ARIZONA DEPARTMENT OF HEALTH SERVICES
PREPAREDNESS

Bureau Of Emergency Medical Services & Trauma System
150 N. 18th Avenue, Suite 540
Phoenix, Arizona 85007-3248
602-364-3150

Protocols, Medications & Devices (PMD) Standing Committee

Date: November 16, 2017 - **Time**: 12:00 hrs

Location: 150 N. 18th Ave., Conference Rooms 215 A&B, Phoenix, AZ 85007
Via computer with call back: azgov.webex.com, meeting code 802 706 946, password PMD2017
Via telephone: dial 240-454-0879, meeting code 802 706 946 (#)

AGENDA

I. Call to Order – Toni Gross, MD, Chair

II. Roll Call – Shelley Bissell (13 Members, 7 required for quorum)

III. Chairman's Report – Toni Gross, MD
- a. Attendance report (Attachment III. a.)
- b. 2018 Meeting Schedule (Attachment III.b.)
- c. National Clinical Guidelines update (please visit: https://www.nasemso.org/documents/National-Model-EMS-Clinical-Guidelines-2017-Distribution-Version-05Oct2017.pdf)

IV. Bureau Report – Taylor George, Bureau Liaison
- a. ASENA = 2016 Arizona Statewide Emergency Medical Services Needs Assessment – Taylor George (Attachment IV.a.)
- b. Pediatric ketamine review – Taylor George and Alyson Welch
- c. Pediatric Traumatic Cardiac Arrest
- d. DHS Bureau of Epidemiology & Disease Control Services to present TB test background and information

V. Discussion and Action Items
- a. Discuss, amend, approve addition of adding Mantoux tuberculin test interpretation to the EMCT scope of practice (Attachment Table 5.1)
- b. Discuss, amend, approve PMD minutes of July 20 16, 2017 (Attachment V.b.)
- c. Discuss, amend, approve Bylaws (Attachment V.c.)
- d. Discuss and approve creation of a workgroup for TTTG for LVAD patients (Attachment V.d.)
- e. Discuss Non-Opioid Intravenous Pain/Analgesic Medications
- f. Discuss Wound Packing STR
- g. Discuss, amend, approve addition of application of end tidal Co2 monitor to the EMT scope of practice (Attachment Table 5.1)
- h. Discuss, amend, approve Adult Stroke TTTG guidelines (Attachment V.h.)

VI. Agenda items to be considered for the next meeting

VII. Call to the Public

A public body may make an open call to the public during a public meeting, subject to reasonable time, place and manner restrictions, to allow individuals to address the public body on any issue within the jurisdiction of the public body. The Committee may ask staff to review a

matter or may ask that a matter be put on a future agenda. Members of the public body shall not discuss or take legal action on matters raised during an open call to the public unless the matters are properly noticed for discussion and legal action. A.R.S. § 38-431.01(G)

Persons with disabilities may request a reasonable accommodation such as a sign language interpreter, by contacting Angie McNamara, Administrative Specialist, at 602-364-3156; State TDD Number 1-800-367-8939; or Voice Relay Number 711. Request should be made as early as possible to allow time to arrange accommodations.

VIII. Summary of Current Events

a. November 7, 2017 – Arizona Public Safety Broadband Program/FirstNet Regional Forum in Tucson, AZ http://info.mcp911.com/arizona-public-safety-broadband-forum-0
b. November 16 - 17, 2017 - 9th Annual Southwest Trauma & Acute Care Symposium - Talking Stick Resort, Scottsdale, Arizona
c. November 29, 2017 – Arizona Public Safety Broadband Program/FirstNet Regional Forum in Flagstaff, AZ http://info.mcp911.com/arizona-public-safety-broadband-forum-0
d. December 13, 2017 – Arizona Public Safety Broadband Program/FirstNet Regional Forum in Chandler, AZ http://info.mcp911.com/arizona-public-safety-broadband-forum-0
e. December 14, 2017 – Arizona Public Safety Broadband Program/FirstNet Regional Forum in Phoenix, AZ http://info.mcp911.com/arizona-public-safety-broadband-forum-0
f. January 17, 2018 - EMS for the Future 2050 - Los Angeles, California
g. March 1, 2018 - EMS for the Future 2050 - Dallas, Texas
h. March 12- 13, 2018 - Arizona Pediatric Symposium - Flagstaff, Arizona

IX. Next Meeting

March 15, 2018 @ 12:00 hrs, Arizona Department of Health Services, 150 N. 18th Ave, Rooms 215A & B, Phoenix, AZ 85007

X. Adjournment

Committee Attendance Report

Protocols, Medications & Devices Committee

		Present	Tele	Absent
Brian Smith	EMS Council Liaison			
	11/17/2016	☑	☐	☐
	3/16/2017	☑	☐	☐
	7/20/2017	☑	☐	☐
Chester Key	WACEMS Representative			
	7/21/2016	☑	☐	☐
	11/17/2016	☑	☐	☐
	3/16/2017	☑	☐	☐
	7/20/2017	☐	☑	☐
Franco Castro-Marin	STAB Liaison			
	11/19/2015	☐	☐	☑
	3/17/2016	☑	☐	☐
	7/21/2016	☑	☐	☐
	11/17/2016	☑	☐	☐
	3/16/2017	☑	☐	☐
	7/20/2017	☑	☐	☐
Gail Bradley	AEMS Representative			
	11/19/2015	☑	☐	☐
	3/17/2016	☑	☐	☐
	7/21/2016	☑	☐	☐
	11/17/2016	☑	☐	☐
	3/16/2017	☑	☐	☐
	7/20/2017	☑	☐	☐
Garth Gemar	AEMS Representative			
	11/19/2015	☑	☐	☐
	3/17/2016	☑	☐	☐
	7/21/2016	☑	☐	☐
	11/17/2016	☑	☐	☐
	3/16/2017	☑	☐	☐
	7/20/2017	☑	☐	☐
Heather Miller	WACEMS Representative			
	11/19/2015	☑	☐	☐
	3/17/2016	☑	☐	☐
	7/21/2016	☐	☐	☑
	11/17/2016	☑	☐	☐
	3/16/2017	☑	☐	☐
	7/20/2017	☐	☐	☑
Jason Johnson	NAEMS Representative			
	11/19/2015	☑	☐	☐
	3/17/2016	☑	☐	☐
	7/21/2016	☑	☐	☐
	11/17/2016	☑	☐	☐
	3/16/2017	☑	☐	☐
	7/20/2017	☐	☐	☑
Jeffrey Salomone	Trauma Surgeon			
	11/17/2016	☐	☐	☑
	3/16/2017	☐	☐	☑
	7/20/2017	☐	☐	☑

Protocols, Medications & Devices Committee

		Present	Tele	Absent
Josh Gaither	SAEMS Representative			
	11/19/2015	☑	☐	☐
	3/17/2016	☑	☐	☐
	7/21/2016	☑	☐	☐
	11/17/2016	☐	☑	☐
	3/16/2017	☑	☐	☐
	7/20/2017	☐	☑	☐
Neil Gago	SAEMS Representative			
	11/19/2015	☐	☐	☑
	3/17/2016	☑	☐	☐
	7/21/2016	☐	☑	☐
	11/17/2016	☑	☐	☐
	3/16/2017	☐	☑	☐
	7/20/2017	☑	☐	☐
Robert Jarvis	AEMS Representative			
	11/19/2015	☐	☑	☐
	3/17/2016	☑	☐	☐
	7/21/2016	☐	☑	☐
	11/17/2016	☐	☑	☐
	3/16/2017	☐	☐	☑
	7/20/2017	☐	☐	☑
Terence Mason	Vice Chair/AEMS Representative			
	11/19/2015	☑	☐	☐
	3/17/2016	☑	☐	☐
	7/21/2016	☑	☐	☐
	11/17/2016	☑	☐	☐
	3/16/2017	☑	☐	☐
	7/20/2017	☑	☐	☐
Toni Gross	Chair/MDC Liaison			
	11/19/2015	☑	☐	☐
	3/17/2016	☑	☐	☐
	7/21/2016	☑	☐	☐
	11/17/2016	☑	☐	☐
	3/16/2017	☑	☐	☐
	7/20/2017	☑	☐	☐

Bureau of Emergency Medical Services and Trauma System
2018 Statutory/Standing Committee Meetings

Date	Time	Meeting	Conference Room
January 18, 2018	9:00 a.m.	State Trauma Advisory Board	215A & 215B – 2nd Floor 150 Bldg
January 18, 2018	10:30 a.m.	Emergency Medical Services Council	215A & 215B – 2nd Floor 150 Bldg
January 18, 2018	12:00 p.m.	Medical Direction Commission	215A & 215B – 2nd Floor 150 Bldg
March 15, 2018	9:00 a.m.	Trauma and EMS Performance Improvement (TEPI)	215A & 215B – 2nd Floor 150 Bldg
March 15, 2018	10:30 a.m.	Education Committee	215A & 215B – 2nd Floor 150 Bldg
March 15, 2018	12:00 p.m.	Protocols, Medications and Devices Committee	215A & 215B – 2nd Floor 150 Bldg
May 24, 2018	9:00 a.m.	State Trauma Advisory Board	215A & 215B – 2nd Floor 150 Bldg
May 24, 2018	10:30 a.m.	Emergency Medical Services Council	215A & 215B – 2nd Floor 150 Bldg
May 24, 2018	12:00 p.m.	Medical Direction Commission	215A & 215B – 2nd Floor 150 Bldg
July 19, 2018	9:00 a.m.	Trauma and EMS Performance Improvement (TEPI)	215A & 215B – 2nd Floor 150 Bldg
July 19, 2018	10:30 a.m.	Education Committee	215A & 215B – 2nd Floor 150 Bldg
July 19, 2018	12:00 p.m.	Protocols, Medications and Devices Committee	215A & 215B – 2nd Floor 150 Bldg
September 27, 2018	9:00 a.m.	State Trauma Advisory Board	215A & 215B – 2nd Floor 150 Bldg
September 27, 2018	10:30 a.m.	Emergency Medical Services Council	215A & 215B – 2nd Floor 150 Bldg
September 27, 2018	12:00 p.m.	Medical Direction Commission	215A & 215B – 2nd Floor 150 Bldg
November 15, 2018	9:00 a.m.	Trauma and EMS Performance Improvement (TEPI)	215A & 215B – 2nd Floor 150 Bldg
November 15, 2018	10:30 a.m.	Education Committee	215A & 215B – 2nd Floor 150 Bldg
November 15, 2018	12:00 p.m.	Protocols, Medications and Devices Committee	215A & 215B – 2nd Floor 150 Bldg

DISCLAIMER: "Meeting schedule subject to change upon the request of the Governor's Office or the Office of the Director. Should this occur, the Bureau will make all reasonable efforts to contact the affected members as soon as feasible."

9/28/2017

Attachment IV.a.

ABSTRACT

Emergency Medical Services (EMS) is an institution and product of public health, health care, and public safety that is chopped and scattered across multiple jurisdictional deployment methodologies throughout Arizona. To fully-asses the EMS needs of the state, those jurisdictions are considered as a whole; for it is the whole that makes a system, and a system is what truly impacts patient outcomes. Evaluating the "whole" is the genesis and driver of the 2016 Arizona Statewide EMS Needs Assessment (ASENA).

The primary objective of ASENA is to establish a current "snap-shot" of EMS in the state while simultaneously identifying needs and/or areas that can be targeted for further analysis and/or improvement as part of Population Health Management and Emergency Medical Services Integration under the AZ Flex Grant funded by the U.S. Health Resources and Services Administration (HRSA). In addition, the secondary objective of ASENA is to compare and contrast this current "snap-shot" with data obtained in a more narrow needs assessment conducted in 2001, allowing comparison of changes in Arizona's critical access EMS system over 15 years.

To accomplish this, a 105-question needs assessment survey tool was developed and distributed to EMS agencies throughout the state. The fully-vetted survey tool collected information pertaining to sixteen core functional sections. Eighty-six agencies fully-completed the needs assessment survey tool, with respondents evenly distributed across the state's four EMS coordinating regions and representative of the various service-delivery methodologies. The combined service areas of the respondents cover over 85% of the state's population.

Arizona's statewide EMS system is well organized and positioned to deliver advanced levels of prehospital care for the vast majority of its citizens and visitors, with some variation between urban and rural regions. Key needs identified relate to: patient care reporting between EMS providers, emergency departments and receiving hospitals; quality assurance activities; education and skills training programs; dispatch system capabilities; mass casualty and public health preparedness; equipment and supplies; and more robust use of data and analyses to inform continuous EMS system improvement.

Table 5.1. Arizona Scope of Practice Skills

KEY:
✓ = Arizona Scope of Practice skill
STR = STR skill
* = Already intubated

	Airway/Ventilation/Oxygenation	EMT	AEMT	EMT-I(99)	Paramedic
	Airway - esophageal	STR	✓	✓	✓
	Airway - supraglottic	STR	✓	✓	✓
	Airway - nasal	✓	✓	✓	✓
	Airway - oral	✓	✓	✓	✓
	Automated transport ventilator	STR	STR	✓	✓
	Bag-valve-mask (BVM)	✓	✓	✓	✓
	BiPAP/CPAP				✓
	Chest decompression - needle			✓	✓
	Chest tube placement - assist only				STR
	Chest tube monitoring and management				STR
	Cricoid pressure (Sellick's maneuver)	✓	✓	✓	✓
	Cricothyrotomy- needle			STR	✓
	Cricothyrotomy- percutaneous			STR	✓
	Cricothyrotomy- surgical			STR	STR
	Demand valve- manually triggered ventilation	✓	✓	✓	✓
	End tidal CO2 monitoring/capnography			✓	✓
	Gastric decompression - NG tube			✓	✓
	Gastric decompression - OG tube			✓	✓
	Head-tilt chin lift	✓	✓	✓	✓
	Intubation - nasotracheal			STR	✓
	Intubation - orotracheal	STR	STR	✓	✓
	Jaw-thrust	✓	✓	✓	✓
	Jaw-thrust – modified (trauma)	✓	✓	✓	✓
	Medication Assisted Intubation (paralytics)				STR
	Mouth-to-barrier	✓	✓	✓	✓
	Mouth-to-mask	✓	✓	✓	✓
	Mouth-to-mouth	✓	✓	✓	✓
	Mouth-to-nose	✓	✓	✓	✓
	Mouth-to-stoma	✓	✓	✓	✓
	Obstruction - direct laryngoscopy			✓	✓
	Obstruction - manual	✓	✓	✓	✓

	Oxygen therapy - humidifiers	✓	✓	✓	✓
	Oxygen therapy - nasal cannula	✓	✓	✓	✓
	Oxygen therapy - non-rebreather mask	✓	✓	✓	✓
	Oxygen therapy - partial rebreather mask	✓	✓	✓	✓
	Oxygen therapy - simple face mask	✓	✓	✓	✓
	Oxygen therapy - venturi mask	✓	✓	✓	✓
	PEEP - therapeutic			✓	✓
	Pulse oximetry	✓	✓	✓	✓
	Suctioning - upper airway	✓	✓	✓	✓
	Suctioning - tracheobronchial		✓*	✓	✓
Cardiovascular/Circulation		**EMT**	**AEMT**	**EMT-I (99)**	**Paramedic**
	Cardiac monitoring - multiple lead (interpretive)			✓	✓
	Cardiac monitoring - single lead (interpretive)			✓	✓
	Cardiac - multiple lead acquisition (non-interpretive)	STR	STR	✓	✓
	Cardiopulmonary resuscitation	✓	✓	✓	✓
	Cardioversion - electrical			✓	✓
	Carotid massage – (≤17 years)			STR	STR
	Defibrillation - automatic/semi-automatic	✓	✓	✓	✓
	Defibrillation - manual			✓	✓
	Hemorrhage control - direct pressure	✓	✓	✓	✓
	Hemorrhage control - tourniquet	✓	✓	✓	✓
	Internal; cardiac pacing - monitoring only			✓	✓
	Mechanical CPR device	STR	STR	STR	STR
	Transcutaneous pacing - manual			✓	✓
Immobilization		**EMT**	**AEMT**	**EMT-I (99)**	**Paramedic**
	Spinal immobilization - cervical collar	✓	✓	✓	✓
	Spinal immobilization - long board	✓	✓	✓	✓
	Spinal immobilization - manual	✓	✓	✓	✓
	Spinal immobilization - seated patient (KED, etc.)	✓	✓	✓	✓
	Spinal immobilization - rapid manual extrication	✓	✓	✓	✓
	Extremity stabilization - manual	✓	✓	✓	✓
	Extremity splinting	✓	✓	✓	✓
	Splint- traction	✓	✓	✓	✓
	Mechanical patient restraint	✓	✓	✓	✓
	Emergency moves for endangered patients	✓	✓	✓	✓
Medication administration - routes		**EMT**	**AEMT**	**EMT-I (99)**	**Paramedic**

	Aerosolized/nebulized (beta agonist)	STR	✓	✓	✓
	Assisting patient with his/her own prescribed medications (aerosolized/nebulized)	✓	✓	✓	✓
	Assisting patient with his/her own prescribed medications (ASA/Nitro)	✓	✓	✓	✓
	Assisting patient with his/her own prescribed medications (auto-injector)	✓	✓	✓	✓
	Assisting patient with his/her own prescribed medications (hydrocortisone sodium succinate)		✓	✓	✓
	Auto-injector	STR	✓	✓	✓
	Buccal	STR	✓	✓	✓
	Endotracheal tube			✓	✓
	Inhaled self-administered (nitrous oxide)		✓	✓	✓
	Intradermal			STR	STR
	Intramuscular (including patient-assisted hydrocortisone)		✓	✓	✓
	Intranasal	STR	✓	✓	✓
	Intravenous push		✓	✓	✓
	Intravenous piggyback			✓	✓
	Intraosseous		STR	✓	✓
	Nasogastric				✓
	Oral	✓	✓	✓	✓
	Rectal		STR	✓	✓
	Small volume nebulizer	STR	✓	✓	✓
	Subcutaneous		✓	✓	✓
	Sublingual		✓	✓	✓
IV initiation/maintenance fluids		**EMT**	**AEMT**	**EMT-I (99)**	**Paramedic**
	Access indwelling catheters and implanted central IV ports				✓
	Central line - monitoring				✓
	Intraosseous - initiation		✓	✓	✓
	Intravenous access		✓	✓	✓
	Intravenous initiation - peripheral	STR	✓	✓	✓
	Intravenous- maintenance of non-medicated IV fluids or capped access	✓	✓	✓	✓
	Intravenous- maintenance of medicated IV fluids			✓	✓
	Umbilical initiation				STR
Miscellaneous		**EMT**	**AEMT**	**EMT-I (99)**	**Paramedic**
	Assisted delivery (childbirth)	✓	✓	✓	✓
	Assisted complicated delivery (childbirth)	✓	✓	✓	✓
	Blood glucose monitoring	✓	✓	✓	✓
	Blood pressure- automated	✓	✓	✓	✓

	Blood pressure- manual	✓	✓	✓	✓
	Eye irrigation	✓	✓	✓	✓
	Eye irrigation (Morgan lens)				STR
	Thrombolytic therapy- initiation				STR
	Urinary catheterization				STR
	Venous blood sampling			✓	✓
	Blood chemistry analysis				STR
	Use/monitoring of agents specified in Table 5.4 during interfacility transports			STR	STR
	Use/monitoring of infusion pump for agent administration during interfacility transports			STR	STR

Attachment V.b.

PROTOCOLS, MEDICATIONS & DEVICES (PMD) STANDING COMMITTEE

July 20, 2017 - 12:00 PM
150 N. 18th Ave., Conference Rooms 215 A&B

MINUTES DRAFT

I. Call to Order – Toni Gross, MD, Chair
- Dr. Gross called the meeting to order at 12:00pm

II. Roll Call – (13 Members, 7 required for quorum)
- A quorum was present

Members Present		**Members Absent**
Toni Gross, MD	Garth Gemar, MD	Robert Jarvis
Brian Smith	Josh Gaither, MD*	Jason Johnson, MD
Chester Key*	Neil Gago	Jeffrey Salomone, MD
Franco Castro-Marin, MD	Terence Mason, RN	Heather Miller, RN
Gail Bradley, MD		

*indicates member participated telephonically

III. Chairman's Report – Toni Gross, MD

a. Attendance report
- As presented to members

b. Introduction Taylor George, Services Section Chief
- Terry Mullins, Bureau Chief provided background and credentials of Taylor; as well as described his role in the reorganization of the Bureau. Taylor provided additional information, including his role as oversight of Epidemiological Data and Quality Assurance, Strategic Planning and Recognition Programs, Fellowship and Internship Programs, Statutory and Standing Committees, and Time Sensitive Illness and Injury, among other duties.
- Chief Mullins introduces Hugh Fox, the Bureau's new Enforcement Manager. Hugh came to us from the Apollo Education Group, the parent company of the University of Phoenix where he was the managing senior investigator of the Ethics & Compliance Program. He has a Masters in Administrative Science from Fairleigh Dickson University in Trenton, New Jersey; and Bachelors in Criminal Justice from Bellevue University in Bellevue, Nebraska. He is a Certified Fraud Examiner, Computer Hacking Forensic Investigator, and a Certified Inspector General Investigator. He is also a member of the American College of Forensic Examiners Institute and has over 20 years of law enforcement investigative experience with such organizations as the Bergen County Prosecutors Office, City of New Orleans, Office of Inspector General in Washington DC and a Supervisory Special Agent with the Washington DC Metro Transit Authority.

c. Department request to open the Adult Stroke TTTG pursuant to new rules
- Chief Mullins states that during the pass session there was updates to our 600 rules. The Bureau of EMS and Trauma along with the EMS Council have a relatively small role assigned to it. One is that we now work with a specific list of organization to periodically update the stroke rules. To take into account new treatment paradigm with new information. Including the potential need for education on emergent large vessel occlusions. Once the rule passed the people who are interested in stroke become very hopeful about making certain that we take them serious. To be place on next agenda as discussion item

d. Update from March MDC meeting
- Dr. Gross stated that everything they submitted from the last PMD meeting was approved. The last of the TTTG toxicology were approved, the drug profile change to the Ketamine that established a maximum dose, then change to the Diphenhydramine adding the oral route.

IV. Bureau Report – Noreen

a. Rules update
- Noreen stated that the Trauma Rules packet is ready to be presented to the Regulatory Council on September 15, 2017. If approved by the Council they will go into effect January 1, 2018.

b. FDA medication expiration extension update – Ithan Yanofsky
   - The FDA has put out a list of extended expiration dates on medication that has expired. The information has been updated on July 19, 2017 with a list of additional bar codes and lots. The plan is to update guidance document 104 that the Bureau has put out regarding drug shortages in the past. We will try to accommodate the FDA guidance in some way to ensure that crews are informed of which drugs they are able to keep in the drug box that have expiration dated that are past the current date.

c. Governor's Opioid Mandate – Taylor George
   - Taylor stated that on June 5, 2017 Governor Doug Ducey signed a Declaration of Public Health Emergency Response to Opioid Crisis in Arizona. 790 people died of confirmed opioid overdose in 2016. Subsequently to that he issued an executive order that mandated the reporting of suspected opioid overdose and opioids deaths and naloxone administrations by all EMS personnel and Law Enforcement among many others. We implemented a real time reporting system that tied into AZ Piers which all agencies should report to. There is a FAQ's in the Bureau's website that answers many questions regarding opioid incidents. Dr. Christ, ADHS Director and Terry Mullins, Bureau Chief (Bureau of EMSTS) signed a standing order for **ALL** EMS agencies in the state, including BLS agencies who do not have a medical director, if they met the training requirements outlined in the Arizona Revised Statute's they may purchase, carry and administer Naloxone to suspected overdose patients. From June 15th to date there have been 699 reported suspected overdose related cases by EMS in the state of Arizona. 443 of those have been transported to a hospital, 47 pronounced dead on scene, and 43 refusals, 4 transported by law enforcement to jail and 2 that fled the scene. 144 of these cases have been fully linked embedded with hospital sight data.

d. Bylaw review – Taylor George
   - Taylor notified the members that it is time for bylaw review and possible update (required to be performed every three years), and that this must be achieved by end of December 2017. Taylor mentioned that a workgroup will be established and a proposal for bylaws will be presented at next PMD meeting.

V. Discussion and Action Items

a. Discuss, amend, approve, PMD minutes of March 16, 2017
   - Brian Smith made a motion to approve the minutes, second by Terence Mason. Discussion ensues. Dr Gross asked for a motion to approve the minutes with 3 friendly amendments. **Minutes are approved**

b. Discuss, amend, approve addition of wound packing to Table 5.1 Arizona Scope of Practice Skills - Dr. Joshua Zeidler
   - Dr. Zeidler asked the committee to consider adding wound packing to the scope of practice for paramedics as an STR skill. Wound packing is included in multiple national programs put out by the NAEMT, some tactical emergency casualty care; tactical combat casualty care program is included. "Stop the Bleed" Program includes the packing. It is turning into a national standard and he asks for Arizona to incorporate it.
   - Dr. Gross asks for a motion to discuss, Dr. Bradley makes a motion and Terence Mason second the motion. Discussion ensues. Dr. Gross asked if there was anyone who would offer up that it should be in everyone's scope of practice without special training, that it should be basic training for every one?" Taylor responded by stating that there should be a caveat: Not included in initial Paramedic and EMT training. Motion to add the wound packing as an STR only to the Table 5.1 Arizona Scope of Practice. **Motion passes**

c. Discuss addition of finger thoracotomy to Table 5.1 Arizona Scope of Practice Skills - Jenn Killeen
   - Speaker not available. **Tabled to the next meeting**

d. Discuss adding Mantoux tuberculin test interpretation to the EMCT scope of practice
   - Dr. Gross stated there is not a lot of support of adding Mantoux tuberculin test interpretation to the EMCT scope of practice table. Medical Direction Commission is more than likely not entertain this and it will not be moved any further. Discussion ensued. Discussion ended with recommendation that Dr. Gross and Taylor George engage Bureau of Epidemiology to discuss TB screening recommendations for the EMS workforce.

e. Discuss creation of a TTTG for LVAD patients – BUMC LVAD program - Sarah Matushinec, RN
   - Sarah Matushinec, RN (Destination Therapy Program, Banner University Medical Center), Dr. Holland, MD, Heart Failure Institute at Banner. The number of LVAD patients in the state of Arizona is approximately 100 to 150 and it fluctuates while patients are waiting for transplants versus those who are living years on the devices. We do have a lot of LVAD visitors that come to our state, some of which we know about and of we don't. The patients require some unique assessment abilities; they don't typically have

a palpable pulse; which means we can't check blood pressures in our usual manner, we need to assess sometimes there circulation in other ways and determine if there pumps are running, that could lead us down to different paths of treatment. Discussion ensues. Dr. Gross stated that what needs to be done is to bring the Education and PMD committees together and have a meeting to begin the process to create continuing education (required by National Registry) and a TTTG (Triage, Treatment, Guideline).

f. Discuss Dopamine in TTTGs – Toni Gross, MD
   - Dr. Gross asked the committee "Do we want to leave the Dopamine in the TTTG's or remove it?" Discussion ensues. No action taken.

VI. Agenda items to be considered for the next meeting
   - Discuss TTTG Stroke Rules
   - Discuss addition of finger thoracotomy to Table 5.1 Arizona SOPS
   - Discuss By Laws
   - Discuss creation of a TTTG for LVAD patients
   - Creating a TTTG for sepsis
   - NASEMSO guidelines have been changed

VII. Call to the Public:
   - No response from the public

VIII. Summary of Current Events

   a. August 3 - 4, 2017 - 28th Southwest Regional Trauma Conference, Tucson, AZ
   b. August 17 - 18, 2017 - Trauma Conference International, Live-Simulcast, In-Person (Toronto, Canada) - https://traumacon.org/

IX. Next Meetings: November 26, 2017 @ 12:00 PM, Rooms 215A&B, 150 N. 18th Ave.

X. Adjourn
   - Meeting was adjourned at 1:20pm

BYLAWS

Standing Committee Title: Protocols, Medications and Devices Standing Committee
Standing Committee Acronym: PMD

Article I: Purpose

1. The Protocols, Medications and Devices Standing Committee assists the Statutory Councils (State Trauma Advisory Board, Emergency Medical Services Council and Medical Direction Commission) in carrying out the duties described in Arizona Revised Statutes, Title 36, Chapter 21.1, Emergency Medical Services, by making recommendations for adoption by the Director, Arizona Department of Health Services. Duties include:
2. Review Drug Box Procedures/Drug lists annually.
3. Publish, as necessary, agents list approved for prehospital use emphasizing agent, minimum supply.
4. Develop and distribute information profiles for each agent approved for prehospital use.
5. Review annually all agents approved for IV monitoring by certification levels on interfacility transports.
6. Review requests for new therapeutic agents, care devices, and pilot projects, as requested by the Statutory Councils and make recommendations to the Statutory Councils.
7. Recommend medical standards for non-physician prehospital treatment and prehospital triage of patients requiring emergency medical services.
8. Recommend standards pertaining to prehospital communication for direct and indirect medical control.
9. Recommend standards for prehospital standing orders for treatment and triage.
10. Recommend treatment guidelines approved for prehospital use.

Article II: Committee Liaison

The intent of this article is to provide for the timely and appropriate exchange of information between the Standing Committee and the three Statutory Councils. All Standing Committees shall, therefore, have a minimum of one member from each of the three Statutory Councils in their membership to serve as liaisons.

The Chief of the Bureau of Emergency Medical Services and Trauma System, or designee, shall also attend and support the timely and appropriate exchange of information between the Standing Committee and the three Statutory Councils and to provide staff support and technical support to the Standing Committee including notification of pending actions or issues which may be within the scope of the Standing Committees' purpose.

Article III: Members

Section 1: Committee Membership
Membership of the PMD Standing Committee shall consist of no more than 13 members from a diverse representation of individuals from throughout the state. There will be Standing Committee members selected from each of the four EMS Regions. The Medical Director, Standing Committee

Chair and Bureau Chief, under the advice of the Bureau Liaison, shall solicit and appoint members. The following members are required:

- A member of the State Trauma Advisory Board
- A member of the Medical Direction Commission
- A member of the Emergency Medical Services Council
- A trauma surgeon

Section 2: Terms of Membership
There is no specific term of membership, however, the Medical Director, Standing Committee Chair and Bureau Chief, under the advice of the Bureau Liaison, shall periodically review member attendance (Article V, Section 4) and if necessary, remove a member due to failure to meet the attendance requirement.

Section 3: Compensation
Standing Committee members shall not be eligible to receive compensation.

Section 4: Voting
Each member of the Standing Committee shall be entitled to one vote when present in person or via electronic media at a meeting of the Standing Committee. No individual member shall cast more than one vote on the Standing Committee. Voting by proxy and/or alternate voter shall not be permitted.

Section 5: Vacancies
Standing Committee vacancies shall be filled through appointment by the Medical Director, under the advice of the Standing Committee Chair, Bureau Chief and the Bureau Liaison, with consideration given to individuals with expertise consistent with the Standing Committee purpose. The Bureau Liaison shall be responsible for informing the Medical Director, Standing Committee Chair and Bureau Chief of vacancies.

Article IV: Officers

Chair: The Standing Committee Chairs shall be chosen as follows:

- Education Standing Committee – EMS Council
- Protocols Medications and Devices Standing Committee – MDC
- Trauma and EMS Performance Improvement Standing Committee – STAB

Vice Chair: The Vice Chair of the Standing Committee shall be filled through appointment by the Medical Director, Standing Committee Chair and Bureau Chief, under the advice of the Bureau Liaison, and shall serve as the Standing Committee Chair in his/her absence. On resignation a new Vice Chair shall be selected by the next regular meeting.

Article V: Meetings

Section 1: Regular Meetings
The regular meetings of the Standing Committee shall be held, at a minimum, three times per year at a time and place designated by the Chair and Bureau.

Section 2: Special Meetings
Special meetings and/or telephone meetings may be called by the Chair in agreement with the Bureau Liaison, or by written request of five (5) members of the Standing Committee and must comply with the Open Meeting laws.

Section 3: Notice of Meetings
Standing Committee members shall be notified ten (10) days in advance of all Standing Committee meetings. A yearly schedule of regular Standing Committee meetings shall be made available to Standing Committee members in January. Minutes of the previous meeting and an agenda for the upcoming meeting should be available to members ten (10) days in advance of the Standing Committee meeting.

Section 4: Attendance
Regular attendance is expected of all Committee members. If a member fails to attend two (2) consecutive meetings, an inquiry shall be made by the Bureau Liaison of that member concerning their continued participation on the Board, and the results of the inquiry shall be forwarded to the Medical Director, Committee Chair, and Bureau Chief for a decision on the member's status.

Section 5: Quorum
A quorum consists of a simple majority (50% plus one) of the entire membership, whether the position is filled or vacant, present in person or via electronic media.

Article VI: Parliamentary Authority

The rules contained in the current edition of Robert's Rules of Order Newly Revised shall govern the Standing Committee in all cases to which they are applicable and in which they are not inconsistent with these bylaws.

Article VII: Open Meeting Law

The Arizona Open Meeting Law (A.R. S. 38-431: 38-431.09) shall apply to meetings of the Standing Committee.

Article VIII: Minutes

Minutes of each Standing Committee Meeting will be recorded and the Standing Committee shall have the rights of review and correction of minutes of all meetings before publication and distribution.

Article IX: Motions

All motions passed by this Standing Committee will be forwarded to the appropriate Statutory Council(s) for review and/or action at their next regularly scheduled meeting.

Article X: Amendments

These bylaws can be amended at any regular meeting of the Standing Committee by a majority vote of the entire membership, provided that the amendment has been submitted to the members in written form ten (10) days in advance of the meeting. Bylaws will be reviewed, at a minimum, every three (3) years.

Article XI: Workgroups

The committee may authorize small workgroups that are necessary to review, develop or amend any subject contained in these bylaws when such review, development or amendment would not be of a benefit to the committee as a whole, but rather having the workgroup meet and provide a detailed report and recommendation to the committee at its next regular meeting.

Approved: 4/97
Revised and Approved by MDC: 3/27/98, 3/26/99, 7/23/99, 1/25/02, 1/24/03
Revised and Approved by PMD: 2/16/06
Revised and Approved by MDC: 4/21/06
Revised and Approved by PMD: 11/18/10, 3/20/14, 7/16/15

Implantable Ventricular Assist Devices

Aliases

Ventricular assist device (VAD), left ventricular assist device (LVAD), right ventricular assist device (RVAD), biventricular assist device (BiVAD)

Patient Care Goals

1. Rapid identification of, and interventions for, cardiovascular compromise in patients with VADs
2. Rapid identification of, and interventions for VAD-related malfunctions or complications

Patient Presentation

Inclusion Criteria

1. Adult patients that have had an implantable ventricular assist device (VAD), including a left ventricular assist device (LVAD), right ventricular assist device (RVAD), or biventricular-assist device (BiVAD), and have symptoms of cardiovascular compromise
2. Patients with VADs that are in cardiac arrest
3. Patients with VADs that are experiencing a medical or injury-related event not involving the cardiovascular system or VAD malfunction

Exclusion Criteria

Adult patients who do not have a VAD in place

Patient Management

Assessment

1. Assess for possible pump malfunction
    a. Assess for alarms
    b. Auscultate for pump sound “hum”
    c. Signs of hypoperfusion including pallor, diaphoresis, altered mental status
2. If the VAD pump has malfunctioned:
    a. Utilize available resources to troubleshoot potential VAD malfunctions and to determine appropriate corrective actions to restore normal VAD function:
        i. Contact the patient’s VAD-trained companion, if available
        ii. Contact the patient’s VAD coordinator, using the phone number on the device
        iii. Check all the connections to system controller
        iv. Change VAD batteries, and/or change system controller if indicated
        v. Have patient stop all activity and assess for patient tolerance
        vi. Follow appropriate cardiovascular condition-specific protocol(s) as indicated

Treatment and Interventions

1. Manage airway as indicated
2. Cardiac monitoring
3. IV access
4. Acquire 12-lead EKG
5. If patient is experiencing VAD-related complications or cardiovascular problems, expedite transport to the medical facility where VAD was placed if patient’s clinical condition and time allows

6. If patient has a functioning VAD and is experiencing a non-cardiovascular-related problem, transport to a facility that is appropriate for the patient's main presenting problem without manipulating the device
7. If patient has a functioning VAD and is hypoperfusing:
    a. Administer IV fluids (30 mL/kg isotonic fluid; maximum of 1 liter) over less than 15 minutes, using a push-pull method of drawing up the fluid in a syringe and pushing it through the IV
    b. May repeat up to 3 times based on patient's condition and clinical impression for a total cumulative dose not exceed 3 L
8. If patient is in full cardiac arrest:
    a. CPR should not be performed if there is any evidence the pump is still functioning, the decision whether to perform CPR should be made based upon best clinical judgment in consultation with the patient's VAD-trained companion and the VAD coordinator (or direct medical oversight if VAD coordinator unavailable)
    b. CPR may be initiated only where:
        i. You have confirmed the pump has stopped and troubleshooting efforts to restart it have failed, and
        ii. The patient is unresponsive and has no detectable signs of life

Notes/Educational Pearls

1. You do not need to disconnect the controller or batteries in order to:
    a. Defibrillate or cardiovert
    b. Acquire a 12-lead EKG
2. Automatic non-invasive cuff blood pressures may be difficult to obtain due to the narrow pulse pressure created by the continuous flow pump
3. Flow though many VAD devices is not pulsatile and patients may not have a palpable pulse or accurate pulse oximetry
4. The blood pressure, if measurable, may not be an accurate measure of perfusion.
5. Ventricular fibrillation, ventricular tachycardia, or asystole/PEA may be the patient's "normal" underlying rhythm. Evaluate clinical condition and provide care in consultation with VAD coordinator
6. The patient's travel bag should accompany them at all times with back-up controller and spare batteries
7. If feasible, bring the patient's power module, cable, and display module to the hospital
8. All patients should carry a spare pump controller with them
9. The most common cause for VAD alarms are low batteries or battery failures
10. Although automatic non-invasive blood pressure cuffs are often ineffective in measuring systolic and diastolic pressure, if they do obtain a measurement, the MAP is usually accurate
11. Other VAD complications:
    a. Infection
    b. Stroke/TIA
    c. Bleeding
    d. Arrhythmias
    e. Cardiac tamponade
    f. CHF
    g. Aortic insufficiency

Quality Improvement

Associated NEMSIS Protocol(s) (eProtocol.01)

- 9914069 – General-Medical Device Malfunction
- 9914065 – General-Indwelling Medical Devices/Equipment

Key Documentation Elements

- Information gained from the VAD control box indicating any specific device malfunctions
- Interventions performed to restore a malfunctioning VAD to normal function
- Time of notification to and instructions from VAD-trained companion and/or VAD coordinator

Performance Measures

- Identify and mitigate any correctable VAD malfunctions
- Perform CPR for patients in cardiac arrest when indicated

References

1. Garg S, Ayers CR, Fitzsimmons C, et al. In-hospital cardiopulmonary arrests in patients with left ventricular assist devices. *J Card Fail*. 2014;20(12):899-904.
2. Mabvuure NT, Rodrigues JN. External cardiac compression during cardiopulmonary resuscitation with left ventricular assist devices. *Interact Cardiovasc Thorac Surg*. 2014;19(2):286-9.
3. Mechem M. Prehospital assessment and management of patients with ventricular-assist devices. *Prehosp Emerg Care*. 2013;17(2):223-9.
4. Shinar Z, Bellezzo J, Stahovich M, Cheskes S, Chillcott S, Dembitsky W. Chest compressions may be safe in arresting patients with left ventricular assist devices (LVADs). *Resuscitation.* 2014;85(5):702-4.

Revision Date

September 8, 2017

Suspected Stroke/Transient Ischemic Attack: Adult & Pediatric

Presentation could include:
1. Neurologic deficit such as facial droop, localized weakness, gait disturbance, slurred speech, altered mental status.
2. Hemiparesis or hemiplegia.
3. Dysconjugate gaze, forced or crossed gaze.
4. Severe headache, neck pain/stiffness, difficulty seeing.

If glucose < 60, refer to **Hypoglycemia/Hyperglycemia** guideline.
If trauma and GCS < 14, refer to **Traumatic Brain Injury** and **General Trauma Management** guidelines.
If seizure activity present, refer to **Seizures** guideline.

EMT

- Use a validated prehospital stroke scale
- ABCDE assessment, vital signs
- Check blood glucose level
- Note on physical exam:
  - SBP > 185 or DBP > 110
  - Evidence of active bleeding
- Obtain history:
  - When was patient "last seen normal"?
  - Previous cerebral hemorrhage
  - Current anticoagulant therapy
  - Head trauma or prior stroke in last 3 months
  - Symptoms of subarachnoid hemorrhage
  - Arterial puncture at noncompressible site in last 7 days
  - History of previous intracranial hemorrhage
  - Seizure at onset
  - Major surgery or serious trauma within past 14 days
  - GI or urinary tract hemorrhage within past 21 days
  - Acute MI within last 3 months
- Neurologic status assessment
- Provide oxygen only if O_2 saturation < 94%
- Ensure airway is patent, avoid aspiration
  - Elevate head of stretcher 15-30 degrees if SBP > 100 mm Hg
- Protect paralyzed limbs from injury

- Although rare, pediatric patients can have strokes
  - Higher risk in sickle cell anemia patients
- Stroke scales are not validated for pediatric patients
- Per local protocols, call receiving facility or base hospital to ensure appropriate destination decision

AEMT

- Avoid multiple IV attempts

EMT-I/Paramedic

- Place on cardiac monitor
- Perform 12-lead ECG, where available
- Do not treat hypertension

- Transport to ~~nearest stroke center or stroke-capable facility~~ Acute Stroke Ready Hospital, Primary Stroke Center, or Comprehensive Stroke Center per local protocols
  - *or*
- EMS may transport a patient to a healthcare institution participating in a recognized stroke telemedicine program if approved by local protocol/medical direction
- Notify receiving facility as soon as possible

Last revised September 15, 2016