EMSAC July 2024 Public Comment Medical Director Responses

Protocol/Policy	Summary of Changes-Pre Pub Comment	Commenter	Public Comment	EMSA and Medical Director Responses
Policy 5000-Destination	**Added destination decision in section 4 Added pediatric destination decision in section 6.5 Added last seen normal timeframe for stroke patients in section 6.7 Added Psychiatric destination and reporting in section 6.11.2.1 and 6.11.3**	Jeremy Lacocque	4.4 – typo, should be "the following" I therefore suggest we change the language from "should be transported" to "should be transported if there is a reasonable suspicion that the condition is gynecological or obstetrical in nature." Base contact can be made for guidance. Additionally, patients who are less than 20 weeks pregnant can still have ob/gyn related issues that would benefit from an ob-receiving center. For instance, a patient having a miscarriage at 12 weeks who is already getting care at Mission Bay. Or, someone who has uterine cancer and has bleeding and is normally managed at Mission Bay. Someone who has a post-partum eclamptic seizure. So, for this portion, I would suggest "for patients who have an obstetrical or gynecological issue currently under the care of an ob-specialty care center may be transported there regardless of pregnancy status or gestational age."	Reviewed-Follow up discusion at EMSC
			6.10 – I'm concerned about this policy because it implies that just because someone is >20wga, it's reasonable to take them to a place like Mission Bay that does not have adult ED services. This means if someone is 22 weeks pregnant with ankle pain, a headache, chest pain (and no STEMI), appendicitis, depression, etc is eligible to go to Mission Bay and would therefore be in the care of ob/gyn physicians. While our ob/gyn physician colleagues are highly qualified for ob/gyn issues, it is not standard of care for them to take care of these other, non-ob/gyn related conditions. I don't think it's fair for people to be defined by their child carrying status when they still have conditions that can affect the rest of their body.	Reviewed. Will forward to QI for further discussion.
			6.15.4.1 – suggest change to: indication of alcohol intoxication from alcoholic beverage. This is so it's clear that if the ingestion is unclear, they should go to an ED instead, in case it is a toxic alcohol ingestion mimicking ethanol ingestion. There have been reports of a few hand sanitizer ingestions going to sobering, which I don't think is appropriate.	Agree. Policy updated.
Policy 5000-Destination		Antenor Molloy	4.2 Response: Disposition choice & reason for diversion is already NEMSIS 3.5 national required data element in transport decision documentation. Hospitals may already utilize exception reports for incidents where they believe policies or protocols have not been followed. Already in the PCR in "disposition" section as a drop down.	Reviewed. NEMSIS 3.5 does not provide enough information to sort out a number of destination concerns SFEMSA receives on a weekly basis. Having additional documentation provisdes ability to sort out ambulance destination concerns.
			6.11.2.4 Response: Suggest more specific language: "involuntary mental health hold" "Involuntary" language needs clarification. Should have a separate line regarding conserved patients	Agree. Policy updated.
			6.11.3 Response: Disposition choice & reason for diversion is already NEMSIS 3.5 national required data element in transport decision documentation. Hospitals may already utilize exception reports for incidents where they believe policies or protocols have not been followed. Already in the PCR in "disposition" section as a drop down.	Reviewed. See above response.
Protocol 2.17 Hyperkalemia	**Created algorithm Added visual of "sine" wave Updated prioritazation CaCL Updated CaCl and Sodium Bicarb administration and dosage Added IV flushing Added HayperK and crush syndrome in indications**	Jeremy Lacocque	For CaCl, say "may repeat every 5 minutes" instead of "in" 5 minutes. The CaCl and bicarb doses listed should include pediatric doses as well. In notes, I would add "especially with any of these ECG findings" because you don't need the ECG findings to have HyperK. You can still suspect it if they've missed 3 HD sessions, they're throwing up, have a known value, etc. Suggest language change to: Calcium should always be given first. Peds doses are missing.	1. Agree 2. Agree 3. Agree with premise, will need more rewording within protocol 4. agree
		Antenor Molloy	Suggest BLS treatment section is removed entirely, (If not removed, suggest BLS treatments are outlined in BLS Section "Routine Medical Care with hyperlink to 1.01/1.02)	Agree-BLS language updated
			Suggest removing A&P information regarding potassium-shifting and cardiac membranes from the protocol and move them to the notes	Reviewed-open to discusion
			List medications in the following order: cacl, bicarb, albuterol	Reviewed-open to discusion
		Janelle Cortright	Recommend to change 11.02 Crush Syndrome to also order Calcium prior to sodium bicarb. Or remove crush syndrome from 2.17.	Agree
Protocol 14.1 Calcium Chloride	**Updated dosage**	Jeremy Lacocque	"Ensure you have a patent IV or IO line" since meds can be given IO. Also, "20cc flush IV/IO between medications."	Agree
		Antenor Molloy	Add word "every" prior to "5 minutes" in the hyperk & CaCl channel blocker overdose section	Agree
			Request specific cc's / or time range for verbiage "flushed thoroughly" (20cc flush per pharmacist is usually minimal recommended flush.)	Agree
Protocol 14.1 Sodium Bicarbonate	**Added Hyperkalemia and crush syndrome in indications Updated dosage**	Jeremy Lacocque	The minimum equipment list for sterile water likely needs to be increased so there is enough for a single dose of bicarb in kids who are <2 years old but weigh 20kg. We carry 10cc's, which would be enough for 1 dose of a 10kg kid, but not anything more.	Reviewed-Open to discussion
		Antenor Molloy	Request specific cc's / time for verbiage "flushed thoroughly" Suggest this language is made uniform with "flush IV" in CaCl 14.1	Agree
			Pediatric Dose RE: QRS widening	to my knowledge needs to be diluted in sterile water (because of sodium load)
			Suggest a different dilution mechanism than sterile water	
			Would need to be an increase in the number of vials of sterile water in medic units on required equipment in Policy 4000.1	
		Janelle Cortright	Recommend to re write 11.02 to match 2.17 calcium and sodium bicarbonate changes.	Reviewed-11.02 not up for review this EMSAC. Will forward to TSAC Also, just a note to make sure crush includes giving IVF as well as NaHCO3

Protocol 2.04 Cardiac Arrest	**Updated Hyperkalemia in reversible causes** **Removed "do not perform CPR" in LVAD patients** **Added perform manual or mechanical CPR in LVAD patients** **Removed LVAD brands**	Jeremy Lacocque	Typo: Compressions, line 2, "100-120/min" Hypovolemia: This is the cardiac arrest protocol, so doesn't make sense to say SBP <90 or to include an epi gtt. I would just say "normal saline bolus." And maybe add "for hypovolemia secondary to blood loss/exsanguination, consider rapid transport for blood transfusion." While some blood loss is from trauma and would fall under traumatic arrest protocol, some other patients may have significant bleeding from GI losses, minor trauma, airway bleeding, etc, an those would benefit from early transport.	Addressed typo-second point to be discussed at STAR
			Hyperkalemia: I don't think we need to include the first sentence. Just give the treatment. Providers will learn how to recognize HyperK in the hyperK protocol. If this does stay in, I would say peaked T waves aren't always apparent in all leads, just some. Bradycardia would also be an ECG change from potential HyperK.	Agree
			Torsades: Treatment should include magnesium and defibrillation.	Reviewed-Will forward to STAR
			Tamponode/thrombosis: Do we want to suggest rapid transport for these? If a patient's family said "they were diagnosed with a PE last week, they felt SOB today and then collapsed" I would favor rapid transport for thrombolytics rather than 20 minutes of on scene CPR (which wouldn't be affective for a massive PE).	Reviewed-Will forward to STAR
			Pregnancy CPR – if LUCAS device is on, patient can be displaced to the side on the gurney by putting padding under the long board (as opposed to manual displacement).	Reviewed-keep manual displacement (manual displacement also recommended by the Lucas manufacturer)
			Also, I would not advocate for lateral decub position for a patient with ROSC, but rather just 30 degrees of tilt. Full lateral decub will make it difficult to monitor/treat a very sick patient.	Reviewed-Forward to QI with OB consultant
			Can you explain the context behind: If patient is receiving IV/IO Magnesium pre-arrest, stop infusion and switch to Normal Saline. Flush line with Normal Saline prior to giving Calcium Chloride. May repeat in 10 min. Why would they get calcium? If it's just for other indications, it sounds a little leading. Flushing the line is already on the med page, so I don't think it's needed here	Reviewed-Calcium is for magnesium overdose cardiac membrane stabalization. Giving calcium is in the AHA ACLS algorithm for pregnancy
			Documentation – This box seems redundant. All these things are required fields in the PCR already or are policy elsewhere. Might simplify the protocol to trim info like this.	Reviewed-Open to discussion
			LVAD: EMS providers do not carry dopplers, so it should not be used in a protocol.	Reviewed-Open to discussion
			5. EtCO2 should be on this patient regardless of AMS. Also, this is the cardiac arrest protocol but some of these guidelines apply to patients who are not in cardiac arrest.	Reviewed-Open to discussion
			#8 is redundant, as hypovolemia is already addressed in other protocols. The SBP listed here is different than other thresholds (usually 90mmHg) and also, as mentioned above, you can't get an SBP, just a MAP. Skin signs/mental status should be the most important guide.	Reviewed-Open to discussion
			#9 consider putting this at the top of the list – most phone numbers are pagers, so the LVAD RN calling back might take a few minutes. Would be helpful to get the process started early so the response comes in a timely fashion. Maybe phrase it as "have a provider not actively engaged in resuscitation contact the patient's LVAD center."	Agree
			#10 CPMC-Pac should be CPMC- Van Ness	Agree
			#13 Call base hospital for field determination of termination of resuscitation criteria are otherwise met.	Agree
			Suggest we limit epi administration to max of 3 doses in cardiac arrest. There is no evidence to suggest benefit in neurologic survival beyond that, and we often experience epi shortages. Limiting to 3 may also help prevent units going out of service to restock. We could also consider 4 doses, so the timing lines up with 20 minutes. For example: https://pubmed.ncbi.nlm.nih.gov/38507848/ and https://www.nejm.org/doi/full/10.1056/NEJMoa1806842	Reviewed-Forward discusion to STAR
			It says shock 200j with alternate vector at 30 minutes, but earlier in the protocol it says to do it after the 3rd shock (which might be closer to 6-8 minutes)	Reviewed
Protocol 2.04 Cardiac Arrest		Antenor Molloy	Under "reversible causes" Hyperkalemia : Clarification on if providers are to give albuterol	Reviewed-Forward the dissusion to STAR
			Requesting to add AHA language to match other protocols	Agree
			Lucas device when treating LVAD patients in cardiac arrest: Seeking Clarification from the agency on use	LUCAS does not list LVAD as a complication. At this time there is not a documented contraindication. Aligning with AHA and an SFEMSA July 2022 memo allowing CPR on LVAD patients.
Protocol 7.14 Reporting Abuse/Assualt	**Including Human Trafficking in protocol title** **Added signs of possible human trafficking section** **Added reporting and documentation of suspicion of human trafficking**	Jeremy Lacocque	"must transport" potential child abuse victims. I'm worried this protocol is requiring our EMS providers do to something they don't have the power to do. EMS providers are not able to "force" a kid to be transported if the parents/others on scene refuse. We need the support of CPS, SFPD to make this work. Instead say "make every reasonable effort to transport child." Maybe include "if any difficulty transporting victim, contact SFPD and CPS for support." In certain circumstances, protective custody may need to happen, and our members should know how to initiate that process.	Agree with the clarification to involve CPS, law enforcement if there are concerns
		Antenor Molloy	Below Child Abuse, Add language... "every effort should be made to transport" (Remove "must")	Agree
Protocol 7.06 Thoracostomy	**Removed Heimlich or one way valve under "Equipment"** **Removed Heimlich or one way valve under "Procedure"**	Jeremy Lacocque	7.06 – should be "over-the-catheter needle" Syringe and tubing shouldn't be necessary. Also, our protocol says mid-axillary, however ATLS says anterior axillary. Clarification would be helpful on which is best.	Agree--change to anterior axillary line for placement
		Kevin Chocker	7.06 Needle Thoracostomy-Proposed Insertion Site Change. 1. Presently, the preferred insertion site for needle thoracostomy is the 4th or 5th intercostal space (ICS), mid-axillary, on the affected side. 2. Propose changing the preferred site to the 4th or 5th (ICS) at the anterior axillary line (AAL), on the affected side. 3. Teach the concept of the Safe Space: The Safe Space ensures the catheter is placed above the diaphragm, within the thorax, and away from large blood vessels (hotlink: see Reference Graphics) https://county.milwaukee.gov/files/county/emergency-management/EMS-/Standards-of-Care/PSNeedleThoracostomy	Agree-See above
		Antenor Molloy	Equipment: Strike Connective tubing and syringe	Agree
Protocol 2.03 Altered Mental Status	**Created Algorithim** **Added language in BLS section** **Added dosage of medications**	Tony Olguin	Zyprexa should be added to our medication list for AMS patients of behavioral/psych nature	
		Jeremy Lacocque	2.03 – what's the difference between glucose paste and oral glucose? This flowchart suggests that blood glucose should be checked before giving Narcan. I don't think that would be best practice if the context was clearly an overdose. If patient is hypoglycemic, I don't think they would routinely need an ECG as indicated in the box. For underlying causes/listed protocols, I would include poisoning/overdose as well. In terms of the leave behind Narcan box, I think that can go in the poisoning/overdose protocol. I wouldn't think to look in the AMS protocol when thinking about leave-behind Narcan	Agree on leave behind narcan in the OD protocol.

Protocol 2.03 Altered Mental Status	**Added dosage of medications** **Add current protocols where treatment does not fall under 2.03 (eg. shock, sepsis, stroke, etc...)**	Antenor Molloy	Current IV/IO/IM maximum doses may not be adequate to reverse opiate overdose and respiratory depression. There is no maximum dose for IN narcan Flow chart is very difficult to follow. Consider creating a more linear flow chart. Remove the eight (8) hyper links. Consider being more generalized and focus on AEIOU TIPS. More linear list....Rethink or strike flow chart	Agree-Removing "determine underlying cause" box to keep the flow chart from becomiing a spiral as well as taking out hyperlinks and adding common causes using AEIOU TIPS
Protocol 11.04 Field Amputation	**Created Algorithim** **Added multiple language in BLS section** **Added multiple language in ALS section including care of amputated limb** **Added field roles under tram guidlines (Physician only)** **Added language under "Training Requirements"**	Jeremy Lacocque	Instead of having "pain" be a decision point, just have the arrow go straight to the medication. There isn't a "no" option anyway. Also, I would include ketamine here. It says "paramedic may assist with field amputation" and then it says performing amputation is not in scope of practice, which is confusing. To clean up the protocol, I think we can delete the red box because it's a given and already covered in the patient assessment protocol. "Base physician contacts trauma center medical director" – I don't think this is needed or practical. Additionally, it would be difficult – would it be his/her personal phone number? What if there is no answer? Operator – "EM physician with field amputation training." I don't think any of us have formally gotten this training. What is the training? It says "if available" a surgeon – I think we need buy in from the trauma service to say that a trauma surgeon (fellow level or above) or orthopedist attending will co-respond with us if requested. This is feedback more for the hospital and less for EMS policy, but there should probably be a pager system, much like a STEMI alert, for this at SFGH. It would page an OR tech, trauma team, anesthesia, ortho, AIC, AOD, backup trauma attending (if the first is going to be deployed), and ED pharmacist. Also, perhaps include "a vehicle designed by DEC/dispatch will respond to SFGH to retrieve the equipment and personnel, and will then take them to the scene." Typically, I would imagine an ambulance would be the easiest thing to move all of that. A typical RC vehicle cannot. Community paramedicine has vans as well.	Agree-removing the flow chart and will rework at a later date
		Antenor Molloy	Consider providing spinal motion restriction	Reviewed
Protocol 8.05 Neonatal Resusitation	**Updated BGL to to <45 mg/dl**	Janelle Cortright	Recommend to add under indications for Dextrose blood glucose levels less than 45mg/dl for neonates	Reviewed-need further clarification if refereing to updating Dextrose med sheet-Please contact EMSA
Protocol 8.10 Pediatric Seizure	**Updated BGL to to <45 mg/dl to align with 8.05**	Jeremy Lacocque	> 1 month (add the word old) For diastat, do you want to put an arrow that points to midazolam if seizure continues after a certain period of time? In other words, give diastat, if seizure does not stop within 5 more minutes à midazolam.	Diastat's onset of action is between 5- 15 minutes, so likely better to just transport the child and they can be reassessed at the hospital.
Protocol 8.12 Pediatric Pain control	**Updated Fentanyl max dose from 100 mcg to 4 doses** **Added splinting language in BLS** **Added ODT Zofran as preferred in children**	Jeremy Lacocque	What does on-going support of heat mean?	Agree--remove "ongoing support of heat"
		Antenor Molloy	"Maximum of four (4) doses or not to exceed 100mcg"	Agree