

Clinical Advisory Subcommittee of the Emergency Medical Care Committee



Meeting Agenda

10:15 A.M., Tuesday, October 11th, 2022

Location: SLOEMSA Conference Room

2995 McMillan Ave, Ste 178

San Luis Obispo, CA 93401

Members

CHAIR: Dr. Stefan Teitge, *County Medical Society*
 Dr. Heidi Hutchinson, *ED Physician Tenet*
 Dr. Kyle Kelson, *ED Physician Tenet*
 Dr. Lucas Karaelias, *ED Physician Dignity*
 Diane Burkey, *MICNs*
 Rob Jenkins, *Fire Service Paramedics*
 Nate Otter, *Ambulance Paramedics*
 Paul Quinlan, *Fire Service EMTs*
 Lisa Epps, *Air Ambulance*
 Jeffrey Hagins, *Air Ambulance*
 Arneil Rodriguez, *Ambulance EMTs*
 Casey Hidle, *Lead Field Training Officer*
 Tim Benes, *Medical Director Appointee*

Staff

STAFF LIAISON: David Goss, *EMS Coordinator*
 Vince Pierucci, *EMS Division Director*
 Dr. Tom Ronay, *Medical Director*
 Ryan Rosander, *EMS Coordinator*
 Rachel Oakley, *EMS Coordinator*
 Sara Schwall, *EMS Admin Assistant III*

AGENDA	ITEM	LEAD
Call to Order	Introductions	Dr. Teitge
	Public Comment	
Summary Notes	Review of Summary Notes October 11th	
Discussion	Review and Approval of Draft Procedure Revision: <ul style="list-style-type: none"> Procedure #710: Vascular Access and Monitoring 	David
Adjourn	Declaration of Future Agenda Items <ul style="list-style-type: none"> Roundtable on Future Agenda Items 	Dr. Teitge
	Next meeting date – February 16th, 2023 1015 hrs – EMSA Conference Room 2995 McMillan Ave. Suite 178 San Luis Obispo, CA 93401	

Clinical Advisory Subcommittee of the Emergency Medical Care Committee



Meeting Minutes

10:15 A.M., Tuesday October 11th, 2022

Virtual Via Zoom

Members

- CHAIR: Dr. Stefan Teitge, *County Medical Society, ED Physician Dignity*
- Dr. Heidi Hutchinson, *ED Physician Tenet*
- Dr. Kyle Kelson, *ED Physician Tenet*
- Dr. Lucas Karaelias, *ED Physician Dignity*
- Lisa Epps – *Air Ambulance*
- Jeffrey Hagins – *Air Ambulance*
- Rob Jenkins, *Fire Service Paramedics*
- Nate Otter, *Ambulance Paramedics*
- Arneil Rodriguez, *Ambulance EMTs*
- Casey Hidle, *Lead Field Training Officer*
- Diane Burkey RN, *MICNs*
- Tim Benes, *Medical Director Appointee*
- Paul Quinlan, *Fire Service EMTs*

Staff

- STAFF LIAISON: David Goss, *EMS Coordinator*
- Vince Pierucci, *EMS Division Director*
- Tom Ronay, *Medical Director*
- Vacant, *EMS Coordinator*
- Rachel Oakley, *EMS Coordinator*
- Sara Schwall, *EMS Admin Assistant III*

Guests

Doug Weeda, *CHP*

AGENDA	ITEM	LEAD
Call to Order 1015	Introductions	Vince Pierucci
	Public Comment – No public comment	
Summary Notes	No Additions - Finalized	
Discussion	<p>Final Review of Draft Procedures:</p> <ul style="list-style-type: none"> • Supraglottic Airway (SGA) Device #718, Endotracheal Intubation #717, Airway Management #602 • SGA: Option for primary or back-up only. Primary would incorporate Cormack-Lehane Scale and SGA would be utilized if airway is a grade 3 or 4. Back-up only requires two attempts either visually or ETI placement. If attempts fail, SGA would be utilized. • Review of other CA counties utilizing SGAs (LA, Sacramento, Santa Barbara, Santa Clara). • Current SGA data shows 78% of CA counties use SGA as primary and 22% as back-up only. <p>Discussion R. Jenkins – other counties noted SGA is the preferred method for cardiac arrest patients. Could there be an option in the policy for use of SGA with high-performance CPR. H. Hutchinson suggests moving away from the Cormack-Lehane scale to use more simplified guidelines. V. Pierucci – next steps are to take a recommendation from this committee to the operations committee and then to EMCC for approval. If approved, implementation could take place in July.</p>	David Goss

	<p>Further discussion will need to occur regarding SGA use in pediatrics.</p> <p>Introduction to Utilization of Preexisting Vascular Access Devices (PVAD):</p> <ul style="list-style-type: none"> • Currently not permitted for use by ALS providers in SLO county. • Only 42% of counties use PVAD for unstable patients and only 15% permit use in long distance transfers <p>Discussion of use of PVAD in SLO County and what restrictions should be considered. T. Ronay mentioned that most medics are not formally trained on differences in lines and ports.</p> <p>Future Items:</p> <ul style="list-style-type: none"> • Utilization of Preexisting Vascular Access Devices (PVAD) 	
Adjourned – 1115	Next meeting date – Thursday, December 15 th , 2022, 1015 a.m.	



COUNTY OF SAN LUIS OBISPO HEALTH AGENCY

PUBLIC HEALTH DEPARTMENT

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

MEETING DATE	December 15 th , 2022
STAFF CONTACT	David Goss, EMS Coordinator 805.788.2514 dgoss@co.slo.ca.us
SUBJECT	Policy #710: Vascular Access and Monitoring Revision/Addition
SUMMARY	<ul style="list-style-type: none">• PVAD Implementation<ul style="list-style-type: none">- PVAD Review from last CAC.- PVAD data from other counties.- PVAD Implementation draft. • IO Expansion Addition<ul style="list-style-type: none">- IO Option for Primary Expansion.- Humoral IO Expansion. • Discussion and Approval of items listed above.
REVIEWED BY	Vince Pierucci, Dr. Thomas Ronay, SLOEMSA Staff
RECOMMENDED ACTION(S)	Recommended #710 Revision for Clinical Advisory approval. Move to EMCC Agenda for recommended approval.
ATTACHMENT(S)	CAC PowerPoint Presentation, Policy #710 Draft

Emergency Medical Services

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www.slocounty.ca.gov/ems

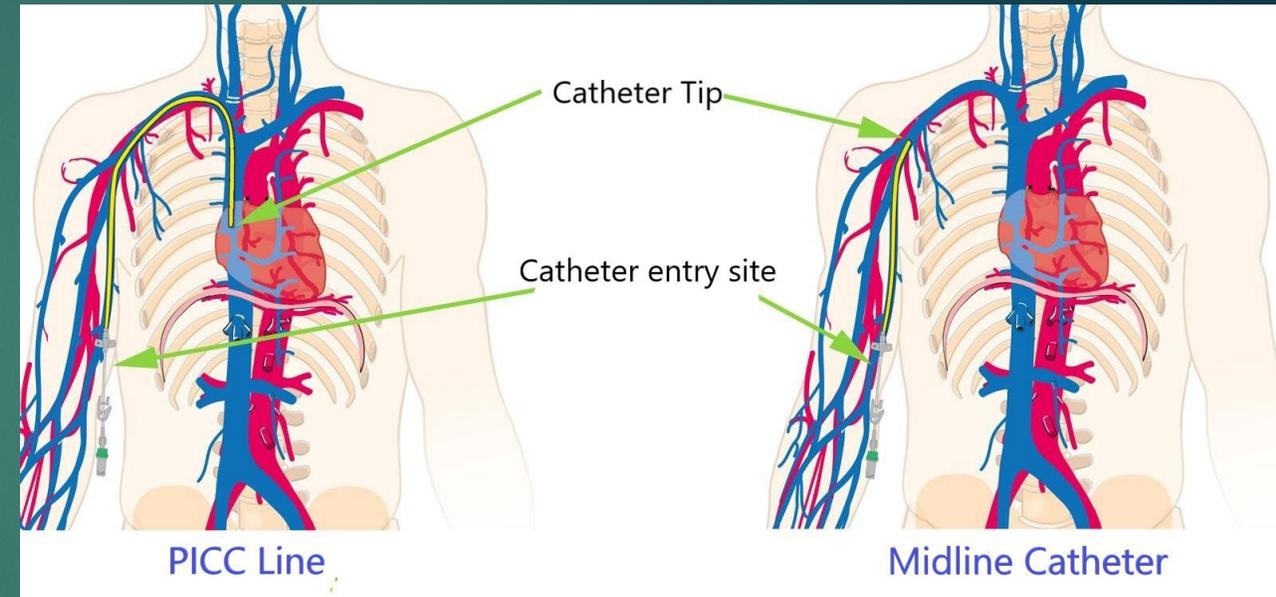


Clinical Advisory Subcommittee

December 15th, 2022

PVAD Utilization Review from Oct 11th

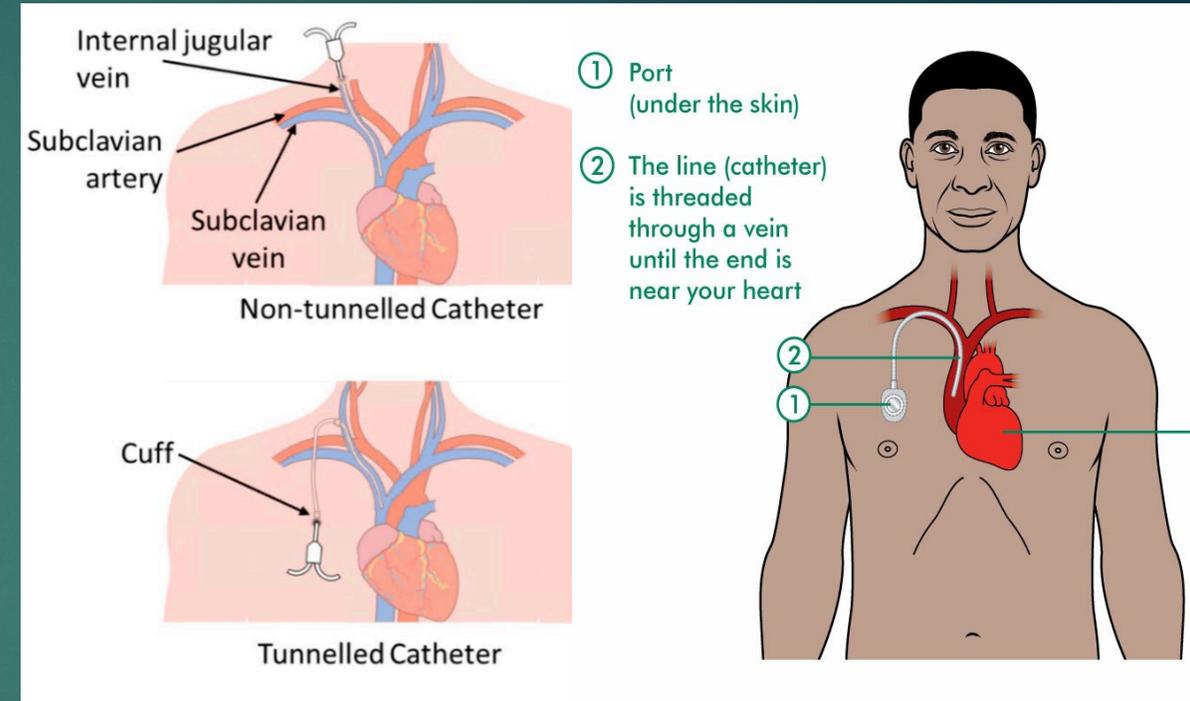
- ▶ Currently, San Luis Obispo County ALS Providers are unable to utilize Pre-Existing Vascular Access Devices (PVAD).
- ▶ PVADs included in other county protocols and procedures include:
 - ▶ Peripheral Inserted Central Catheters (PICC)
 - ▶ Midlines
 - ▶ Tunneled & Non-Tunneled Central Lines
 - ▶ Implanted 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 Review from Oct 11th

▶ Restricted Use County Specifics:

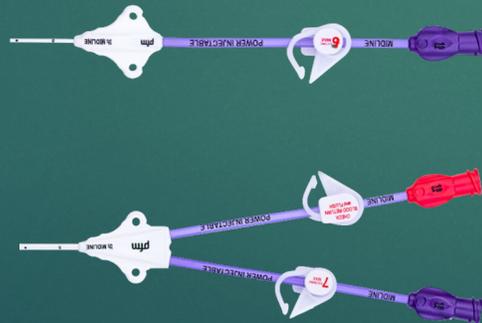
- ▶ PVAD only authorized for unstable, extremis, or cardiac arrest conditions
- ▶ Counties Placing these restrictions are for these devices
 - ▶ PICC: 85%
 - ▶ Mid: 85%
 - ▶ Implanted Port: 71%
 - ▶ Tunneled/Non-Tunneled Central Lines: 100%



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 line 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 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 Revisions and Other 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.

VASCULAR ACCESS AND MONITORING

ADULT

PEDIATRIC (≤34KG)

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 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 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

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?

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 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. 	
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DRAFT