- Utilization of a commercial pelvic binder is optional, and only approved for AEMT/paramedic personnel. ALS/LALS provider agencies must ensure that their personnel are appropriately trained on the application/use of the device, as misplacement of pelvic binders can significantly decrease the ability of the binder to reduce pelvic ring fractures.
- Physical exam findings which may indicate the presence of a pelvic ring fracture include, but are not limited to:
  - Crepitus when applying compression to the iliac crests
  - Perineal or genital swelling
  - Testicular/groin pain
  - Blood at the urethral meatus
  - Rectal, vaginal or perineal lacerations/bleeding
- When stabilizing a suspected pelvic ring fracture, care must be taken not to over-reduce the fracture. Over-reduction can be assessed by examining the position of the legs, greater trochanters and knees with the pt supine. The goal is to achieve normal anatomic position of the pelvis, so the lower legs should be symmetrical after stabilization.
- When clinically indicated and logistically feasible, the pelvic binder should be placed prior to extrication/movement.
- Pelvic binders should be placed directly to skin. Once applied, pelvic binders should not be removed.
- If possible, avoid log-rolling pts with a suspected pelvic fracture.

Mechanism of injury suggestive of a pelvic fracture?

NO → Pelvic binder not indicated

YES ↓

Does pt present with one or more of the following?

- Physical exam findings suggestive of a pelvic fracture
- Hemodynamic instability: HR >100 & SBP <90 (or SBP <100 in pts ≥65 years of age)

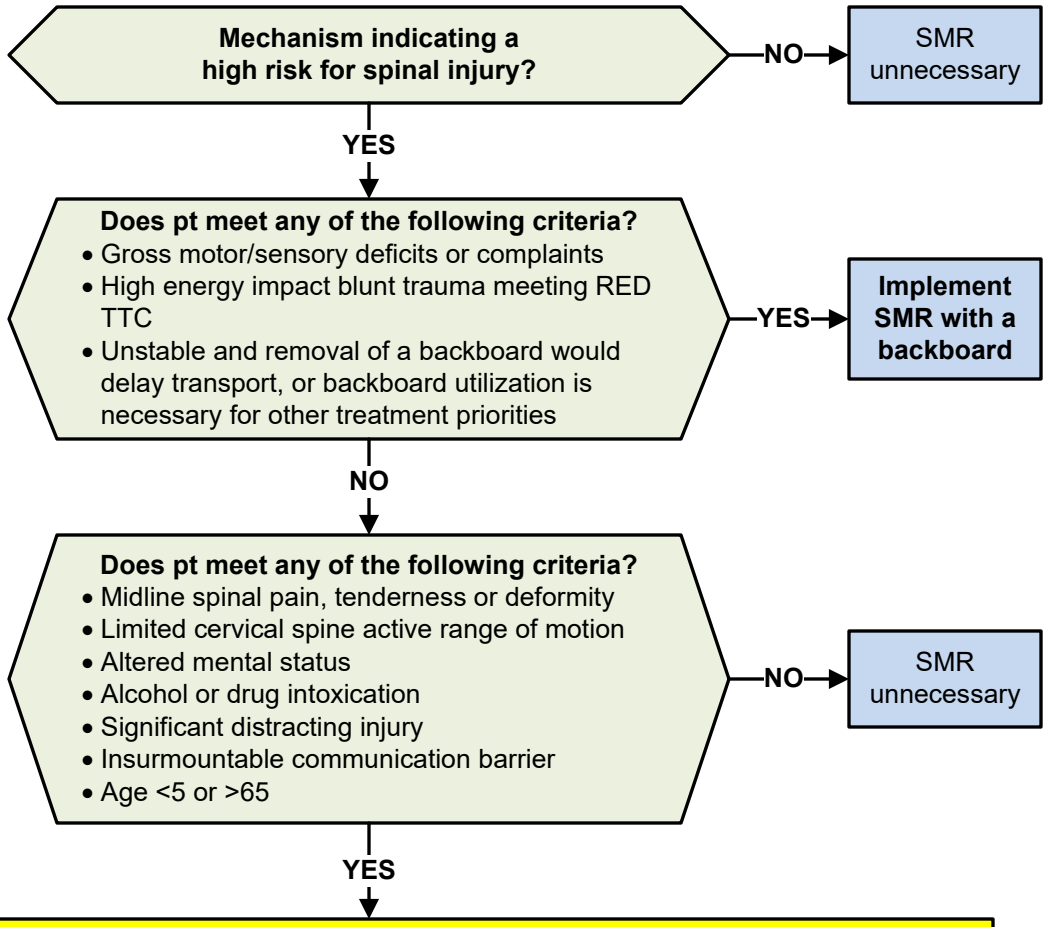
NO → Pelvic binder not indicated

YES ↓

Apply pelvic binder according to manufacturer instructions

Spinal Motion Restriction (SMR)

- A backboard shall not be utilized for pts with penetrating trauma to the head, neck or torso without evidence of spinal injury
- Helmet removal guidelines:
  - For pts who meet criteria for SMR with a backboard, football helmets should only be removed if they prevent adequate SMR or under the following circumstances:
    - If the helmet and chin strap fail to hold the head securely or prevent adequate airway control.
    - If the facemask cannot be removed.
  - Football helmets should be carefully removed to allow for appropriate SMR of pts who do not meet criteria for backboard utilization.
  - All other types of helmets (bicycle, motorcycle, etc.) should be carefully removed to allow for appropriate SMR.



Implement SMR without a backboard as follows:

- ~~Apply a cervical collar~~ Alert and cooperative patients may be allowed to self-limit motion if appropriate with or without cervical collar
- Allow ambulatory pts to sit on the stretcher and then lie flat (no 'standing take-down")
- If necessary, move pt from the position found to the ambulance stretcher utilizing a device such as a KED, scoop stretcher, backboard, or if necessary, by having the pt stand and pivot to the stretcher – do not permit the pt to struggle to their feet from a seated or supine position
- Once on the ambulance stretcher, remove any hard backboard device & instruct the pt to lie still
- The head of the stretcher may be elevated 20-30^0 in a position of comfort
- Secure cross stretcher straps and over-the-shoulder belts firmly
- Pts with nausea &/or vomiting may by placed in the lateral recumbent position, maintaining the head in a neutral position using manual stabilization, padding, pillows, &/or the pt's arm

Field Trauma Triage Criteria (TTC)

RED TTC (High Risk for Serious Injury)

Injury Patterns

- Penetrating injuries to head, neck, torso, &/or proximal extremities
- Skull deformity, suspected skull fracture
- Suspected spinal injury with new motor/sensory loss
- Chest wall instability, deformity, or suspected flail chest
- Suspected pelvic fracture
- Suspected fracture of two or more proximal long bones in a pt of any age, or one or more proximal long bone fracture in a pt ≤14 or ≥65 years of age
- Suspected open proximal long bone fracture
- Crushed, degloved, mangled, or pulseless extremity
- Amputation proximal to wrist or ankle
- Continued, uncontrolled bleeding despite EMS hemorrhage control measures

Mental Status/Vital Signs

MENTAL STATUS

- **<65 years of age:**
  - GCS ≤13
- **≥65 years of age:**
  - GCS <15 (or decreased from baseline) with evidence/suspicion of a head strike

RESPIRATORY STATUS

- **All pt ages:**
  - RR <10 or >29 breaths/min
  - Resp. distress or need for resp. support
  - Room-air SpO_2 <90%

CIRCULATORY STATUS

0-9 years of age:
- SBP <70mm Hg + (2 x age years)

10-64 years of age:
- SBP <90 mmHg **OR** HR>SBP

≥65 years of age:
- SBP <100 mmHG **OR** HR>SBP

YELLOW TTC (Moderate Risk for Serious Injury)

Mechanism of Injury

- High-Risk Auto Crash
  - Partial or complete ejection
  - Significant intrusion (including roof)
    - >12 inches occupant site; or
    - >18 inches any site; or
    - Need for extrication for entrapped pt
  - Death in passenger compartment
  - Child (0-9 years of age) unrestrained or in unsecured child safety seat
  - Vehicle telemetry data consistent with severe injury
- Rider separated from transport vehicle with significant impact (motorcycle, ATV, horse, etc.)
- Pedestrian/bicycle rider thrown, run over, or with significant impact
- Fall from height >10 feet (all ages)

EMS Judgement

EMS personnel should consider the following risk factors, and contact the closest trauma center or base/modified base hospital for destination consultation (see page 1), if transport to a trauma center is believed to be in the pt's best interest:

- Low-level falls in young children (≤5 years of age) or older adults (≥65 years of age) with significant head impact
- Anticoagulant use
- Suspicion of child abuse
- Special, high-resource healthcare needs
- Pregnancy >20 weeks
- Burns in conjunction with trauma

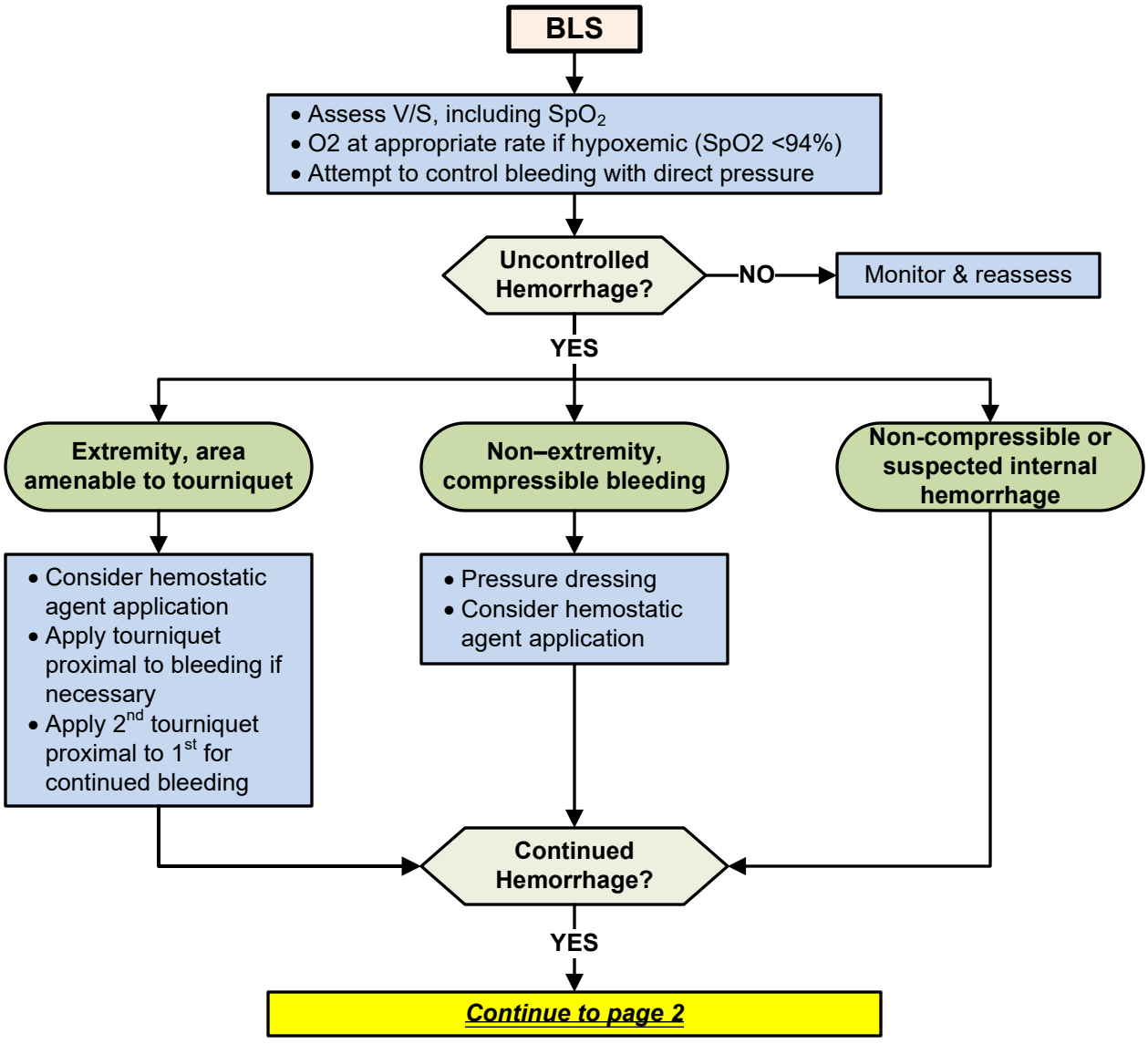
Sierra – Sacramento Valley EMS Agency Treatment Protocol	T-4
Hemorrhage	
Approval: Troy M. Falck, MD – Medical Director	Effective: 10/01/2025
Approval: John Poland – Executive Director	Next Review: 07/2028

Tourniquet Devices:

- Any windlass style device included on the current Committee on Tactical Combat Casualty Care (CoTCCC) recommended Limb Tourniquets (non-pneumatic) list may be utilized by EMS personnel.
- Tourniquets applied by lay rescuers or other responders shall be evaluated for appropriateness and may be adjusted or removed if necessary – improvised tourniquets should be removed by prehospital personnel.
- If application is indicated and appropriate, a commercial tourniquet should not be loosened or removed by prehospital personnel unless time to definitive care will be greatly delayed (>2 hrs).

Hemostatic Dressings:

- Any hemostatic agent that is incorporated into gauze (no loose granules/particles) included on the current Committee on Tactical Combat Casualty Care (CoTCCC) recommended Hemostatic Dressings list may be utilized by EMS personnel.



- *In trauma patients with suspected active hemorrhage, control life-threatening bleeding before routine airway or blood pressure–augmenting interventions.*
- *Push-dose epinephrine is not routinely indicated for hemorrhagic shock and may worsen bleeding by increasing blood pressure before hemorrhage control is achieved.*
- Routes for TXA other than IV/IO (e.g., nebulized, topical) may be considered **(with base/modified base hospital order only)** for bleeding from epistaxis, lacerations, or oral trauma.
- For post-partum hemorrhage, refer to Childbirth Protocol (OB-G1).

ALS

- *Cardiac monitor, $EtCO_2$ monitoring*
- *Establish vascular access (see protocol T-1)*
- *Do not aggressively administer fluids – control volume resuscitation:*
  - *For patients in hemorrhagic shock from trauma target SBP 80-100*
  - *For patient in hemorrhagic shock with suspected moderate/severe TBI or spinal cord injury target SBP >100*
- *If hemorrhagic shock persists, evaluate for Tranexamic Acid (TXA)*

TXA INCLUSION CRITERIA

Does pt meet the following inclusion criteria?

- Blunt or penetrating traumatic injury with signs/symptoms of hemorrhagic shock: including SBP <90 or <100 in pts ≥65 yo

OR

- Significant hemorrhage (either of the following):
  - Significant blood loss with HR >120
  - Hemorrhage not controlled by direct pressure, hemostatic agents, or commercial tourniquet application

NO → Monitor & reassess

YES

TXA EXCLUSION CRITERIA

Does pt. meet any of the following exclusion criteria?

- <15 yo
- Extremity hemorrhage controlled by tourniquet
- Time since injury >3 hrs
- Isolated traumatic brain injury
- Thromboembolic event (i.e., stroke, MI, PE) in past 24 hrs
- ~~Traumatic arrest with >5 mins of CPR without ROSC~~
- Hypotension secondary to suspected cervical cord injury with motor deficit or spinal shock

YES → Monitor & reassess

NO

BASE/MODIFIED BASE HOSPITAL ORDER ONLY

Tranexamic Acid (TXA) IV/IO

- Mix 2 gm TXA in 100mL D_5W or NS and infuse over 10 mins