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

Public Comment – Medical Director Response

Document	Name	Organization	Section	Comment	Medical Director Response
Protocol 3.01 Bites/Stings	Janelle Cortright	SFFD		Flow chart is easy to navigate.	Thank you
	Jeremy Lacocque	SFFD	See below	delete "may help administer their epi pen" because protocol 2.02 is mentioned later in the protocol.	Agree. Will remove the phrase.
				Also, a flowchart implies that you start at the beginning and work your way down, but in this case, I would want providers to treat an allergic reaction before pain.	Agree, but I believe this is a training issue
				Also, the "reactions" aren't mentioned in the envenomations side. Why not? Do we not expect allergic reactions from it?	Agree. Will state as the first bullet point “assess patient for local and/or system reactions and treat according to the appropriate assessment, see L flow diagram”
				If antivenin is available, is there ever a scenario where it could be given prehospital instead of just bringing it to the hospital? Like maybe the zoo staff is trained?	Yes, but not in SF (due to our short transport intervals). Training should include transporting any antivenin present (e.g. at the zoo) with the patient.
				BLS treatment: Delete "may help patient administer EpiPen" and instead write "For associated allergic reactions, refer to protocol 2.02."	Agree, will make the recommended changes.
				ALS tx comments: What does it mean for a "pet" snake to be positively identified? Are providers taking a picture of it? Asking the owner what kind it is?	I think we should leave this up to the crew—a statement by the snake owner documented in the chart would be more valuable than a picture or “dead” snake (at least for most EM physicians).

				It's clear we should not place tourniquets, but if one is already on, should it be removed? You give caution about taking it off, but should we, or should we leave it on? Also, instead of phrasing it as "until you are ready" maybe "be aware patient may rapidly decompensate upon removal."	Agree. I think that we can say "if the patient is stable, remove the tourniquet and be aware that the patient may rapidly decompensate upon removal".
Procedure 7.12 Vascular Access- IO	David Malmud	(AMR)	Contraindications Item 4, 5	Contraindications: Should be "pre-existing" not "pre-exiting." 4: Suggested language from EZ-IO. "Gently press needle through the skin until the tip touches the bone. The 5 mm black mark must be visible above the skin prior to insertion. Squeeze the trigger and apply gentle steady pressure." (Rationale: If the black mark is not showing, the needle is likely not long enough to enter the marrow space.) 5: Remove "OR". (IO should be flushed and IV administration set attached whether patient is conscious or not.)	Agreed, will change. Agree. Will update the language to directly mirror that used by EZ-IO. Agree, will change.
Procedure 7.12 Vascular Access- IO	Janelle Cortright	SFFD	Procedure,1., a., ii,	"Place IO about 1 cm above the neck of humerus and at a 45 degree angle to the anterior plane and posteromedial" Thank you for changing the preferred site to either or. Humerous mispelled. change to humerus change to "...... at a 45 degree angle to the anterior humeral head aiming toward the opposite hip,". to describe correct placement.	Thank you. Agree will change spelling.

Procedure 7.12 Vascular Access- IO	Andrew Barnekoff	SFFD	Procedure, 1, B, i: Procedure, 4, a, 2:	Procedure, 1, B, i: please add a 90-degree angle for tibia IO. Procedure, 4, a, 2: please add a 90-degree angle for tibia IO.	Agree, will add this language (applies to both procedure 1 and 4)
	Jeremy Lacocque	SFFD	See below	To clarify - you'd like providers to try an IV twice before doing an IO and essentially never do IO as first line? I would advocate that IO is okay as a first line in certain scenarios - maybe someone is doing chest compressions so the arms aren't easily accessible and you're the only medic on scene. Doing a tibial IO would therefore be easier. I know there are studies saying outcomes are better with IV compared to IO, but I really think that's because it's easier to get IV access on healthier people (young person with big veins compared to dehydrated 80 year old down for hours).	Disagree. IO has more complications than IV in the field setting. I propose wording that would say "place a blood drawing tourniquet on the most accessible extremity and determine if IV access is possible. If so, attempt IV placement for up to 90 seconds, and if unsuccessful proceed to IO. If no IV access is visible or palpable with blood draw tourniquet placement, proceed directly to IO"
				Could you also simply this section by saying "critically ill or injured patients in which an IV is not easily performed." and that's it?	Alternate language listed above.
				Contraindication Might be more clear to say "Patient is not critically ill or injured" than to say routine IV access is obtainable.	Agree. Will change language.
				Procedure: The angles need to be clarified.	Agree. See above comments on angle of placement at the various sites.
				5. typo "when THE needle is felt to (delete a) "pop" or there is a lack of resistance	Agree. Will change to "the".
				7. Splint the leg/immobilize arm: Maybe I missed it, but I've never seen this mentioned in training material and I've definitely never seen this done in real life. Is the expectation to splint the leg with cardboard, as if it were fractured? I would say most of these patients	Open to specifying only the arm (vs. The leg or both) for transport; I have frequently seen unsecured arms moving around with IOs in place, endangering their continuity and backboards do not solve this problem.

				will be on a backboard for transport anyway, which I think would be sufficient. 8. add language since medics aren't usually trained on how to remove an IO; remove the needle by attaching a syringe and firmly pulling straight out Lastly, PVAD is mentioned in this document, but isn't included in the title or discussed anywhere else. I think providers would appreciate further guidance - what does PVAD stand for and when is it acceptable to use it? What are the different types? How are they accessed? (fistula vs port vs PICC, may have heparin in it, etc). Perhaps worth being it's on procedure/protocol section.	 Agree. Will add this language. Unclear on what your suggestion is here. Agree and will remove PVAD and replace with Peripheral Vascular Access Device.
	SFFD CQI and in-service training	SFFD	procedures	Please add a 90-degree angle for tibia IO. Under number 4 in the procedure level for humeral IO it says 90-degree angle. It should say 45-degree angle.	Agree—see language change above.
Protocol 8.03 Pediatric Bradycardia	David Malmud	AMR	Algorithm	Algorithm: -In the PALS Algorithm, it advises airway maneuvers and treatment only for patients with Cardiopulmonary Compromise, so would move this up to BLS section. -Then, rather than referencing BLS interventions, use PALS language: "Start CPR if HR <60/min despite oxygenation and ventilation." -Remove Bradycardia from Cardiopulmonary Compromise box. You have to have bradycardia to even be on this page/protocol. It is not in the PALS algorithm either. Would make same adjustments with written protocol page.	Agree. Will move airway maneuvers to the BLS section and follow PALS language. Agree, will remove. Agree, will mirror in the text version.

	Janelle Cortright	SFFD	Flow chart is easy to navigate	N/A	Thank you.
	Andrew Barnekoff	SFFD	Comments Section: ALS Treatment Section: ALS Treatment Section: "increased vagal tone"	Cardiopulmonary Compromise definition confusing. Hypotension and acutely altered mental status are both signs of shock comments Section: (Consider saying) Heart rate < 60 BPM and any of these signs of shock. Hypotension Shortness of Breath Acutely altered mental status. ALS Treatment Section: "Refer to Protocol 2.04 Cardiac Arrest Protocol"... Write out reversible causes instead of saying "refer to 2.04" Referring to other references can take time during a pediatric arrest. Additionally, shouldn't we be referring to PALS? ALS Treatment Section: Examples of signs of increased vagal tone	Agree, will add HR < 60 BPM and any of these signs to shock (hypotension, shortness of breath, acute AMS). Agree. Will provide a written list of the H's and T's here. Agree. Will add lightheadedness and fainting.
Protocol 8.03 Pediatric Bradycardia	Jeremy Lacocque	SFFD		BLS - Oxygen via BVM. I don't know that bradycardia in and of itself would merit a BVM vs just a non-rebreather or nasal canula. Gray box on the right - delete "observe" or change to "frequent reassessments" I would put 12 lead ECG last since it's not a therapy and less important than the other things	Agree. Will change to oxygen therapy to include high flow O2 and positive pressure ventilation. Agree. Will change to "frequent reassessments" Agree, will move to last.

				The flow of BLS into ALS is confusing. It says assess, ABCs, if cardio compromise then start CPR but then an arrow goes back to compromise and says to start CPR again. It should go ABCs, BLS airway, then if ALS, ALS airway, then compromise --> yes --> CPR. Instead of "Continue CPR" I would write "Start CPR" Why aren't pacing and epi infusions mentioned in this protocol? If the patient is awake (but altered, in shock, hypotensive, etc) I would address underlying causes, then start epi/give atropine and consider pacing. I wouldn't do CPR unless they're GCS 3, right? I think this flowchart would really help differentiate that confusing point for providers. Base contact: I would never endorse determining death in a patient who was bradycardic (as opposed to full cardiac arrest). I would delete this box.	Agree. Will make the requested flow chart changes. Agree, will change. Not sure of your suggested revision. Can add epi and pacing after airway/oxygenation/ventilation are addressed. Agree. Will delete.
Protocol 8.07 Pediatric Cardiac Arrest VT/VF	David Malmud	AMR	BLS: ALS:	BLS: -Add "Apply Automated External Defibrillator (AED). Use pediatric pads, if available" (PALS recommends use of AEDs, even with adult settings if no pediatric pads/attenuator are available.) -Not sure about HR <60, start CPR. Similar to Pediatric Bradycardia, first intervention for bradycardia with a pulse would be BVM with oxygen. CPR would be done if unresponsive to BVM. ALS: Should we include Q2 minute pulse/rhythm checks?	Agree. Will add this to BLS treatment. Agree, will change to state "if no change and HR still < 60 after airway/breathing/ventilation manoevers, start CPR". Agree. Will add this timing. Agree, will change both.

				Comments apply to both algorithm and text protocol pages.	
Protocol 8.07 Pediatric Cardiac Arrest VT/VF	Eric Silverman	King American	ALS algorithm/treatment section, Reversible causes	If lidocaine is being added as a cardiac medication, the lidocaine medication page will also need to be updated to allow use in cardiac arrest. Consider adding hyperthermia as reversible cause of arrest.	Agree. Will add lidocaine (as a backup to amiodarone if drug shortage occurs) to the medication page. Disagree on the hyperthermia cause of cardiac arrest—have we seen this in SF?
	Oscar Thadeo	SFFD	1) ALS algorithm Box with the "If amiodarone is unavailble" Lidocaine dosage 2) "For Intubated patients..." box	1) Will there be an update regarding lidocaine and its usage not only as a local anesthetic but also as an antiarrhythmic in the Section 14 under "Lidocane Xylocaine"? 2) Should this be "For patients with advanced airways..." as the iGel my also be used inline with capnography monitoring to monitor for ROSC?	Agree. See comments above. Agree. Will make the suggested change.
	Janelle Cortright	SFFD	ALS Amiodarone- If amiodarone is unavailable For Intubated patients	Lidocaine drug reference card should have antiarrhythmic listed Intubation ventilation rate-"Intubation" changed to "ALS airway" ventilation rate	Agree to both points. See comments above.
	Andrew Barnekoff	SFFD	ALS Treatment- Amiodarone ALS Treatment- "For intubated patients...." ALS Treatment- Lidocaine	ALS Treatment- Amiodarone: Language is confusing regarding "May repeat up to three doses". May need clarification. ALS Treatment- "For intubated patients....": Change Verbiage from “intubated” to “advanced airway patient,” under advanced airway. We don’t intubate all pediatrics. ALS Treatment- Lidocaine: We aren’t currently approved for Lidocaine in a cardiac arrest setting. This needs to be removed.	Not sure what the recommendation is. Amiodorone normal dosage frequency is two but may be repeated up to 3 times. Agree, see above comments. Disagree, see above comments (due to medication shortage issues)
Protocol 8.07 Pediatric Cardiac Arrest VT/VF	Jeremy Lacocque	SFFD		It's confusing that the pediatric cardiac arrest protocol asks people to refer to the adult cardiac arrest protocol (page 6 of 2.04 is written for adults, for instance) and also to	Agree. We will confine recommendations to following the pediatric cardiac arrest protocol.

				AHA guidelines. 2.04, this protocol and AHA are all slightly different, so telling provides to refer to all 3 could be confusing. Box in lower right - I believe this is meant for patients with an advanced airway, not just intubated patients. Also, isn't the frequency of breaths dependent on the age? q2-3 seconds would be too fast for a 17 year old "pediatric" patient. BLS treatment: I would remove "if HR<60, start CPR." If their heart rate is 50, then providers should refer to the bradycardia protocol. This is the cardiac arrest protocol. Also, capnography can be used for more than compression quality and ROSC, such as helping a provider decide on minute volume for a patient. Maybe just say "monitor with EtCO2." If lidocaine is a possibility, the medication sheet should be modified for lidocaine.	 Agree, see above comments. Agree, will change ventilation frequently to age-appropriate rate. Agree, this was addressed in another comment above. Agree, will make the suggested change. Agree, see above comments.
	SFFD CQI and in-service training	SFFD	ALS treatment	•Amiodarone- repeat 3 doses for pediatrics? Confusing language. •Change Verbiage from "intubated" to "advanced airway patient," under advanced airway. We don't intubate all pediatrics. •We aren't currently approved for Lidocaine in a cardiac arrest setting. This needs to be removed.	Agree, see above comment. Agree, see above comment. Disagree, we are preparing to have lidocaine available in case of amiodorone medication shortages.

Protocol 8.07 Pediatric Cardiac Arrest VT/VF	Lauren Friend	UCSF		How is EMS determining kg of pediatric patient to determine correct shock J and medications?	Utilizing the length-based measurement tape.
Protocol 8.08 Pediatric Poisoning and Overdose	Janelle Cortright	SFFD	ALS, Treatment options based on Type of Subsance	Subsance mispelled-Substance Activated Charcoal-listed under certain substances not unknown substances given contraindications hydrocarbons, gasoline, and caustics	Agree, will change. Agree. We need to list contraindications to activate charcoal.
	Andrew Barnekoff	SFFD	Treatment Options Based on Type of of Substance, UNKNOWN SUBSTANCE	Treatment Options Based on Type of of Substance, UNKNOWN SUBSTANCE: Activated Charcoal is recommended for “unknown substance” however section 14.I. “Medication List” does not list unknown substance as an indication for administration.	Agree, will add with the contraindications listed above.
	Jeremy Lacocque	SFFD		BLS - Why are SMR, bandaging, fractures mentioned in the poisoning protocol? It's something we should always think of in BLS care, but that isn't mentioned in other BLS care sections for other protocols. Maybe connect the glucose box with beta blocker overdose? I don't know that it needs to be the FIRST thing for ALS care. It isn't common unless we're talking about insulin or beta blockers. Also, neonates can normally have BGL of <60 and they often unnecessarily get glucose. I believe the normal low for them is 40mg/dL. The medication sheet for charcoal says it's only for beta blockers and calcium ch blockers, but here the protocol says it's for "unknown substances" too. For the caution box to lower left - I would	Agree. Will remove. Agree. Will connect the box and add a proviso for neonate BGL treatment trigger is < 40 mg/dL. Agree, will change per comments above. Agree, will change wording as suggested.

				just say "never induce vomiting." I don't think that's ever recommended anymore for any substance. For opioid overdose, I don't see an intranasal option for narcan? I don't know that "extrapyramidal reaction syndrome" is the typical term. Perhaps "Extrapyramidal effects" instead. For organophosphates I don't see a mention in this protocol or on the med page for atropine the indication for repeating a dose. Perhaps on the med page you could include "repeat doses until bronchorrhea resolves." For BB and Calcium - just curious - why the base contact? I'm not sure it's necessary, especially since it's not for the other meds. Maybe also add a caution that BB overdoses can become hypoglycemic. Maybe also add a section that if medics get direction from poison control that's different than our protocol, they can call base to do it (or just do it without base?) For instance, giving charcoal to a Seroquel overdose (which is in scope of practice but not in the protocol). For glucagon, why do we give 1mg instead of the typical loading dose of 5mg?	 Agree, will add. Agree, will change. Agree, will change on med page. I think this is listed due to the high lethality of the agent and the complications of Ca extravisation risk. I don't think this will cause an increased BH MD burden due to low frequency. Agree. Will add language that if PCC requests off-protocol treatments, providers should contact BH MD for approval. Agree—will request review by Pharmacy Advisor and potentially change dose to 5 mg.
Protocol 8.08 Pediatric Poisoning and Overdose	David Malmud	AMR	Algorithm Warning Box Activated Charcoal	Algorithm Warning Box -Can be simplified to "Never Induce Vomiting." We don't induce vomiting for any substances anymore. Activated Charcoal:	Agree, see above comments. Agree, will change (see above comments).

			Tricyclic Antidepressants Naloxone	-Does Poison Control recommend this for all unknown substances currently? Or should this medication just be for after calling Poison Control (my recommendation)? Tricyclic Antidepressants Algorithm box needs the indication: "If hypotensive, seizing and / or wide QRS > 0.10 sec" Would not give Naloxone to any unknown ingestion. Should have signs of opiate overdose (depressed respirations, altered mental status, etc.).	 Agree, will change language. Partially disagree. Will add that patients with unknown ingestion who are having depressed respirations of AMS should have an emperic administration of Naloxone.
Protocol 8.08 Pediatric Poisoning and Overdose	Eric Silverman	King American	Treatment - activated charcoal Treatment - organophosphates Overall algorithm missing Hydroxocobalamin	Treatment - activated charcoal: consider adding recommendation not to administer charcoal if patient is vomiting (exists on Charcoal medication page), and to administer zofran prior to/with activated charcoal to prevent vomiting and aspiration. Consider additional recommendation to transport patient in sitting position (not supine) after charcoal administration when possible. Treatment - organophosphates: consider adding Pralidoxime to algorithm since 1-PAM medication page still exists) Overall - missing Hydroxocobalamin as antidote for cyanide exposure (structure fires)	Agree. Will add administration of Zofran and be prepared for vomiting and see other changes accepted in comments above. Agree. Should we add here or refer to special circumstances protocol? Agree. See comment above.
Protocol 8.09 Pediatric Respiratory Distress	David Malmud	AMR	Algorithm (ALS)	Algorithm (ALS): All treatments are focused on bronchospasm. For children <2 (and certainly <1) even wheezing is typically bronchiolitis, for with albuterol is not helpful. Would limit albuterol (and possibly epinephrine to) >1 year with wheezing.	Agree. Will change with the proviso that the assessment does not include possible allergic reaction.

	Eric Silverman	King American	Algorithm	Consider adding albuterol as adjunct to Severe Distress/Life Threatening treatment in addition to epinephrine IM (they should be given together, or albuterol as soon as possible after epi).	Agree. Will change to epi, then albuterol for Severe Distaress/LT treatment.
Protocol 8.09 Pediatric Respiratory Distress	Janelle Cortright	SFFD	ALS Severe Distress of Life Threatening TX	Epinephrine dose needs to be updated to most recent update	Agree, will update.
	Andrew Barnekoff	SFFD	ALS Treatment, Epinephrine	Epinephrine is no longer listed as weight base drug dose calculations in our protocols as of 10/1/2023. This should be adjusted to <30kg= 0.15mg/IM OR >30KG= 0.3mg/IM	Agree, will adjust as described.
	Jeremy Lacocque	SFFD		Under albuterol, it prioritizes MDI over nebulizer. Given our concern for AGP's is lower now, I would say neb should be first line. There is evidence to suggest an MDI is just as effective as a neb, but it requires proper training and a spacer. It's easier to use a neb and it's what EMS uses 99.9999% of the time. I would add "if secondary to anaphylaxis, please see allergic reaction protocol." Also, I don't see CPAP mentioned on here, even though it's approved for 8 years and up. I would add "monitor with pulse oximeter and end tidal CO2." Maybe also include a comment "consider checking blood sugar to rule out metabolic causes of tachypnea, such as DKA." I can imagine a lethargic, sick looking kid to be confused for resp distress when it's actually DKA.	Disagree. Will clarify language to state MDI preferred over nebulizer when appropriate. Less risk of crew exposure to respiratory pathogens with MDI's. Agree. Will change. Agree, we can add "consider CPAP for patients 8 years of age and older" Agree, will add Agree, will add (but this is also a training issue)

	SFFD CQI and in-service training	SFFD	ALS treatment	•Epinephrine is no longer listed as weight base drug dose calculations in our protocols as of 10/1/2023. This should be adjusted to <30kg= 0.15mg/IM OR >30KG= 0.3mg/IM	Agree, see comments above
Protocol 8.10 Pediatric Seizure	David Malmud	AMR	Glucagon Diastat Midazolam IV	Glucagon: -Route can be just IM (not IV/IM) since it is only being used here if no IV/IO access. Diastat: -Why is this listed as preferred? Brief check of literature shows IM midazolam to be similarly efficacious to rectal diazepam. Paramedics are much more familiar with IM administration and are less likely to have errors (or leakage or rectal medication). -Would put midazolam column to left of Diastat and remove "preferred." Midazolam IV: -Would precede this IV section (both in algorithm and text) with: "If IV already in place when seizure occurs:" (Don't want to delay medication while attempting an IV on a child. As noted from Rampart trial, first line IM led to faster seizure cessation than IV in patients without an IV in place already.)	Agree, will change Agree, will change languate to reflect diastat “preferred in patients who are on the medication and it is readily available to the ALS provider”. Agree, will change.
	Eric Silverman	King American	Midazolam Treatment	Midazolam max dose is listed for IM route but not IN route, recommend adding max dose to all routes	Agree, will add.
	Janelle Cortright	SFFD	ALS Status epilepticus, Diastat	Need guidance on Diastat dosage- prescriptions are not always clearly defined or in English.	Agree, will add “medication can be given in patients who are on the medication it is available to the ALS provider, and the dosage is decipherable on the container”

	Andrew Barnekoff	SFFD	Diastat rectal gel	Diastat rectal gel: “May assist caregiver in giving Diastat rectal gel by inserting a syringe tip (no needle) into rectum. Hold or tape buttocks for 5 minutes to prevent spillage of Diastat from rectum. Follow prescription dosing directions.” ------ We recommend changing this to the previous verbiage of “May assist caregiver in administering normally prescribed at home medication.”	Agree, will change to include your language and the items above.
Protocol 8.10 Pediatric Seizure	Jeremy Lacocque	SFFD		BLS - remove "cooling measures." Cooling a fever is no longer standard treatment for febrile seizures. Again, neonates can have a BGL of 40 and be normal. For status, I would include that is in their scope of practice first: midazolam. Then, in the comments section, you can write "may assist caregiver in giving--- etc." https://pubmed.ncbi.nlm.nih.gov/25817929/ My understanding is that IN versed is about the same as diastat rectal gel in terms of efficacy. If versed is more familiar and not as difficult to give (doesn't involve holding/taping the buttocks when the patient is actively seizing), I vote versed is the #1 recommendation. However, if the crew doesn't have their versed with them, or they're busy drawing it up, sure, the diastat can be done in the meantime. I think we can remove "status epilepticus with hypotension" as a criterion for base contact. Seizures should always be treated and a BP is not likely to be accurate during a seizure anyway.	Agree. Will remove. Agree, see comments above. Disagree. We had a long period of negotiations with parents, pediatric neurologists, advocates and schools and patients that are on diastat should have that medication administered initially if it is available. If not, procede with midazolam. Disagree. See comments above. Agree, will remove.

Protocol 8.10 Pediatric Seizure	SFFD CQI and in-service training	SFFD	ALS treatment	•"May assist caregiver in giving Diastat rectal gel by inserting a syringe tip (no needle) into rectum. Hold or tape buttocks for 5 minutes to prevent spillage of Diastat from rectum. Follow prescription dosing directions." ------ We recommend changing this to the previous verbiage of "May assist caregiver in administering normally prescribed at home medication." •Add passive to say: Passive cooling measures as indicated.	Agree with changing this language per comments above. We will be removing cooling as a therapy for this condition (see notes above)
Protocol 9.01 Pediatric Trauma	David Malmud	AMR	Pain control Abuse Reporting	Pain Control: -Remove morphine. No longer in use and unnecessarily complicates protocol. -Add warning for ibuprofen: "Do not use if ongoing external bleeding or suspect internal bleeding." (Would not want antiplatelet effects to worsen serious bleeding.) Abuse Reporting: In addition to notifying ED staff, include mandatory report to SF Child Protective Services and possibly phone number (800-856-5553) and link to form (https://oag.ca.gov/sites/all/files/agweb/pdfs/childabuse/ss_8572.pdf).	Agree, will replace with medication per pain control protocol. I think this is sufficiently mentioned in the medication page. My concern is adding potential contraindications of medications directly to protocols, but if we do are there other ones that need to be changed to reflect this? Not sure about this—if reporting is done to receiving hospital personnel and documented in the ePCR, I believe this covers mandatory reporting requirement. Will refer to City Attorney for their advise.
Protocol 9.01 Pediatric Trauma	Eric Silverman	King American	Algorithm	Clarify if morphine or all opiates are contraindicated in suspected head injury. Recommend allowing opiates/pain control in head injury if pt is at baseline mental status and normotensive (perhaps at lower dose)	Agree, will remove head injury as a contra-indication to opiate management of severe pain.
Protocol 9.01 Pediatric Trauma	Janelle Cortright	SFFD	Pain Control	Add contraindication of head injury to Fentanyl as well.	Disagree. Will be removing opiate prohibition for severe pain in head injury patients.

Protocol 9.01 Pediatric Trauma	Andrew Barnekoff	SFFD	ALS Treatment, Pain	ALS Treatment, Pain: In the morphine section, the contraindication for head injury is included and therefore needs to be added to Fentanyl. Consider adding “hypovolemic shock” as an additional contraindication.	Disagree—see above comments.
Protocol 9.01 Pediatric Trauma	Jeremy Lacocque	SFFD		BLS - instead of "head of spine board" write "head of spine board or gurney" since not all kids will be on a board. Also, I believe the recommendation for increased ICP is 30 degrees. https://www.ahajournals.org/doi/10.1161/SVIN.122.000522#:~:text=Several%20authors%20have%20documented%20the,cerebral%20blood%20flow%20(CBF). spell out "nausea/vomiting". Maybe add "keep patient warm" I'm not sure repeated NS boluses are recommended in trauma given the potential to potentiate coagulopathy/hypothermia. The adult protocol just says "administer bolus" and kind of implies to not give more than one. Head injury - morphine should be removed since we don't use it. Also, I think we recently discussed opioids as safe for most head injuries, and I think we under treat a lot of pain because of this contraindication. Can we change it to a threshold? Pain medication contraindicated if GCS <13 or something? I can't member the last time 50-100mcg of fentanyl made a patient altered. Ondansetron - no PO option?	Agree. Will change language to attempt heat raise of 30 degrees from horizontal when feasible. Agree, will add. Any suggestion on revised language welcome. Perhaps “IV bolus, may repeat to achieve evidence of improved perfusion”? Agree, see comments above. Disagree. We want to keep trauma/burn patients NPO until ED evaluation.

				Ibuprofen - do we want to allow ibuprofen in trauma victims given the concern of bleeding risk (although somewhat debatable)? What about ketorolac? Maybe just for extremity trauma? Get rid of the morphine box. Even if we would use it during a shortage, we can mention it on the medication page, but it adds too much clutter here.	Will refer to the trauma service for their specific comment on this. I don't want to remove non-opiate alternatives across the board to all trauma patients. Agree, see comments above.
Protocol 9.01 Pediatric Trauma	SFFD CQI and in-service training	SFFD	ALS treatment	In the morphine section, the contraindication for head injury is included and therefore needs to be added to Fentanyl. Consider adding "hypovolemic shock" as an additional contraindication.	Agree on the need for changing this wording. See comments above.
Protocol 9.02 Pediatric Burns	David Malmud	AMR	Destination Morphine	Destination: -Need to add indications for which burns go to St. Francis. -Add "Burns with associated traumatic injuries should go to Zuckerberg San Francisco General Hospital." Morphine: -Delete (Out of date and makes protocol page harder to read.)	Agree, we should change to "follow current destination policy" and cross-link it here. Agree, see comments above.
	Janelle Cortright	SFFD	ALS Advanced airway as indicated. Patients with the following Criteria.......	"C" in Criteria is not in bold. "Patients with the following Criteria shall be transported to St. Francis Hospital Burn Center of Zuckerberg San Francisco General" St. Francis is listed as the primary hospital for Major burns If Trauma is involved the SFGH is primary. Possibly omit this sentence due to misleading direction for destination	Agree, will bold C. Agree, will change reference to destination policy listed above. Agree, see above comments Will modify per above comments

Protocol 9.02 Pediatric Burns	Andrew Barnekoff	SFFD	ALS Treatment	ALS Treatment: Patients with the following criteria shall be transported to St. Francis Hospital Burn Center or Zuckerberg San Francisco General. States this but then does not state burn center criteria or SFGH criteria for burns and trauma.	Agree, see above comments Agree, see above comments
Protocol 9.02 Pediatric Burns	Jeremy Lacocque	SFFD		Electrical burns - I don't think we need the all caps. We don't usually do that in protocols and it feels like yelling. The C in "criteria" doesn't appear to be bolded. What are the criteria that are following? I don't see any. Also, Saint Francis should have the "St" spelled out for some reason. They're picky about that. This flow chart makes it seem like pain and n/v are mutually exclusive since the arrows are pointing opposite ways.	Agree, will change to lower case. Agree see above comments on these 2 issues. Agree, will spell out. Agree, will clarify.
Medication List 14.1 Lorazapam	Eric Silverman	King American	Pediatric dosing	Recommend adding maximum dosing for pediatric sedation/agitation Recommend adding pharmacokinetic info to "Notes" section about time to clinical effect when given IM (20-30 minutes) in order to prevent medication stacking	Agree, will add to medication page Agree, will add that 20" minimum time between dosing.