San Francisco EMS Agency
Emergency Medical Services Advisory Committee
February 1, 2023

Public Comment – Medical Director Response

Document	Name	Organization	Section	Comment	Medical Director Response
Epinephrine Infusion Medication Page	Andy Zanoff	San Francisco Fire EMS	Adult Dose/Route	Should read 1-3 DROPS, not drips. Also, is there a concern re differing fluid volumes between 1:10 (10 cc) and 1:1 (1 cc) Epinephrine required to deliver 1mg? Instructions should be given for drawing out 10cc of saline from the bag BEFORE injecting 10cc of Epi 1:10,000	Agreed. We will change to Drops. Thank you for your feedback. In reviewing the public comment received, several items need additional review and clarification. For this reason, the Epinephrine Infusion Medication Page is being referred to the Medical Directors' Committee for further review. It will not be discussed at the February 1st EMSAC meeting. It will be re-released for Public Comment in advance of a future EMSAC meeting.
	Curt Geier	SFDPH/SF EMS	Pediatric Dose/Route: Bullet 3	It should read "Run the infusion at 0.3 mcg/kg/min, which is equivalent to 0.3 drops/kg/second"	See above.
	David Malmud, M.D.	AMR	Page 1, Notes	Final bullet should say "Macrodrip" (not "Microdrip"). I submitted this feedback via email on Jan 11th. Pharmacist Curt Geier replied to the LEMSA that day, saying that he concurred with this correction.	See above.

	David Malmud, M.D.	AMR	Pediatric Dosing, 3rd arrow	The buretrol drip rate should be "0.3 drops/kg/second" (not minute). I confirmed this correction with pharmacist Curt Geier. Unlike a macrodrip, a buretrol is 60 drops/mL. Therefore, 0.3 drops/kg/second = 18 drops/kg/min = 0.3 ml/kg/min = 0.3 mcg/kg/min, which is the epinephrine rate we are trying to achieve. Also, would reorder the sentence to emphasize the drip rate (rather than mL rate) since this is what the paramedics will actually be using. "Run the infusion at 0.3 drops/kg/second using the drip chamber (equivalent to 0.3 mL/kg/minute)."	See above.

Epinephrine Infusion Medication Page	Hoi Cheung	SFFD	Notes & Adult Dose/Route	NOTES SECTION: -I propose "Microdrip" be changed to "Macrodrip" to be consistent with the strikethrough changes, assuming the EMSAC prefers the paramedic to use a macrodrip for the epinephrine infusion. Example: - "Microdrip chambers have 10 drops per mL" should be changed to "Macrodrip chambers have 10 drops per mL". ADULT DOSE/ROUTE SECTION: -I propose all terms "drips" be changed to "drops", if the intended meaning of "drips" be the amount of drops for the administration of a desired volume. Drops or gtt is what is assumed when talking about the number of drops within a drip set to infuse the desired volume in mL. So, in order to be consistent with the desired language of the policy as seen in the draft's strikethroughs and unamended portions, all "drips" when referring to a volume infusion be changed to "drops". Examples: - "1-3 drips/second using the 10 drip/mL chamber" should be changed to 1-3 drops/second using the 10 drop/mL chamber". -"so 1 drip/second is equivalent to 6mL/min or 6mcg/min" to "so 1 drop/second is equivalent to 6mL/min or 6mcg/min"	See above.

Epinephrine Infusion Medication Page	James Lee	SFFD	Adult Dose/Route. Point 1.	Would the EMSA be open to a different method to the drip rate approach which, in the absence of a IV pump, is difficult to deliver accurately. Would the EMSA be open to substituting it with or adding in a Epinephrine Push dose approach? See Alameda County protocols. It is imperative that our protocols minimize the complexity of drip rate drug administration in a moving ambulance. Or require us to have the tools to accurately administer drip rates. For this protocol, having a Epi push dose in addition to the drip rate approach would provide options for field providers.	See above.
Epinephrine Infusion Medication Page	Janelle Cortright	SFFD Station 49	Section 13.1 Epinephrine drip	Having the Epinephrine drip page with the dopamine is helpful but not as obvious. More user friendly to also have it with the Epinephrine page on page 7. Redundant to have it in two places but better for providers.	See above.
	Ray Ryan	ALS/Chair	Notes	In notes, shouldn't it be "macro" instead of "micro" in bullet point 4	See above.
	Judy Klofstad	San Francisco Fire Department	All	Is it possible to post this link for public comment on the EMSA website, under announcements. Many members would like to comment but do not have access to the public comment link. I have searched but cannot find it on the website.	Agreed. Moving forward, when Public Comment is open, we will link to it directly from the top of the EMS Agency homepage at https://sf.gov/emsa . It can also always be found on the corresponding meeting page linked at https://sf.gov/emsac .

Normal Saline Medication Page	David Malmud, M.D.	AMR	Pediatric Dose	Should "AMS of Unknown Cause" be on a separate line? Think this is supposed to be a separate indication, but it looks like a continuation of the treatment for Neonatal hypovolemic shock by being on the same line.	Agreed. Formatting corrected on final document.
Policy 1010 - Advisory Committees	David Malmud, M.D.	AMR	VII. C. (Stroke and EMS-C) Committees. Quorums.	Quorums are far too demanding to make policy. For example, for stroke, having the Medical Directors and Coordinators from all 8 Stroke Centers as a quorum may make voting difficult. Similarly, requiring Medical Directors and Coordinators from all Pediatric Receiving Centers is untenable (have never seen this at an EMS-C meeting). Would suggest a lower number (e.g. Medical Directors from four Stroke centers. Medical Directors from four Pediatric Receiving Centers (including both Critical Medical Peds centers). Also would reduce to "Medical Director and QI Staff from one 911 EMS Provider."	Agreed. Updated Quorum requirements for STAR and STROKE committees to reflect the same as EMSAC. Requesting feedback from EMSAC regarding Quorum levels for EMS-C.
Policy 1010 - Advisory Committees	David Malmud, M.D.	AMR	VII. C.	Would apply similar Quorum standard I suggested for Stroke and EMS to STAR committee, as well.	See Above
	Janelle Cortright	SFFD Station 49	Protocol 11.03	Please list where and or what apparatus' have the 2 PAM/Chloride and cyanokits	Reviewed. Protocol 11.03 not currently up for public comment. This will be taken under consideration for future EMSAC discussions.
Policy 4043 - Use of Physical Restraints	Andy Zanoff	San Francisco Fire EMS	II Policy B; L; M-1-b	II B - why must an Exception Report be filed every time a patient is put in restraints? Why is the thought that these are 'rare instances'? L - 'rapidly' is repeated. Only needs to be once in that sentence M-1-b - Does SFPD know this? Has anyone	Agree. Policy updated. Agree. Policy updated.

				spoken with the Police Department? Have SFPD agreed to abide by this part of our policy? We should confirm this, BEFORE we write a policy that obligates members of a different department to perform a function	Reviewed. Policy changed from “should” to “shall” for clarity. This language is already in effect to date.
	Antenor Molloy	SFFD	De-escalation	De-escalation should be covered in glossary. Include any clinical studies, best practices. What exactly are you wanting from providers in the field. Calls where restraints are usually very complicated and requiring more documentation while understandable needs to be clearer.	Reviewed. LEMSA reviewed SFFD training for de-escalation and restraint application as part of the revision and training process for this policy.
Policy 4043 - Use of Physical Restraints	Janelle Cortright	SFFD Station 49	4043,	It would be helpful to include a chemical restraint protocol as well. Given the demographics of the city a more supportive guideline including physical restraints, chemical restraints, and Midazolam would be helpful. A guideline that supports the dynamic succession of the need to use these two restraint methods would better support providers. Procedure would be helpful when explained in a dynamic succession rather than a chronological order as that is not represent the reality of these calls.	Reviewed. Thank you. This suggestion will be brought forward in the upcoming policy revision workgroup which is being developed to better align and create workflows with LEMSA policies.

	Jeffrey Covitz	San Francisco Fire Dept.	B	I am uncomfortable with the way this policy is worded. This also applies to protocol 6.01. Naturally, de-escalation techniques should always be emphasized and utilized. However, as any experienced prehospital provider can attest, patients may initially respond to de-escalation techniques when confronted with multiple providers on scene, then "turn south" when the patient is alone in the back of the ambulance with only one provider. "Restraints shall be the last resort" is not safe practice. Providers should be allowed flexibility to place soft restraints on ANY altered patient they feel has the POTENTIAL to become violent. Perhaps "Chemical" restraint can be a last resort, but physical restraints on an altered patient is safer for providers, and safer for the patient. With proper training, providers can restrain a patient while maintaining a patient's dignity. Thank you.	Reviewed. Policy revised to remove language of “last resort.” Comments addressed in existing section D language. LEMSA reviewed SFFD’s new training module for provider and patient safety.

Policy 4043 - Use of Physical Restraints	Oscar Thadeo	San Francisco Fire Departm ent	Policy B, C	Policy 4043 Policy B.- Although the concept of de-escalation is an important focus in situations where restraints are to be considered, requiring an exception report to be written every time a patient is placed into restraints when de-escalation is not possible is unnecessary. An alternative could be to have providers reference Policy 4040 Appendix 3:Prehospital Personnel Resources for Patient Management regarding what should be document when restraining a patient. C.- "Restraints shall be a last resort. For placement of restraints, the minimum amount/type of restraint necessary using minimum amount of force." The above should be completely struck from being placed into the restraint policy. Paramedics and EMTS should be allowed to exercise sound clinical judgment and not be given policy which undermines their ability to perform a procedure when they feel it is necessary to protect their safety, crews on scene, and the patient. L. Approved Restraints 1. Soft Restraints- There is no need for the agency to dictate where restraints should be secured to on gurneys. Providing overall intent regarding access to monitor a patient's airway, breathing, and circulation with the ability to rapidly remove the restraint is clear enough for providers.	Agree. Policy updated with your suggestion about Policy 4040. Reviewed. Removed language describing “last resort.” Reviewed. Added this language as part of an SFFD pilot to use a new restraint device.

Policy 4043 - Use of Physical Restraints	Ray Ryan	ALS Field Representative / EMSAC Chair	II(B)	With the added documentation requirements to restraints, why is the redundancy of an exception report necessary? When the hospital provides implied consent treatments to patients with behavioral emergencies do you write exception reports separate from standard patient care documentation? I would consider an exception report an extension to the already required charting and complete both in tandem instead of within 24hrs. The submission would be a direct copy and paste of my narrative and I would not clear from the call until the exception report is submitted. I take exception with the word “rare” in II(B). It feels as though the language is shifting the cause for needed interventions away from the condition that is afflicting patients and onto providers. The situation described is not "rare” as any provider who regularly treats severely agitated methamphetamine users can attest. Why are we not expanding our intervention tools? Is there any progress in adding ketamine and Zyprexa?	Agree. Policy updated. Reviewed. Removed the word “rare.” Reviewed. LEMSA is reviewing option of adding ketamine (for pain management) once it becomes part of Paramedic standard scope of practice this year.
Policy 7010 - EMS at Special Events	Andy Zanoff	San Francisco Fire EMS	Appendix D; B - Standby, Non-Transport	Will paramedics who are already accredited in SF as an ALS provider, and who work for a San Francisco ALS provider (Fire, King, AMR), be required to take this 8-hour orientation and two-year renewal?	Reviewed. An accredited paramedic is already eligible to work for a second EMS provider without all of this training.

	David Malmud, M.D.	AMR	Appendix D. Section C. 3.	What is the Modified Scope of Practice that is mentioned here? It does not seem to appear elsewhere in the policy nor can be identified on a quick search of the protocol/policy app.	Agree. Updated language – this was a holdover from a draft document.
	Janelle Cortright	SFFD Station 49	4030, IV. Procedure, A-E	Please make it known at what location, on the bridge or in which lane, is it more efficient to transport to an out of county hospital. For Golden Gate Bridge response, please list the hospital that is a Level 2 Trauma Center other than SFGH. Paramedics do not have time to search on cell phones for transport times or for which hospitals are capable of which services. Please list ED phone numbers of the out of county hospitals in this policy for transport notification. When convoys are provided by SFFD of SF ambulances traveling out of county, such as to the South Bay, please list procedures for transport. Ambulances provide transport to other counties not listed in this policy.	Reviewed. LEMSA will add bridge response policy for updating and review at a future EMSAC meeting.
Protocol 2.07 - Symptomatic Bradycardia	Raymond huang	Sffd	Atropine for symptomatic bradycardia should be updated to AHA guidelines of 1mg	See above	Reviewed. This med page will be added to list for upcoming medication revisions at future EMSAC meetings.

			instead of 0.5mg to prevent possible bradycardia. Also, protocol 2.05 ROSC to include atropine for bradycardia without signs of hypo perfusion to prevent loss of pulses without excessive vasoconstriction.		
Protocol 2.18 - Opioid Withdrawal	Andy Zanoff	San Francisco Fire EMS	Appendix A	How will COWS be documented? Will it be built into the ESO? Paper checklists? Who will this information be reported to?	Reviewed. Initially, COWS will be documented in PCR narrative.

	Clement Yeh MD	DEM-DEC Medical Director / SFGH EMS Base Physician	Appendix B	Commenting as a base physician who might be called under the proposed protocol to authorize(?) prehospital buprenorphine administration: I have concerns that need clarification before I would be able to support this program. There are many operational details that have not yet been explained or agreed upon. This is an important area and I think more coordination work needs to be done before this is implemented if it is expected to be successful in helping patients. It's not there yet. (There is also a typo in "Withdrawal")	Reviewed. The QI Committee on Feb 8 is going to have a significant period of time to discuss data reporting, concerns, and metrics as a follow-up to the last meeting regarding buprenorphine. The Base Hospital is developing a training for BH physicians to familiarize them with the program and the considerations when approving. This will be rolled out in March, and the Base Hospital documentation has already been modified to allow for QI of the program. Agree. Updated policy.
Protocol 2.18 - Opioid Withdrawal	David Malmud, M.D.	AMR	Appendix B, Dark Blue Box, #3	Do we have a system for the various hospitals' "navigator" to link with and contact patient? If not, would remove this item.	Agree. New flowchart updated specifically for San Francisco by CA Bridge.
	James Lee	SFFD	Spelling error in header	Withdrawal is spelt wrong in the header on all pages.	Agree. Updated policy.
	Judy Klofstad	SFFD	Appendix B	It should be made VERY clear that if there is a medication administration of B, and patient refuses transport, it must be documented as an AMA. The phrase in the flow chart is "patient declines transport" which could be misleading	Agree. Updated flowchart.
	Ray Ryan	ALS Field Rep / Chair	ALS Treatment	Replace "Score" with "Scale" where it reads "Clinical Opiate Withdrawal Score". Otherwise, it's like saying ATM Machine.	Agree. Updated policy.

	Ray Ryan	ALS Field Rep / Chair	ALS Treatment	- Since buprenorphine is currently limited to community paramedicine should we consider making that differentiation under the ALS treatment or is this document the prelude to the expansion? - Will buprenorphine be added to 13.1?	Reviewed. All paramedics will be eligible to give buprenorphine under a recently approved local optional scope of practice. Reviewed. Will add this to future policy development.
Protocol 6.01 - Agitated/Violent Patient	Oscar Thadeo	San Francisco Fire Department	BLS Treatment	"Consider physical restraints (4-point, soft restraints with patient in supine position if possible) if patient continues to represent danger to self or others and multiple deescalation techniques are unsuccessful." There are no clear de-escalation techniques that are standardized so asking providers to perform them is an unclear expectation. This should be revisited when there is clear direction to offer providers regarding training. Furthermore, the term "de-escalation" is a term often used by law enforcement which could have carry negative cogitations if tied to prehospital providers. The Project BETA (Best practices in Evaluation and Treatment of Agitation) mentioned that " Clinicians who work with agitated patients on a daily basis have perfected skills that frequently are in line with principles found in these resources. However, a review of the literature indicates that scientific studies and medical writings on verbal de-escalation are few and lack descriptions of specific techniques and efficacy." (Richmond, Janet S et al. Verbal	Reviewed. LEMSA reviewed SFFD training for de-escalation and restraint application as part of the revision and training process for this policy.

				De-escalation of the Agitated Patient: Consensus Statement of the American Association for Emergency Psychiatry Project BETA De-escalation Workgroup. The western journal of emergency medicine vol. 13,1 (2012): 17-25. doi:10.5811/westjem.2011.9.6864)	
Protocol 6.01 - Agitated/Violent Patient	Ray Ryan	ALS / Chair	ALS Treatment	Patients actively resisting following initial max chemical sedation can still be impossible to assess with cardiac monitor equipment. Suggested change: “All attempts to continuously monitor cardiac, end tidal CO2, and pulse-oximetry shall be made for patients who have received chemical sedation or document conditions which limited continuous monitoring” or “All patients receiving a chemical restraint must have continuous cardiac, end tidal co2,	Agree. Updated policy.

				and pulse-oximetry monitoring with frequent reassessment or documentation as to why monitoring was limited”	
Protocol 7.08 - Pulse Oximetry	Andy Zanoff	San Francisco Fire EMS	Procedure; # 1	Recommend this read "...nail polish is removed IF POSSIBLE".	Agree. Updated policy.
Protocol 8.03 - Pediatric Symptomatic Bradycardia	David Malmud, M.D.	AMR	BLS Treatment	Pediatric bradycardia is most commonly caused by inadequate oxygenation/ventilation. Consider adding BVM to treatments: "Oxygen as indicated; with appropriate adjuncts and BVM, as indicated."	Agreed. Language added to BLS treatment.
Protocol 8.11 - Pediatric Shock and Hypotension	David Malmud, M.D.	AMR	ALS Treatment, 4th bullet	Indent 4th bullet ("If no IV or IO access: administer Glucagon") to make it clearer that the giving glucagon is for hypoglycemia (as noted in 3rd bullet), not just a treatment for shock.	Agree. Updated Policy