

EMERGENCY MEDICAL CARE COMMITTEE MEETING AGENDA



Thursday, March 16th, 2023 at 8:30 A.M.
2995 McMillan Ave, Ste #178, San Luis Obispo

MEMBERS

CHAIR Jonathan Stornetta, *Public Providers, 2020-2024*
 VICE – CHAIR Dr. Brad Knox, *Physicians, 2022-2026*
 Bob Neumann, *Consumers, 2022-2026*
 Matt Bronson, *City Government, 2020-2024*
 Alexandra Kohler, *Consumers, 2020-2024*
 Chris Javine, *Pre-hospital Transport Providers, 2022-2026*
 Michael Talmadge, *EMS Field Personnel, 2020-2024*
 Jay Wells, *Sheriff's Department, 2020-2024*
 Julia Fogelson, *Hospitals, 2022-2024*
 Diane Burkey, *MICNs, 2022-2026*
 Dr. Rachel May, *Emergency Physicians, 2022-2026*

EX OFFICIO

Vince Pierucci, *EMS Division Director*
 Dr. Tom Ronay, *EMS Medical Director*

STAFF

Rachel Oakley, *EMS Coordinator*
 David Goss, *EMS Coordinator*
 Ryan Rosander, *EMS Coordinator*
 Denise Yi, *PHEP Program Manager*
 Sara Schwall, *Administrative Assistant*

AGENDA	ITEM	LEAD
Call To Order	Introductions	J. Stornetta
	Public Comment	
Action/Discussion	Approval of minutes: January 19 th , 2023 Minutes (<i>attached</i>)	J. Stornetta
	<ul style="list-style-type: none"> Staff Report for addition of Policy #710: Vascular Access and Monitoring Revision/Addition 	D. Goss
	<ul style="list-style-type: none"> 2023 Strategic Planning Discussion 	J. Stornetta
Staff Reports	<ul style="list-style-type: none"> Health Officer EMS Agency Staff Report EMS Medical Director Report PHEP Staff Report 	P. Borenstein V. Pierucci T. Ronay D. Yi
Committee Members Announcements or Reports	Opportunity for Board members to make announcements, provide brief reports on their EMS-related activities, ask questions for clarification on items not on the agenda, or request consideration of an item for a future agenda (Gov. Code Sec. 54954.2[a][2])	Committee Members
Adjourn	Next Meeting: Thursday, May 18th 2023 at 8:30am	

**Emergency Medical Care Committee
Meeting Minutes
Thursday January 19th, 2023
2995 McMillan Ave, Ste 178, San Luis Obispo**



Members

- CHAIR Jonathan Stornetta, Public Providers
- VICE CHAIR Dr. Brad Knox, Physicians

- Bob Neumann, Consumers
- Alexandra Kohler, Consumers
- Matt Bronson, City Government
- Chris Javine, Pre-Hospital Transport Providers
- Michael Talmadge, EMS Field Personnel
- Dr. Rachel May, Emergency Physicians
- Jay Wells, Sheriff's Department
- Julia Fogelson, Hospitals
- Diane Burkey, MICNs

Ex Officio

- Vince Pierucci, EMS Division Director
- Dr. Thomas Ronay, LEMSA Medical Director

Staff

- Rachel Oakley, EMS Coordinator
- David Goss, EMS Coordinator
- Ryan Rosander, EMS Coordinator
- Denise Yi, PHEP Program Manager
- Sara Schwall, Administrative Assistant

Guests – Tim Benes, CCHD; Rob Jenkins, CAL Fire; Natasha Lukasiewicz, FHD ED Director; Doug Weeda, CHP

AGENDA ITEM / DISCUSSION	ACTION
CALL TO ORDER	Meeting called to order at 08:30 AM
Introductions	
Public Comment	No comments
Approval of November 17th, 2022 Meeting Minutes – Correct meeting location from virtual to in person	R. May Motions. B. Neumann 2nds. All present in favor.
<p>Staff Report for addition of Supraglottic Airway to approved policies and procedures:</p> <ul style="list-style-type: none"> • Introduction of Procedure 718, with option for primary SGA use as an advanced airway following Endotracheal Intubation. Procedures 718 and 717 refer to each other depending on the condition of patient airway. 718 will allow i-Gel as an advanced airway. • Addition of Procedure 717 to include allowing ALS providers to abandon ETI attempts if SGA is a better option for the patient. • Protocol 602 will include reference to Procedures 717 and 718. • Addition of specific SGA sizes to Policy 205A EMS Equipment and Supply List. <p>Discussion:</p> <p>J. Fogelson asks why pediatrics were not included. D. Goss responds that there is not data collected at this time for pediatrics M. Talmadge asks to clarify the language regarding a visualized attempt and how that relates to using SGA as a primary. T. Ronay says that this procedure will also need to be addressed in training as well as in the writing. D. Burkey asks what training will be involved. D. Goss responds that SGA training will be a component of the annual EMS Update Class in April and May. R. May agrees that the language surrounding “attempts” is confusing. D. Goss responds that the procedure is open for interpretation by the provider. Many agencies are going with a more fluid approach, leaving the decision open for the patient’s best interest. J. Wells says personally wouldn’t use a tube without a visual attempt and cautions against giving the freedom to use an SGA without at least attempting visualization.</p>	D. Goss

<p>M. Talmadge says he would have a tube in hand to intubate instead of an SGA being a primary, but a backup instead.</p> <p>D. Goss shares data from Sept.-Nov. 2022 of ETI attempts. In all, total success of ETI attempts was 22%, with 13% successful on the first try. Other counties have low ETI success but have SGA as backup.</p> <p>R. May suggests wave form capnography be made mandatory, not optional. If wave form capnography is less than 10, remove tube.</p> <p>V. Pierucci says to use capnography and in the event of technical issues, fill out unusual event form.</p> <p>Recommendation for approval:</p> <ul style="list-style-type: none"> • Addition of ETCO2 required plus one additional “shall” • Add i-Gel to each SGA reference • Apneic O2 – nasal cannula added during airway assessment when available • Less than 10 on ETCO2 reassess and remove 	<p>Motion to approve: M. Talmadge 2nd: R. May All present in favor.</p>
<p>2023 Strategic Planning Discussion:</p> <ul style="list-style-type: none"> • Goal to identify areas for collaboration with SLO County Behavioral Health in development of Alternative Destination policy. • Goal to identify how to incorporate resources for unhoused people into the local EMS system. • Identify areas for collaboration with SLO County Behavioral Health Drug and Alcohol in development of protocols for pre-hospital use of Buprenorphine • Collaboration with SLO County Fire Chiefs Association to implement PulsePoint • Develop guiding principles outlining Code of Ethics <p>J. Wells says we need a forward, progressive approach to mental health. We are dealing with thousands of people that need access to physicians, psychiatrists all under one roof.</p> <p>T. Ronay updates on ongoing legislative efforts at the State level on amending/simplifying Alternate Care Destination requirements for LEMSA's. This endeavor could be transformational in directing BH and Sobriety patients directly to appropriate non-acute care hospital settings, and additionally improve APOT metrics.</p> <p>N. Lukasiewich says that there are many work groups at the hospital. A Smart Clearance group is starting to get patients cleared more quickly and effectively. EMS representation would be a great addition to these committees.</p> <p>D. Weeda says that this type of destination should be near a hospital in the event of transfer for medical care.</p> <p>J. Stornetta suggests letting everyone think over these proposed goals for the next meeting.</p>	<p>J. Stornetta / V. Pierucci</p>
<p>EMSA Staff Report: We are introducing our new EMS Coordinator, Ryan Rosander overseeing trauma. The staff is excited to see all PCR's are now on one platform and we purchased a repository that we can easily use to collect system data and run reports.</p> <p>EMS Medical Director Report:</p>	<p>V. Pierucci</p> <p>T. Ronay</p>

<p>Thank you to everyone for the input on SGAs. This was a great conversation on alternate care destinations. Thank you to the providers during the recent storms and overcoming all the challenges that came along.</p> <p>J. Stornetta mentions that the presidential declaration was granted for 25/75 financial aid.</p> <p>PHEP Staff Report: The last COVID testing site will be closing tomorrow. We are hosting a tabletop exercise next month on burn surge and are inviting OES, hospital and EMS partners to participate.</p>	<p>D. Yi</p>
<p>Announcements: None</p>	
<p>Future Agenda Items: Base Contact for post resuscitation bundles of care</p>	<p>R. May motions to adjourn. J. Wells 2nds. Meeting adjourned 10:40 AM</p>
<p>Next Regular Meeting Next meeting will be held Thursday, March 16th, 2022, at 08:30 AM at EMS Agency.</p>	

DRAFT



COUNTY OF SAN LUIS OBISPO HEALTH AGENCY

PUBLIC HEALTH DEPARTMENT

Penny Borenstein, MD, MPH *Health Officer/Public Health Director*

MEETING DATE	March 16 th , 2023
STAFF CONTACT	David Goss, EMS Coordinator 805.788.2514 dgoss@co.slo.ca.us
SUBJECT	Policy #710: Vascular Access and Monitoring Revision/Addition
SUMMARY	<p>In the fall of 2022, generation of a revision to Policy #710: Vascular Access and Monitoring began following feedback from San Luis Ambulance Services to include the use of Pre-Existing Vascular Access Devices (PVAD). Following research into PVADs, it was found that a large amount of counties residing in the State of California had authorized the use of PVADs in various stages of use. This included the use of Peripherally Inserted Central Catheters (PICC), Midline Catheters, and Tunneled/Non-Tunneled Central Lines.</p> <p>After researching individual county protocols, SLOEMSA is proposing a revision to allow routine utilization to pre-existing PICC lines and Midlines along with utilization of tunneled/non tunneled catheters for emergency patients in extremis or cardiac arrest. Both of these included items would assist in providing quick medication administration and patient care for those who requires expedient intervention.</p> <p>While looking for further revisions, an opportunity was also found to expand what ALS Providers are able to perform when utilizing IO devices. In an effort to provide options to ALS Providers, the proposed revision would include the ability for providers to be able to start an IO without the mandated two IV access attempt. In an effort to allow more flexibility for IO usage, an expansion to humoral access is also being proposed if providers are unable to utilize tibial access. Both of these additions to Policy #710 would provide ALS Providers the freedom to provide patient care best suited to the patient they are caring for.</p> <p>Following the February 16th meeting, the Clinical Advisory Subcommittee have given their recommendation on the PVAD and IO expansion and has been included to the EMCC agenda. Current implementation timeline would show recommendation by EMCC in March, training through the Annual Paramedic Update Class in late April going into May, and implementation July 1st of 2023.</p>
REVIEWED BY	Vince Pierucci, Dr. Thomas Ronay, SLOEMSA Staff, Clinical Advisory Subcommittee
RECOMMENDED ACTION(S)	Recommended PVAD / IO Expansion for adoption by EMCC.
ATTACHMENT(S)	EMCC PowerPoint Presentation, Policy #710 Draft

Emergency Medical Services

2995 McMillan Way Suite 178 | San Luis Obispo, CA 93401 | (P) 805-781-2519 | (F) 805-788-2517

www.slocounty.ca.gov/ems

VASCULAR ACCESS AND MONITORING	
ADULT	PEDIATRIC (≤34KG)
BLS	
<ul style="list-style-type: none"> • Universal Protocol #601 • In stable patients, providers may monitor and turn off IV lines of isotonic balanced salt solutions without medication or electrolyte additives and flowing at a maintenance rate 	
BLS Optional	
Pulse Oximetry – O ₂ administration per Airway Management Protocol #602	
ALS Standing Orders	
<ul style="list-style-type: none"> • Establish IV with drip set or saline lock as appropriate. • Tibial Intraosseous (IO) placement may be utilized when: <ul style="list-style-type: none"> ○ GCS < 8 in extremis with hemodynamic instability/respiratory distress/cardiac arrest. AND ○ Unable to establish following attempt(s) or general suspicion of the inability to establish vascular access. • Attempts to establish vascular access shall be continued even if IO is successful. • ALS providers can monitor and administer medications through a Pre-existing Vascular Access Device (PVAD). These pre-existing catheters are: <ul style="list-style-type: none"> ○ Peripheral Inserted Central Catheter (PICC Line) ○ Midline IV Catheters • PVAD access procedure: <ul style="list-style-type: none"> ○ Wipe the access port with an alcohol pad to ensure aseptic technique. ○ Ensure that if your line is a dual lumen line that it is the line designated for medication administration (do not use the line utilized for blood, this can be identified by a red colored catheter or stated on the catheter). ○ Attach a 10ml syringe and draw up 5-10ml of fluid out of the line until blood is noted in the syringe. This is to ensure the line is not pre-loaded with heparin. ○ Discard the filled syringe and flush the line with an entire 10cc saline flush. This is to ensure that the line is clean and ready for medication administration. ○ Connect the syringe with the desired medication and administer according to the appropriate formulary. Follow the medication administration with an entire 10cc saline flush. ○ If any sort of cap was used to cover the port, ensure the cap is wiped down and placed back on the port following use. ○ If the patient is needing an infusion from a saline bag, ALS Providers may connect the IV line to the PVAD after the line has been aspirated per instructions listed above. After the infusion is finished, ensure the line is flushed with a 10cc saline flush, and wipe the port with an alcohol pad. If any sort of cap was used to cover the port, ensure the cap is wiped down and placed back on the port following use. 	
Base Hospital Orders Only	
<ul style="list-style-type: none"> • Pain management if patient becomes conscious after establishing IO access • Humoral IO Placement • Access to tunnelled/non-tunnelled Central Lines for patients in extremis or cardiac arrest. Access of these central lines shall follow the PVAD access procedure listed above. • As needed 	

Notes

- Peripheral IV placement is preferred to IO placement – including the external jugular.
- Tibial plateau is preferred for IO placement over humoral placement. Humoral IO placement shall only be utilized if the Tibial plateau is unable to be accessed.
- When establishing IV/IO access in a critical patient with a GCS < 8, ALS Providers will take the following into consideration:
 - When assessing a patient's vasculature and determining access to be difficult, an ALS Provider may proceed straight to IO access. Further IV attempts will continue following IO placement.
 - If the first attempt at IV placement fails, an ALS provider may consider placement of an IO prior to a second attempt.
- External Jugular (EJ) access shall always be considered prior to IO placement.

DRAFT



Emergency Medical Care Committee

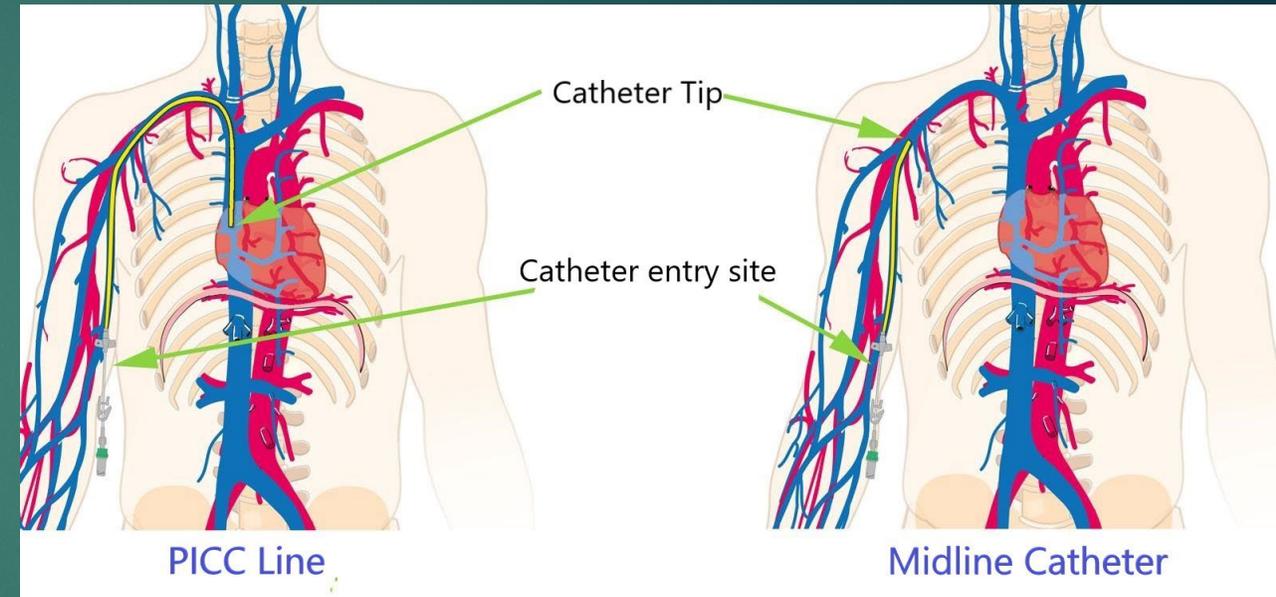
MARCH 16TH, 2023

Summary

- ▶ Proposed additions to existing Procedure #710: Vascular Access and Monitoring
 - ▶ Addition of PVAD utilization
 - ▶ Addition of Humoral IO Access
 - ▶ Elimination of the two IV start rule prior to IO access, paramedic discretion

PVAD Utilization

- ▶ Currently, San Luis Obispo County ALS Providers are unable to utilize Pre-Existing Vascular Access Devices (PVAD).
- ▶ PVADs included in other county protocols and procedures include:
 - ▶ Peripheral Inserted Central Catheters (PICC)
 - ▶ Midlines
 - ▶ Tunneled & Non-Tunneled Central Lines
 - ▶ Implanted Ports
- ▶ Protocol Usage of PVADs Across California:
 - ▶ Total Access to PICC, Mid, and Central: 42%
 - ▶ Restricted Access (unstable patients only): 42%
 - ▶ Monitor Only: 15%
 - ▶ Implanted Ports for routine use are not allowed in any county



PVAD Utilization

▶ Restricted Use County Specifics:

▶ PVAD only authorized for unstable, extremis, or cardiac arrest conditions

▶ Counties Placing these restrictions are for these devices

▶ Tunneled/Non-Tunneled Central Lines: 100%

▶ PICC: 85%

▶ Mid: 85%

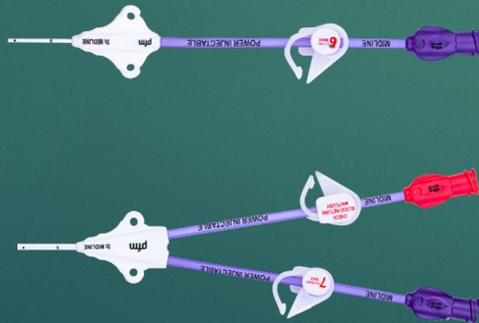
▶ Implanted Port: 71%

LEMSA	PICC Usage	Mid Line Usage	Implanted Port Usage	Central Catheter Usage	Central only for unstable pts	Notes
Alameda	x	x		x		
Contra Costa	x	x				
El Dorado	x	x				
Imperial	x	x			x	
Kern	x	x		x		
Los Angeles	x	x		x		
Marin	x	x		x		
Merced	x	x				
Monterey	x	x				
Napa						Monitor only
Orange	x	x			x	PVAD only for unstable pts
Riverside						Monitor only
Sacramento					x	PVAD (central) only for unstable pts
San Benito	x	x			x	PVAD only for unstable pts, requires base order
San Diego	x	x			x	PVAD only for definitive therapy, requires base order
San Francisco	x	x			x	PVAD only for unstable pts
San Joaquin	x	x		x		
San Luis Obispo						Monitor only
San Mateo						Monitor only
Santa Barbara						Monitor only
Santa Clara	x	x		x	x	Emergent use only unless pt is conscious and can walk the medic through how to access
Santa Cruz	x	x			x	PVAD only as last choice for unstable pts, requires base order
Solano	x	x		x		
Tuolumne	x	x			x	Only for pts in extremis
Ventura	x	x			x	PVAD only for unstable pts
Yolo	x	x			x	Only for pts in extremis
Central California	x	x			x	Only for use if a peripheral IV is unable to be started or for cardiac arrest
Coastal Valleys					x	Only for use during cardiac arrest or extremis
Inland Counties	x	x				
Mountain-Valley	x	x			x	Only for unstable pts
Norcal	x	x		x		
North Coast	x	x			x	
Sierra-Sac Valley	x	x			x	Only for patients in extremis

Procedure #710 PVAD Addition

▶ Additions:

- ▶ Routine access for medication/fluid administration through PICC and Mid lines as standing orders while following appropriate preparation and procedure.
- ▶ Access of Tunneled and Non-Tunneled Central Lines via Base Order for patients in Extremis or Cardiac Arrest.



▶ Access Procedure:

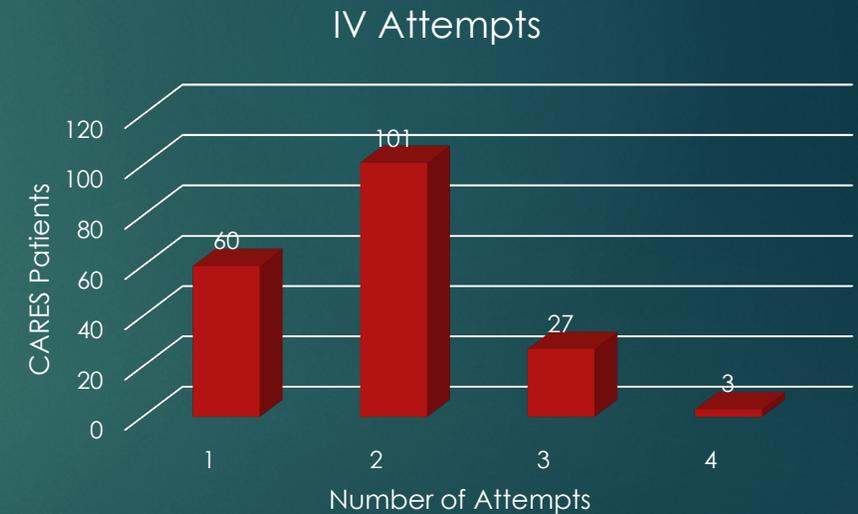
- ▶ Wipe the access port with an alcohol pad.
- ▶ Ensure that if line is a dual lumen that you utilize the line for medication and not for blood.
- ▶ Attach 10ml syringe and draw up 5-10ml of fluid out of the line or until blood is noted in the syringe.
- ▶ Discard filled syringe and flush the line with an entire 10ml saline flush.
- ▶ Administer medication into line followed by an entire 10ml saline flush.
- ▶ Wipe down port and replace any protective cap (if one was present).
- ▶ ALS providers may attach a saline bag for an infusion after the PVAD has been properly aspirated.

Procedure #710 IO Revisions and Humoral Access Additions

- ▶ Intraosseous access has been opened as an option for primary for patients presenting with difficult vasculature.
- ▶ “When establishing IV/IO access in a critical patient with a GCS < 8, ALS Providers will take the following into consideration:”
 - ▶ When assessing a patient's vasculature and determining access to be difficult, an ALS Provider may proceed straight to IO access. Further IV attempts will continue following IO placement.
 - ▶ If the first attempt at IV placement fails, an ALS Provider may consider placement of an IO prior to a second attempt.
 - ▶ External Jugular access shall always be considered prior to IO placement.
- ▶ Humoral IO placement will become available via Base Hospital Order if:
 - ▶ Unable to gain access to the tibial plateau or plateau is nonexistent.
 - ▶ Tibial plateau is preferred for IO placement over humoral.

Cardiac Arrest Registry for Enhanced Survival (CARES) IV Access Data

- ▶ CARES Database tracks medical cardiac arrests without presence of trauma.
- ▶ 191 resuscitations attempted system wide with 47 patients transported.
- ▶ IV Attempts:
 - ▶ One Attempt: 60
 - ▶ Five of these were unsuccessful resulting in IO Placement
 - ▶ Two Attempts: 101
 - ▶ Three Attempts: 27
 - ▶ Four Attempts: 3
- ▶ IO Placement was utilized 94 times, resulting in a 49% utilization rate.



VASCULAR ACCESS AND MONITORING

ADULT

PEDIATRIC ($\leq 34\text{KG}$)

BLS

- Universal Protocol #601
- In stable patients, providers may monitor and turn off IV lines of isotonic balanced salt solutions without medication or electrolyte additives and flowing at a maintenance rate

BLS Optional

Pulse Oximetry – O₂ administration per Airway Management Protocol #602

ALS Standing Orders

- Establish IV with drip set or saline lock as appropriate.
- Tibial Intraosseous (IO) placement may be utilized when:
 - GCS < 8 in extremis with hemodynamic instability/respiratory distress/cardiac arrest.
AND
 - Unable to establish following attempt(s) or general suspicion of the inability to establish vascular access.
- Attempts to establish vascular access shall be continued even if IO is successful.
- ALS providers can monitor and administer medications through a Pre-existing Vascular Access Device (PVAD). These pre-existing catheters are:
 - Peripheral Inserted Central Catheter (PICC Line)
 - Midline IV Catheters
- PVAD access procedure:
 - Wipe the access port with an alcohol pad to ensure aseptic technique.
 - Ensure that if your line is a dual lumen line that it is the line designated for medication administration (do not use the line utilized for blood, this can be identified by a red colored catheter or stated on the catheter).
 - Attach a 10ml syringe and draw up 5-10ml of fluid out of the line until blood is noted in the syringe. This is to ensure the line is not pre-loaded with heparin.
 - Discard the filled syringe and flush the line with an entire 10cc saline flush. This is to ensure that the line is clean and ready for medication administration.
 - Connect the syringe with the desired medication and administer according to the appropriate formulary. Follow the medication administration with an entire 10cc saline flush.
 - If any sort of cap was used to cover the port, ensure the cap is wiped down and placed back on the port following use.
 - If the patient is needing an infusion from a saline bag, ALS Providers may connect the IV line to the PVAD after the line has been aspirated per instructions listed above. After the infusion is finished, ensure the line is flushed with a 10cc saline flush, and wipe the port with an alcohol pad. If any sort of cap was used to cover the port, ensure the cap is wiped down and placed back on the port following use.

Base Hospital Orders Only

- Pain management if patient becomes conscious after establishing IO access
- Humoral IO Placement
- Access to tunneled/non-tunneled Central Lines for patients in extremis or cardiac arrest. Access of these central lines shall follow the PVAD access procedure listed above.
- As needed

Procedure #710: Vascular Access and Monitoring Draft

Notes

- Peripheral IV placement is preferred to IO placement – including the external jugular.
- Tibial plateau is preferred for IO placement over humoral placement. Humoral IO placement shall only be utilized if the Tibial plateau is unable to be accessed.
- When establishing IV/IO access in a critical patient with a GCS < 8, ALS Providers will take the following into consideration:
 - When assessing a patient's vasculature and determining access to be difficult, an ALS Provider may proceed straight to IO access. Further IV attempts will continue following IO placement.
 - If the first attempt at IV placement fails, an ALS provider may consider placement of an IO prior to a second attempt.
- External Jugular (EJ) access shall always be considered prior to IO placement.



Questions / Discussion

2023 EMCC & EMSA Strategic Goals

1. Goal 1: Identify areas for collaboration with SLO County Behavioral Health in the development of an Alternative Destination policy for medically cleared patients by pre-hospital personnel
2. Goal 2: Identify how mobile community healthcare resources can integrate into the local EMS system to improve access to medical and non-medical, including behavioral health, resources for unhoused people who interact with pre-hospital and hospital emergency department personnel
3. Identify areas for collaboration with SLO County Behavioral Health Drug and Alcohol in the development of protocols for pre-hospital use of Buprenorphine
4. In collaboration with SLO County Fire Chiefs Association implement PulsePoint verified first responder for agencies participating in PulsePoint
5. Develop a guiding set of principles that outlines the ethical principles to govern decisions and behavior that is honest and beneficial to all stakeholders involved- Code of Ethics