San Francisco EMS Agency
Emergency Medical Services Advisory Committee
April 24, 2024

Public Comment – Medical Director Response

Document	Name	Organization	Section	Comment	Medical Director Response
Policy 7010- EMS at Special Events	N/A			No Comments	
Protocol 5.01 Vaginal Bleeding (Formally OB/GYN)	Jeremy Lacocque	SFFD		I agree it's important to have a high index of suspicion for ruptured ectopic, but that doesn't necessarily have implications for prehospital care. If the patient is in shock, they should get fluids, 2 IVs and rapid transport regardless of etiology. In terms of trauma, I don't know that an EMS provider needs to do a sensitive exam in the ambulance if it doesn't change destination or treatment. Doing a sensitive exam can be uncomfortable for the patient and is likely going to be repeated at the hospital. It should also be done with a chaperone/witness, which is not always available in an ambulance.	Agree-Removing ectopic from flowchart Agree-Removing vaginal exam
Protocol 5.01 Vaginal Bleeding (Formally OB/GYN)	Lauren Friend	EMS Fellow	Comments Section	Move Comments "•If reported trauma to the vaginal area, evaluation for external trauma should be offered to patient, apply direct pressure if appropriate. • DO NOT pack the vagina with any material to stop bleeding. • Place pad of large dressing over vaginal opening." To BLS section of flowchart	Agree-Moving comments into BLS treatment and adding bullet points to BLS comment section

Protocol 5.01 Vaginal Bleeding (Formally OB/GYN)	Judy Klofstad	SFFD		BLS Treatment - "evaluation for external trauma should be offered" This is a highly sensitive, possibly emotional instance where we should not be evaluating them in the back of an ambulance. The evaluation at the hospital will be most private and unless there are extenuating circumstances, the evaluation should take place there.	Agree-removing vaginal exam
Protocol 5.01 Vaginal Bleeding (Formally OB/GYN)	Emily Anderson	SFFD	(1) flowchart (2) written	(1) box stating "Inquire if pt has know pregnancy..." there are more questions to be asked here: abdominal pain present? back pain present? hx of fibroids/ovarian cysts/reproductive cancers/prolapsed uterus? recent abortion (medical or spontaneous)? recent vaginal deliver, and if so with complications? --- consider pain medication. blood includes clots? descriptions? approx amount of blood lost over how long? presence of fever? (2) remove "...evaluation for external trauma..." with "...visualize area..." Direct pressure should be offered, but if patient prefers and is able, let them apply direct pressure themselves.	Reviewed-education/training Agree-removing exam
Protocol 5.02-Trauma in the Obstetric Patient-NEW	David Malmud, M.D.	AMR	Title	Renumber 5.02 to 4.xx and group under the section 4 Trauma protocols in Acidremap.	Agree
Protocol 5.02-Trauma in the Obstetric Patient-NEW	Jeremy Lacocque	SFFD		Instead of trauma triage, I would write "meets trauma triage criteria?" I agree with titrating oxygen to 94-98, but I would say that's true for pretty much every protocol and isn't unique to this one. I would say this is standard EMS education and doesn't need to be included (or maybe it can go in the airway procedure section).	Agree with "meets trauma triage criteria"- Agree-removing titration and adding PRN

				"assess for signs of shock" has an extra comma after it Fentanyl is pregnancy category C, so I would be a little hesitant to use it without shared decision making with the patient and a warning to the EMS provider about risks/benefits. Again, I might deemphasize the external vaginal exam unless there is uncontrolled bleeding or significant trauma (straddle injury causing 10/10 pain) etc. Maybe instead of "normal triage pathway" I would say "Any receiving hospital" or "may follow same destination policy as a non-pregnant patient."	Agree--Correcting error Reviewed Agree-removing exam Agree-updating language-Follow destination policy
Protocol 5.02-Trauma in the Obstetric Patient-NEW	Lauren Friend	EMS Fellow	Flowchart	Additional arrow is needed to show that patients >20 gwa should get pain control if needed to align with text in protocol	Agree-correcting with arrow
Protocol 5.02-Trauma in the Obstetric Patient-NEW	Judy Klofstad	SFFD	Pain control under BLS Treatment	Under BLS Treatment, references Fentanyl and Ketorolac - Should be kept under ALS Treatment Also, be consistent with phrasing, "Ketorolac, Ibuprofen and Ketamine are contraindicated in pregnancy/labor"	Agree-Updating phrasing and contraindications language.
Protocol 5.02-Trauma in the Obstetric Patient-NEW	Jenni Wiebers	SFFD	comments: Pelvic binder devices.	No agency working within San Francisco carries pelvic binding devices. "If concern for vaginal bleeding, external vaginal evaluation should be performed." This language should mirror 5.01 with "should be offered "	Reviewed and understood-Updating language “pelvic binding/stabilization” to avoid language around commercial pelvic device

Protocol 5.02- Trauma in the Obstetric Patient-NEW	Judy Klofstad	SFFD	BLS Treatment - "Tight oxygen control" BLS Treatment - Fentanyl BLS Treatment - Ketorolac and other meds Pelvic binder	BLS Treatment - "Tight oxygen control" (REMOVE) Maintain O2 between 94%-98% should suffice. BLS Treatment - Fentanyl concerned about the risk to the fetus, we have no fetal monitoring in the field and would be hesitant to administer without ability to monitor, explaining the risks to the mother may not be adequate in time of trauma or pain (Should be moved to ALS treatment if kept) BLS Treatment - Ketorolac and other meds, move to ALS treatment section Pelvic binder - remove, we do not have in field	Agree- Removing language Agree-Removing fentanyl from "BLS section" and moved to ALS Agree See above comments use "pelvic bindING"/stabilization instead of "pelvic binder"
Protocol 5.02- Trauma in the Obstetric Patient-NEW	Emily Anderson	SFFD	(1) flowchart (2) written	(1) There is no greater than or equal to 20 weeks, or less than or equal to 20 weeks for gestational age (20 weeks itself is not included). If SBP < 90, what if pt has pain? should be addressed in this protocol. Pelvic binders? EMS providers use blankets. no one in SF is using pelvic binders. if provider can improvise a pelvic binder with a blanket, this should be explicitly stated. remove language "external vaginal evaluation." again, EMS providers don't do these. last bullet in comments box: worthy comment but this is not an actionable item. nice to consider but after you consider it, then what??? no reason for this bullet with the yield sign with "!" has action the EMS provider can take. (2) again, remove "external vaginal evaluation." we can visualize and document and report what we observe. this language, "external vaginal	Agree-Update equal sign See comments above Agree-Removing exam Agree-Remove bullet but keep reporting box Agree-Removing exam

				evaluation," is rife with interpretation. medics are not trained, either in medic school or during in-service trainings, to do external vaginal evaluations.	
Protocol 5.03-Normal Delivery and Post Delivery Care-NEW	David Malmud, M.D.	AMR	Comments on Page 2	Suction only if airway is obstructed. (Change "only of airway" to "only if airway". On page 1, consider adding a box for routine care if no shock, CPR, or postpartum hemorrhage.	Agree-Wording change Agree
Protocol 5.03-Normal Delivery and Post Delivery Care-NEW	Jeremy Lacocque	SFFD		Just to encourage parallel language, this policy is the only one that says "if hypoxic, oxygen" instead of just saying "oxygen PRN" To avoid abbreviations, OB kit --> obstetrics kit I don't think there should be an arrow from crowning, no to afterbirth. If there's no crowning, then no need to assess newborn. I know it's not up for comment, but this protocol is interdependent with 8.05, which says dextrose should be given if BGL is <60. My understanding is that BGL can be as long as 40 or 45 and still be "normal" for a newborn. I would vote to change that so neonates aren't getting unnecessary IV's and volume from D10. 8.05 also says to give narcan in certain cases, but the narcan med page says not to give it to neonates. I also don't see mention about withholding CPR/resus efforts if fetus is not a viable age (<20-22wga) Maybe mention drying the baby with a cloth to stimulate it, clamping the cord in 2 places? I know it says delayed clamping is good, but how delayed? Like, as long as possible? 5 minutes?	Agree-Change to "oxygen PRN" Agree-change to "obstetric kit" Agree Reviewed-Agree to update when 8.05 is reviewed Agree-added into flowchart

				For cardiac arrest, are we talking about neonatal or maternal? We're talking about the baby here, so I would point to neonatal cardiac arrest. Then, after that, you could link to 2.04 for mom. Page 2: I'm confused where this is starting off from. What arrow points to the top of page 2? If the child is born, then we can use fentanyl, right? What about ketamine now that baby is out? I would probably educate mom about breastfeeding risk after these medications, though.	
Protocol 5.03- Normal Delivery and Post Delivery Care-NEW	Lauren Friend	EMS Fellow	Flowchart	1. Add “stabilize fetal head and mothers perineum during delivery of head. Do NOT pull on baby’s head” after prepare area and OB kit for delivery in flow chart. 2. Afterbirth Care should branch into “Mother” and “Baby” - In “Baby” flowchart, first box should say “Once delivered, dry, stimulate and cover newborn for warmth. Perform APGAR score at 1 minute.” - Second “baby” flowchart boxes should diverge into “stable” and “nonstable”. First box should say “If non-vigorous or in respiratory distress clamp umbilical cord immediately and proceed to Neonatal Resuscitation protocol.” Second option box should read “If newborn appears pink, warm and vigorous place skin to skin with mother” - In the “Mother” flowchart, first box should say “Assess for signs of shock. If shock, perform uterine massage and refer to Protocol 5.06 Postpartum Hemorrhage. Do not delay transport for delivery of placenta.” Second box can include Cardiac Arrest.	Agree-Will add into protocol

Protocol 5.03- Normal Delivery and Post Delivery Care-NEW	Jenni Wiebers	SFFD	Flowchart	Its confusing to word giving pain control to have a concern "if birth is imminent" in the post-delivery care. Possibly specify in alternating flowchart selections "has baby been born?" and adjust pain medication dosing accordingly. Im not sure how to suggest a further change here.	Reveiwed
Protocol 5.03- Normal Delivery and Post Delivery Care-NEW	Judy Klofstad	SFFD	Maternal Pain	Maternal Pain should not be treated without proper monitoring, post delivery there is also the transfer of drugs through breast milk	Reviewed-Further discussion on pain management
Protocol 5.03- Normal Delivery and Post Delivery Care-NEW	Emily Anderson	SFFD	(1) flowchart (2) written	(1) "Afterbirth Care:" should be two separate sections broken out, one for neonate care, and one for care of mother. Box with "Assess newborn" box has two other boxes off of it, but are both in regards to the MOTHER ("cardiac arrest" and "signs of shock?"). this is confusing. page 2 of this flowchart...is it now assumed the baby has been delivered? if it is following the previous page, it is unclear why there is concern about administering pain meds and how it affects baby if baby has been born. Is this an issue re: breastmilk? please make this more clear. same for ketorolac, ketamine, ibuprofen box.	Agree-correct flowchart Agree-Adding "Post Delivery" the "Maternal Pain" diamond to clarify that baby has been delivered.
Protocol 5.04- Childbirth Complications -NEW	David Malmud, M.D.	AMR	Algorithm, BLS	For blue box in bottom right delete "If unable to reduce, deliver fetus with nuchal cord around neck." Replace with: "If unable to free the cord from the neck, double clamp the cord and cut between the clamps."	Reviewed- "a nuchal cord should only be cut if the cord is so tight that it is at risk of tearing". Further discussion at EMSAC

				(Leaving cord in place during delivery could lead to fetal hypoxia. Neighboring counties allow cutting of the cord in this situation.)	
Protocol 5.04-Childbirth Complications -NEW	Jeremy Lacocque	SFFD		If cord can't be reduced, should providers try to cut it? Put gentle pressure on baby's head to prevent further progression with cord around their neck? I agree domestic violence is underreported, but does it need to be in a birth protocol (since it is not trauma related)? For breech: We don't need the "head delivery" because it already says "anything other than the head" What is the guidance if the legs don't deliver? As in, only one arm or leg is sticking out? I know it's mentioned in comments, but I think it should be part of the protocol portion. for prolapsed cord: I think putting the comments into the protocol is helpful. The protocol should tell providers what to do, and comments should add extra information. Displacing the fetus is an action that they should see in the flowchart, in my opinion.	See above response Agree-does not need to be on all protocols Agree on updating language Agree"if presenting fetal part is buttocks" another box "if presenting fetal part is arm/leg" arrow "can not be delivered in field transport immediately"-Critical Agree-adding prolapsed in in Flowchart
Protocol 5.04-Childbirth Complications -NEW	Jenni Wiebers	SFFD	The whole protocol	I have no idea what hyper-flexing the knees in a delivery would look like. additionally, "Second provider apply suprapubic (not fundal) pressure with fist directed downwards. " This seems like it would need in person training?	Reviewed-Agree on education and training

Protocol 5.04-Childbirth Complications -NEW	Judy Klofstad	SFFD	shoulder dystocia breech delivery	concern for safety with 3 providers on top of the mother during code 3 transport, (McRobert's Maneuver) left lateral knees to chest for the mother early alert to receiving ED Breech delivery should initiate transport as soon as possible, need for surgery, do not delay transport	
Protocol 5.04-Childbirth Complications -NEW	Emily Anderson	SFFD	(1) Shoulder dystocia flowchart (2) prolapsed cord flowchart (3) written	(1) procedure will definitely require training for the SFFD. Is mother on all fours not an option for this complication? (2) shouldn't it be noted if cord is pulsating? and that it should be included in the hospital ring down? (3) directions for maintaining blood flow in cord with a prolapsed cord: too specific, directs field providers to move the baby off the cord. what if it is easier to push aside the vaginal wall? objective should be stated, allow field provider to achieve it in the easiest manner possible.	Agree-Mcrobert's manueuver-if shoulder does not deliver in next push transport immediately-not to be used during and throughout transport-Training Agree on initiating transport. Change wording in protocol
Protocol 5.05 Uncontrolled Hemorrhage-NEW	Oscar Thadeo	SFFD	Algorithm	There is no "Yes" route for "Improvement of perfusion". Although providers would still provide routine medical care and transport, the algorithm seems incomplete.	Agree-Update algorithm
Protocol 5.05 Uncontrolled Hemorrhage-NEW	Emily Anderson	SFFD	flowchart	no mention of pain or it's management.	Reviewed-further discussion at EMSAC
Protocol 5.06-Postpartum Hemorrhage-NEW	Jeremy Lacocque	SFFD		VS --> vital signs (although this is already standard in sick/unstable patients) Don't need PRN because it already says "IF heavy	Agree-changing acronym

				vaginal bleeding" Maybe explain how to estimate blood loss. (# of gauze pads, etc)	Reviewed-May not have validated way to estimate blood loss in field Add in "yes" under improvement in perfusion to be consistent with 5.05, and make the same changes regarding hemorrhage management.
Protocol 5.06-Postpartum Hemorrhage-NEW	Oscar Thadeo	SFFD	5.05 and 5.06	Could these two protocols be combined?	Reviewed-Further discussion at EMSAC
Protocol 5.06-Postpartum Hemorrhage-NEW	Jenni Wiebers	SFFD	Comments: Tone (70%, perform uterine massage)	I dont understand what tone and the percentage are indicating.	Add-“uterine” before tone. Replace 70% with "most common.”
Protocol 5.06-Postpartum Hemorrhage-NEW	Emily Anderson	SFFD	flowchart	no mention of pain or it's management.	Reviewed-Further discussion at EMSAC
Protocol 5.07-Premature Birth (<36 weeks)-NEW	David Malmud, M.D.	AMR	BLS algorithm	Change "Place all uterine contents..." to "Place all uterine other contents..." This mirrors text protocol and avoid having crews placing non-viable or deceased newborns in biohazard bags, which could be traumatic to the family.	Agree-on changing language to align with text
Protocol 5.07-Premature Birth (<36 weeks)-NEW	Jeremy Lacocque	SFFD		Instead of "allow mother" I would say "allow family"	Agree-changing to “family”

Protocol 5.08-Elevated Blood Pressure in Third Trimester-NEW	David Malmud, M.D.	AMR	Algorithm	Before Magnesium box, add "If >20 weeks pregnant or <6 weeks post-partum"	Agree
Protocol 5.08-Elevated Blood Pressure in Third Trimester-NEW	Jeremy Lacocque	SFFD		Unclear flow from first ALS box to 2nd. When should providers give mag? If they seize? What if high BP and floaters? Also, protocol says 3rd trimester, but it can start at 20 weeks and 6 weeks post partum	Agree-Updating flowchart Agree-Using language in weeks instead of trimester
Protocol 5.08-Elevated Blood Pressure in Third Trimester-NEW	Lauren Friend	EMS Fellow	Flowchart	1. Move "Elevated blood pressure in third trimester/postpartum: SBP>160, DBP>110" from comment box to first white box of flowchart 2. Add "with severe features" to end of "Assess for other significant signs and symptoms of pre-eclampsia" to align with wording in Magnesium protocol	Agree to "1" and "2"
Protocol 5.08-Elevated Blood Pressure in Third Trimester-NEW	Emily Anderson	SFFD	flowchart	2nd box: "maintain quiet, dim environment..." do ALL bulleted items need to be present before pushing mag? or just the SBP over 160 / DBP over 110? Mention of the SBP and DBP parameters should be listed somewhere other than at the bottom of this flowchart.	Agree-Updating language to reflect high blood pressure and at least one or more severe features for magnesium administration
Protocol 5.09-Seizure in Pregnancy/Postpartum-NEW	David Malmud, M.D.	AMR	Algorithm	Add box before Magnesium that says: "If actively seizing:" then copy the Midazolam box from the Adult Seizure protocol (with my previously recommended modification). Before Magnesium box, add "If >20 weeks pregnant or <6 weeks post-partum"	Removing 5.09 and incorporate into adult seizure (2.13)

Protocol 5.09-Seizure in Pregnancy/Postpartum-NEW	Jeremy Lacocque	SFFD		Does this need to be its own protocol, or just baked into the 2.13 protocol? I say this because it would likely have more visibility in 2.13. Also, 2.13 mentions versed THEN mag whereas this just says mag.	Agree-See other comments for 5.09
Protocol 5.09-Seizure in Pregnancy/Postpartum-NEW	Oscar Thadeo	SFFD	Algorithm	Contradicts the follow of treatment with the Adult Seizure Changes.	Removing 5.09 and incorporate into adult seizure (2.13)
Protocol 5.09-Seizure in Pregnancy/Postpartum-NEW	Jenni Wiebers	SFFD	flowchart	This protocol flowchart is unclear when comparing it to the updates with 2.13. Do you give Mag first or Versed? Also, in the Mag protocol, it states to make an infusion. I feel in all areas that mag is mentioned with 6mg it should have language of it being in 100ml of D5W. It confusing not to have that match everywhere else.	Removing 5.09 and incorporate into adult seizure (2.13)
Protocol 5.09-Seizure in Pregnancy/Postpartum-NEW	Emily Anderson	SFFD	flowchart	decision boxes that have only one answer of yes or no, and not the other answer, leaves the flowchart looking incomplete. if no continue sz activity ---> support ABC's, maintain dignity of pt, monitor VS/BGL/O2sat, etc.	Removing 5.09 and incorporate into adult seizure (2.13)
Protocol 2.13-Seizure	David Malmud, M.D.	AMR	Algorithm, Midazolam	Add a bullet to Midazolam box saying, "Do not delay IM administration to start an IV. IV dosing is for patients who already have an IV in place when seizure begins."	Agree-updating language

Protocol 2.13-Seizure	Jeremy Lacocque	SFFD		Are we going to include "call for ALS if BLS resource" on all the protocols that would benefit from ALS care? If so, I would include that here since ALS has versed and BLS doesn't. Within BLS care, I would also include suctioning, placing patient on their side, etc I wouldn't begin the protocol by saying "advanced airway." That makes me think we should be putting in an iGel into an actively seizing patient. I also don't think IV/IO should be first thing, as it might delay care when versed can be given IM. Instead, I would start with "Seizure >5 minutes or multiple without return to baseline?" If no, point to blood glucose. If yes, point to versed. Also, the word should be "baseline" not consciousness. Also, I propose the dose of versed for seizures should be the same IV as it is IM. (I just got off the phone with Curt and he said that's the evidence-based dose and what's used in the hospital). I would argue it's better for the patient to end up "over sedated" and need some PPV with a BVM but no seizing rather than still seizing after 5mg. If we make this change, the "repeat dosing" block would not be necessary.	Agree Agree Agree Agree Agree Reviewed-Midazolam will need to be updated if dosage change
Protocol 2.13-Seizure	Oscar Thadeo	SFFD		If providers are to give Magnesium Sulfate first for a suspected eclampsia patient, consider reorganizing the algorithm so that it gives the option to bypass administering Midazolam.	Reviewed-Midazolam should be administered first, but will reorganize to be more clear

Protocol 2.13- Seizure	Jenni Wiebers	SFFD		Adjusting the flowchart to which treatment should come first in the pregnancy seizure. is mag or is it versed?	See comments above
Protocol 7.18 Transcutaneous Pacing	David Malmud, M.D.	AMR	Multiple	There are multiple superscript letters that seem to be footnotes, but have no corresponding notes. 1.a: Pediatrics: Continue CPR if <60 bpm [add "and patient is unresponive"] throughout procedure until mechanical capture is achieved. This follows language in the Pediatric Bradycardia protocol 8.03. (Also apply similar language to #7).	Agree-removing formatting error Agree-update language
Protocol 7.18 Transcutaneous Pacing	Judy Klofstad	SFFD	#10	10. This statement of referencing systolic > 90mmHg is not consistent with the phrasing in previous protocol 2.07. "Midazolam is not contraindicated in the presence of hypotension when used for TCP" Should be consistent throughout.	Agree
Protocol 7.18 Transcutaneous Pacing	Emily Anderson	SFFD	6.	"Ensure mechanical capture by palpating a femoral pulse..."	Agree
Protocol 2.07- Bradycardia	David Malmud, M.D.	AMR	Multiple:	Under atropine in algorithm: Change "but hypotensive persist" to "but hypotension persists". Modify algorithm into two pathways: With 3rd degree (or high grade) Heart Block or Without 3rd degree Heart block. In first column, move TCP to the top. In the Second column, list atropine, then epi, then pacing, as currently listed. Mentioning TCP for High grade Heart block in the pearls section is not obvious enough on a critical call like this.	Reviewed

				Would also modify text protocol to reflect this prioritization.	
Protocol 2.07-Bradycardia	Jeremy Lacocque	SFFD		Instead of "BLS dispatched" say if "BLS resource" ALS: Instead of starting with 12 lead EKG I would say "cardiac monitor followed by ECG, if patient is stable and/or it does not delay treatment." The block says "hypotensive and bradycardic despite atropine" but I believe it should just say "unstable bradycardia" since unstable might mean AMS, heart failure, shock, chest pain, etc, not just hypotension. Instead of NS TKO, I would say "Start IV or IO." No need to spend time hanging 1L of NS if volume depletion isn't the issue. The flow makes it seem like the epi gtt would keep infusing while you move to TCP. I might say "TCP as needed if above therapy is ineffective." I don't think it's standard to do an infusion AND pace without titrating one or the other. Versed: We could include IN as a route. Perhaps vascular access is being obtained and is difficult and the patient is getting paced in the meantime. Or perhaps the patient only has one IV and an epi drip is going through it. Comments section: the "a" in hyperkalemia isn't bolded Should be "and/or wide QRS" since you don't need both It's awkward to say "TCP preferred in heart blocks" if the protocol says to do atropine and epi	Agree Agree Agree Agree Agree Reviewed-wording reflects current medication protocol Agree Reviewed-updating language

				gtt first. If there's a heart block, are you saying TCP should be first? I would suggest saying: 1) Atropine for suspected vagally mediated bradycardia 2) epi infusion for bradycardia from heart blocks or otherwise not responsive to atropine 3) TCP for bradycardia unresponsive to medication I would suggest pointing to "calcium channel or beta blocker toxicity in Protocol 2.10 for bradycardia secondary to medication toxicity." to point providers to the most relevant part.	Agree to #1 & 3. Further discussion for Epi infusion for high degree heart blocks as primary therapy may need to be discussed at EMSAC Agree
Protocol 2.07-Bradycardia	Lauren Friend	EMS Fellow	Comments section	Change: "(e.g. peaked T waves and widening QRS)" to "(e.g. bradycardia, peaked T waves, prolonged QRS (>.12 sec), sine wave)"	Agree
Protocol 2.07-Bradycardia	Oscar Thadeo	SFFD	"Apply "stand by" pad placement for TCP therapy based on"	Remove the term "Standby".	Reviewed-Placing "stand by" will be added to more severe cases where TCP is not primary therapy
Protocol 2.07-Bradycardia	Jenni Wiebers	SFFD	ALS Treatment	Consider adding "if patient is not hypotensive, strongly consider administering Midazolam." Its underneath at the bottom in comments but I feel the way it is worded right under the epi-infusion is confusing.	Agree
Protocol 2.07-Bradycardia	Emily Anderson	SFFD		flowchart: unclear if top-down structures indicates/implies only in that order. rewrite "Atropine" box: "...hypotention persists, administer..."	Agree

Medication 14.I Magnesium Sulfate	Jeremy Lacocque	SFFD		For v tach - I vote mag can be given in all v tach. It's tough to assess someone's risk for hypomag while also dealing with a sick patient. Again, instead of 3rd trimester, it should be 20 weeks and 6 weeks post partum as the range. Same comment for the last point. Also, "history" instead of "hx" It says more than 2g may be needed for TdP but the protocol doesn't offer a redosing option. Why isn't mag indicated in peds? What if the kid has TdP? Maybe has prolonged QT and took zofran?	Reviewed-AHA guidelines for V tach doesn't list magnesium--I would keep this for polymorphic V tach. Reviewed-May need pharmacy input and further discussion
Medication 14.I Magnesium Sulfate	anonymous	unk		-will magnesium administration be considered for status asthmaticus as a smooth muscle dilator?	Reviewed-may review when reviewing respiratory protocols-Intent on this cycle is for OB/GYN
Medication 14.I Magnesium Sulfate	Lauren Friend	EMS Fellow	1. Indications fifth bullet point 2. Notes section, third bullet point	1. Indications fifth bullet point "Preeclampsia with severe features or seizures secondary to eclampsia in third trimester pregnant or up to 6 weeks postpartum women" 2. In Notes section, third bullet point: "Eclampsia/preeclampsia with severe features should be considered in third trimester pregnancy and up to 6 weeks postpartum if seizures occur or a SBP greater than 160 mmHg or a diastolic blood pressure greater than 110mmHg with altered mental status, floaters or blurred vision, pulmonary/peripheral edema, severe headache. Hx of preeclampsia is not required for development of eclampsia."	Agree to all

Medication 14.I Magnesium Sulfate	Oscar Thadeo	SFFD	Adult Dose/ Route	Consider bullet points for the Eclampsia dose. Will make distinguishing the dosages for different routes easier to read.	Agree
Medication 14.I Magnesium Sulfate	Emily Anderson	SFFD	(1) indications (2) adult dose/route, eclampsia/preeclampsia	(1) Third bullet: "Refractory VF/VT after use of..." Should this read "refractory VF/VT with pulses after use of ..."? (2) "Eclampsia/preeclampsia WITH SEVERE FEATURES..." severe features are defined below in protocols. Please put an asterisk here to point reader to the bottom of the page. also, language for definition of severe features is messy: most are "or" conditions, but then changed to "WITH visual disturbances OR altered mental status." please define more precisely how many of these specific conditions must be met, and in what combination. must ALL conditions be met? any two? very unclear. also, we're doing mag infusions/drips??? not identified as a infusion/drip prior to this point in the protocols.	(1)-Agree-update "add" pulse (2)-Use BP requirement w any of the following findings mentioned above
Protocol 2.05 ROSC (med update)	N/A			No comments	
Protocol 2.06 Chest pain (med update)	Jeremy Lacocque	SFFD		Random comment: Change "ambulance company name" to "Provider agency and unit number" since an engine/CP, etc may transmit an ECG.	Reviewed-agree to change wording
Protocol 2.06 Chest pain (med update)	Oscar Thadeo	SFFD		Remove "or" after morphine	Agree

Medication 14.I Epinephrine	N/A			No Comments	
Protocol 8.12 Pediatric Pain Control	Lauren Friend	EMS Fellow	1. ALS section second bullet point 2. ALS section third bullet point 3. Base Hospital Contact Criteria	1. Clarify ibuprofen is single dose administration 2. Subsequent dose 25 mcg for any age would overdose in cases of patient's under 25 kg. Route for repeat doing (IV) should be added. 3. Under Base Hospital Contact Criteria: Add "or patients requiring additional doses after maximum outlined in protocol."	1. Agree 2. Reviewed 3. Agree
Protocol 8.12 Pediatric Pain Control	Judy Klofstad	SFFD	ALS Treatment - Fentanyl Dose	ALS Treatment - Fentanyl Dose May repeat every 10 minutes, Subsequent dose (ADD - not to exceed) 25 mcg As it reads, if the initial dose is 16mcg and you repeat after 10 minutes you would then give 25 mcg. I believe what was meant is the first dose should not exceed 50 mcg and the second dose should not exceed 25 mcg or half of the first dose.	Agree-Update dosing
Protocol 8.12 Pediatric Pain Control	Emily Anderson	SFFD	ALS treatment	Fentanyl dosages... 1mcg/kg IV/IO up to 50mcg. subsequent dose should NOT be 25 mcg. wording should be: "subsequent dose of 0.5 mcg/kg not to exceed 25 mcg." Same issue for IM. except it also says 25 mcg, and probably should be "subsequent dose of 1 mcg/kg not to exceed 50 mcg."	Agree

Protocol 9.01 Pediatric Trauma (med change)	Lauren Friend	EMS Fellow	Flowchart	1. Remove head injury in flowchart. 2. Optional: Add comment that it is okay to give pain medications in head injuries.	Agree
Protocol 9.01 Pediatric Trauma (med change)	Jenni Wiebers	SFFD		match language when used elsewhere. Zofran: < 6 months: Contraindicated. 6 months - 12 years OR < 40 kg: 0.1 mg/kg slow IVP/IO up to 4 mg (IV over 2-5 min). > 12 years OR > 40 kg: 4mg slow IVP/IO (IV over 2-5 min). May repeat in 20 minutes up to 12 mg.	Agree
Protocol 9.01 Pediatric Trauma (med change)	Emily Anderson	SFFD		Entire flowchart is messy and confusing. multiple issues to consider, do not make into a decision tree.	Reviewed-This protocol went live on 4/1/24 with approval at EMSC and EMSAC. The intent was to add Ketamine which is going live 10/24. If protocol needs to be reviewed, please contact EMSA