Regional Performance Improvement and Trauma Committee
Northern Virginia EMS Council
September 7, 2016
Approved 12-6-2016

Those present were:
Lee Gibson, City of Manassas Park Fire and Rescue, l.gibson@manassasparkva.gov
Maggie Griffen, Inova Fairfax Hospital, margaret.griffen@inova.org
Brian Hricik, Alexandria Fire Department, brian.hricik@alexandriava.gov
Kate Keller, Arlington County Fire Department, kekeller@arlingtonva.us
Tracy Lane, Loudoun County Fire & Rescue, tracy.lane@loudoun.gov
Michelle Ludeman, Northern Virginia EMS Council, michelle@vaems.org
Lisa McAllister, PHI AirCare, lmcallister@phihelico.com
Keith Morrison, Reston Hospital Center, keith.morrison@hcahealthcare.com
Melinda Myers, Inova Fairfax Hospital, melinda.myers@inova.org
Marcia Pescitani, Northern Virginia EMS Council, marcia@vaems.org
Babak Sarani, George Washington Hospital, bsarani@mfa.gwu.edu
Brenda Snyder, Reston Hospital Center, brenda.snyder@hcahealthcare.com
Chris Wanka, Metro. Washington Airports Authority, christopher.wanka@mwaa.com
Scott Weir, Fairfax County Fire and Rescue OMD, Committee Co-Chair, weirsd@comcast.net
Ray Whatley, Alexandria Fire Department, ray.whatley@alexandriava.gov
Jamie Wolfin, StoneSprings Hospital, jaime.wolfin@hcahealthcare.com

The PI & Trauma Committee meeting was called to order at 9:00 am by Dr. Scott Weir.

The June 1, 2016 meeting minutes were distributed prior to today's meeting. A motion was made and unanimously approved to accept the minutes from the June 1, 2016 meeting.

Dr. Weir led the group as each participant introduced themselves and shared their affiliations. The topics for today's meeting was hospice and palliative care and integration with other healthcare partners, chest trauma and spinal cord trauma.

Dr. Weir covered the Medical topic first, hospice and palliative care as he had to leave early. Alexandria Fire gave their report first. They do not have any protocols specific to hospice and palliative care and integration with EMS. They have conducted Advanced Grieving Life Support training. This training looks at the issue at different intervals of the call to include on scene. That program's contact is R. Daniel Nelson from Wake Forest. Also Catherine Hobgood from Duke University has a curriculum on death notification which is open source. Alexandria usually sends a police response, but their communications center usually adds EMS to those calls. Police are involved because any unattended deaths must be signed off by police. Also, sometimes EMS gets called by third parties or by families, and when the patient has a DNR, there is a process, but when the patient does not, there can be confusion and issues. There is not a lot of practice between EMS and the hospice partners. Sometimes the communications centers send EMS even though the call originated from a non-emergency number (from Hospice).

Palliative Care, by definition includes family support. Dr. Weir asked the group if anyone transports to in-patient hospice. No one in attendance has had to do this, but that does not mean it cannot happen. The group was asked if EMS needs a playbook for that situation, or if they think they need a policy for that situation?

Lee Gibson reported for Manassas Park. They do not have a specific protocol at this time. They are looking at development of a palliative care protocol that can bridge with hospice. They do not have any hospice facilities in their due. Dr. Weir asked the group how often they encounter hospice patients. He said he knew of 12 patients in the last couple months that their units transported and all of those were transported for reasonable situations. He also said there are a couple reasons why those patients are transported and those reasons include:

- Control of symptoms
- Loss of a device (pump, feeding tube, etc.)
- Hospice was not available so they call 911

Dr. Weir also mentioned that in Fairfax County they added a field to their data dictionary for hospice patients so they can track encounters and situations leading up to and including on the 911 call. The discussion continued. For some calls, EMS is not really needed and the patient is handed back to hospice. Some patients get transported, but do we know if the transport was really needed. Some get pronounced at the scene, others refuse transport, some are treated and transported to the ER. EMS data should also track time spent on scene and categorize that time to determine what was done.

Palliative Care was defined as systematic treatment for the patient for their chronic pain, and other symptoms. POST and the use of DNR are taught to the caregivers in the home. It may be that we need to bridge the gap between palliative care and hospice, but is there a way to ID the patients by EMS. When EMS is called, are they able to handle the patient needs and if not, who do they call? It was determined that there is a need to educate and train EMS.

There was another situation discussed. What happens when the patient with a DNR calls EMS, or EMS is called by a third party for the patient? What does EMS do on-scene when they should not have been called? It may be time to look at a crisis care plan and strategies, paying attention to non-transports and care in the home. Kate Keller explained that use of mobile Integrated Healthcare and Community Paramedicine may be the way these issues are resolved.

Brian Hricik explained that in most jurisdictions, police need to be / want to be involved in all deaths. When hospice calls the non-emergency phone number, the dispatch center often sends a full EMS compliment. This causes all kinds of uncomfortable situations for the EMS crews. They tend to feel really bad for the families when all arrive with lights and sirens at this difficult time. This is something EMS is looking at.

There was discussion as to whether there is a state policy for death notification. Brian said that in Alexandria, their police say they MUST be notified. Dr. Weir asked what happens then there is a POST in the home? If hospice is there, is that considered a healthcare facility? Kate said that the police call EMS to pronounce the patient deceased but EMS cannot pronounce. Only a licensed healthcare provider can pronounce. Dr. Weir said that EMS can call on-line medical control and the physician can confirm death that way. Tracy Lane asked about the time of death, and asked if that would be the time of the consult on the phone with the physician. EMS should write that time on the patient chart. The Medical Examiner is who would certify death and they could get that time from the EPCR. Dr. Weir summarized this odd situation where EMS confirms, the on-line physician pronounces and the Medical Examiner signs the death certificate.

Tracy said that in Loudoun, they have a policy where they contact medical control and currently transport all resuscitative efforts. They are looking at other best practices for updating and revising their policies.

Dr. Weir then asked the group, "How long does EMS provide resuscitative efforts?" It has been shown that the longer the efforts continue, the lower the chance of a good outcome. Dr. Weir said Fairfax County usually continue efforts for 20 minutes. Of course, special situations, such as a diving incident with hypothermia will require efforts to continue longer. Dr. Weir asked that if anyone has any policies on this to please send those to Marcia to share.

Kate added that in Arlington, they usually continue efforts for 15 minutes, no time limit for pediatrics, no limit for witnessed arrest, and no limits if there is ROSC at any time while working the code. There was a discussion about resuscitative efforts with the pregnant female. Dr. Griffen said that at the Trauma Center, with the pregnant patient, they try to not deliver the baby.

There was discussion regarding the delivery/destination for the patient, to the ED or to the morgue. Is the decision different for the patient that EMS is attempting to resuscitate, but has not been able to do so? Some hospital facilities have EMS deliver the deceased patient to the ED, rather than to the morgue. What if the morgue is full? Is there a state morgue nearby? Is it up to EMS to deliver the deceased to the state morgue or to the hospital ED and let them decide what to do with the body? Some ask EMS to leave the deceased where they died. Ray said that in Alexandria, usually the physician meets the unit at the ED and declared and sends them to the morgue.

Dr. Weir said that Fairfax Hospital's morgue agreed to take patients, but EMS is not to announce it on the radio. Fairfax uses Metro Mortuary Service to transport the deceased from the field. They have a contract with them. MWAA brings an out-of-service ambulance to hold the deceased on the scene. If there is trauma, it is considered a crime scene and the body cannot be moved. Dr. Sarani said that in DC, EMS will not transport the deceased.

It seems this is an issues across the region and Kate Keller said that it gets confusing in that EMS is supposed to work codes and bring patients to the ER, but if they stop working the code, the ER does not want the patient brought there. She said that perhaps NV Hospital Alliance can help with this dilemma. Jamie Wolfin offered to ask NVHA for resolution on this matter.

Kate said that Arlington had DDNR and POST training. There is also a training program for long term care facilities and she will see if that can be shared. Their Advanced Practice providers are sometimes used for hospice errands such as retrieving prescriptions so that the patient is not transported. There also exists another situation that warrants examination: if a hospice patient has a UTI or pneumonia or similar situation, as far as the EMS crews and the relationship with the patient, the patient is no longer considered hospice, and the patient is transported and treated based on their acute ailment.

There were discussions on how to operationalize POST. If there is a valid DNR, EMS follows the OEMS prescribed process. Dr. Weir said that EMS uses section A of the POST. Section B adds specific care that the patient wants, for example, intubation or not. He then posed a question to the group: "Can Section B be used for other interventions like pacing, due to the patient having taken 2 metoprolol?" Can decisions be made based on the situation? Dr. Weir and Dr. Yee from OEMS are looking at whether Section B can be opened up to use by EMS. If anyone has any input, please share with Marcia.

Lisa McAllister reviewed a possible situation that they could see with the helicopter transport option. The ED sometimes wants the patient transferred to a higher level of facility, and they are not talking with the family to determine the family's wishes. The helicopter crews usually end up talking to the family directly and often the decision is made to keep the patient local with the family rather than transferring to the higher level facility.

Drs. Weir and Griffen summarized the excellent discussions and different ways the same things are done throughout the region. There are indeed quite a few situations for which there are no policies or procedures. Not only are there no specific rules for EMS, but even the hospital facilities differ in how they integrate with EMS with regards to handling the deceased patient. All were thanked for participation in this discussion.

Dr. Griffen continued the meeting with the trauma topic of chest trauma, with a Power Point presentation. She went over anatomy of the chest, injuries of the chest and said that around 25% of the trauma patients they see have chest trauma. 40% of those patients have chest wall trauma. She said the number one chest injury is rib fractures. Another chest injury that requires surgical intervention is an injury to the esophagus. Injuries to the diaphragm are usually penetrating or blunt. Sometimes those injuries are initially missed. The healthcare providers must have a high suspicion.

Other chest injuries include tracheal, bronchial and cardiac injuries. Aortic injuries are repaired by endovascular repair and 80-85% of those with aortic injuries die at the scene of the injury. Dr. Griffen reviewed the flail chest, which is more than one broken rib in more than 1 piece. Treatment of these injuries include pain management and rib plating.

Pulmonary contusions have a 10-25% mortality. They are treated with pain management, and if the patient has worsening pulmonary function within 24 hours, the provider should have a high level of suspicion that the injury may be a pulmonary contusion.

Dr. Griffen reviewed pneumothorax and tension pneumothorax. In the tension pneumothorax, the patient exhibits mediastinal shift and the fix is either a needle decompression or a chest tube. In the simple pneumothorax, there is no mediastinal shift. The hemothorax has blood involved.

Rib fractures require pain management for 4-6 weeks. Those may indicate other injuries. If a patient is 44 years old or higher, and they have rib fractures, they are put in a higher level of care and there is more potential for morbidity and mortality. The "go to" pain management drug is Ketamine. They try to avoid narcotics, and send, the patient home with the catheter, Ketamine, Tylenol and Celebrex. They do 8-10 rib platings a year, whether they are flail or not.

The group discussed a topic for the next meeting and agreed on Burns.

Tracy lane asked how the use of a selective C-spine policy in Trauma has been received in the ED. Dr. Griffen said that most of EMS sent their policies to the ED and it has gone relatively well. Some providers are not following the protocols, and that is when there are questions from the ED. The main question to ask is when to collar and when not to. Tracy said that she is collecting data on whether their providers are following the protocol or not. Dr. Griffen said that if the trauma patient is not wearing a collar and the staff thinks they should be, Jamie will get back to the agency and the incident will be looked at more closely. Tracy asked if all present have c-spine protocols and all present indicated that they do.

Dr. Griffen presented Trauma Center Data that compares Q22016 data to Q22015.

The meeting was adjourned.

Topics for the December meeting that were chosen include:

Trauma – Mass Burn Care Katie Hallowed + WHC (See Dr. Griffen) Burn event, scene care and/or transport from blast or other event). Parkland Formula, UVA formula

Medical – Mass Burn Care (continuation of care for patients with other medical issues as the result of burn injuries and prolonged on-scene care/time). Regional mass casualty plan. Perhaps include NVERS??

System – Use of system resources to mitigate burn incident. Examples, physical treatment of burn injuries with wet/dry sterile sheets, oxygen administration with large group of patients. Other issues: extrications, civil unrest, on-scene medical control, pain control protocols, fixed pharmacology assets, transport needs vs. resources, DPSC Push Packs from hospitals, mass care. Possibly include NVERS?

The next meeting will be Wednesday December 7, 2016. The meeting will be held at the Fairfax County Fire Station 40, 4621 Legato Road, Fairfax, VA 22030. We will begin at 9 am and the group will complete the discussions by noon.

Please bring pertinent data from your agency and if you are unable to attend, please have your back-up representative attend.

Without further, the meeting was adjourned.

(For NV EMS Council Use only)

CERTIFICATION OF BOARD OF PERFORMANCE IMPROVEMENT AND TRAUMA MEETINGS

NV EMS Council
7250 Heritage Village Plaza, Ste. 102
Gainesville, VA 20155

I, Marcia Pescitani, Interim Executive Director of the Northern Virginia EMS Council certify that the above minutes are a true and correct transcript of the minutes of a meeting of the Performance Improvement and Trauma Meetings of the Northern Virginia EMS Council on September 7, 2016. The minutes were officially approved at the (date of approval) 9/7/16 meeting of the Committees. It was also ~~approved at the~~ 6/7/2017 meeting of the NVEMS Board of Directors.

Marcia Pescitani — 6·8·2017

Marcia Pescitani — *Date*
NV EMS Council

Northern Virginia EMS Council
PI and Trauma Topics for 2016
March 2, 2016

March

Trauma – Solid Organ Injury

Medical – STEMI identification and care

System – Stroke and STEMI Plan review and recommendations for revision

June

Trauma – Spinal Cord Injuries

Medical – Cardiac Arrest Scene Management

System – Managing family / scene-death notification / support during and after SCA. Guest: Social Worker. What comes next? Post Death....

September

Trauma – Chest Trauma

Medical – Hospice and Palliative Care, P.O.S.T, agency level / protocols, best practices.

System – Hospice and Palliative Care, Regional Integration with healthcare partners (hospitals, nursing homes, hospice, etc,), P.O.S.T. and its use in Virginia, LVADS and Lifevests, Adrenal insufficiency, pre-alerts for EMS, home comfort care kits. EMS Scripts for grieving. Jessica Hines-Palliative care – (Dr. Griffen will contact)

December

Trauma – Mass Burn Care Katie Hallowed + WHC (See Dr. Griffen) Burn event, scene care and/or transport from blast or other event). Parkland Formula, UVA formula

Medical – Mass Burn Care (continuation of care for patients with other medical issues as the result of burn injuries and prolonged on-scene care/time). Regional mass casualty plan.

System – Use of System resources to mitigate burn incident. Examples, physical treatment of burn injuries with wet/dry sterile sheets, oxygen administration with large group of patients. Other issues: extrications, civil unrest, on-scene medical control, pain control protocols, fixed pharmacology assets, transport needs vs. resources, DPSC Push Packs from hospitals, mass care

Topics suggested at this meeting for future meetings include:

System - Diversion
System or Trauma - Hemorrhage Care and hemorrhage control strategies, tourniquets, TECC and law enforcement and their data if possible. Arlington's is available, per Anne.
Medical - Peds and peripheral access for fluid administration. Pumps, Buritrols, locks?
System - Child Maltreatment – mandated reporter, how do we do this? Fed. Government guidelines.
System - Human Trafficking – Rebecca Bender (Becky). Mandatory reporting-maybe mandatory reporting as a whole. APS as resource.
System - Suicide by Healthcare providers in the workplace. Prevention. Code Green. Provider Stress management. Behavioral health, cumulative stress. Info from Canada.
System - Provider stress
System - Worker fatigue in decision making, long duty assignments or prolonged operation calls.
Medical – Pittsburg. Which subset of patients benefit from preliminary stabilization at first point of contact and patient movement as a therapeutic intervention. Patient movement is a valuable therapeutic intervention but not if it displaces or delays higher priority/higher value interventions. Respiratory distress and hypoxemia, respiratory distress along with bradycardia. All along with hypotension, sepsis may benefit prior to movement. CPAP is an example of what can be done prior to movement that may benefit the patient. Look at patients that deteriorate in the presence of EMS.
Medical and System – Termination of efforts on scenes. Communicating with family. Advanced grieving life support. Respiratory arrest and grief and do we transport or stay. CA death process, invite SME speaker, social work-managing encounters, Christina Hobgood death notification curriculum is similar, successful strategies and solutions. Death in field, death enroute to ED. How to integrate with law enforcement and turn over scene. Hospital side or receiving deceased patient) and EMS side. Do hospitals have resources there to deal with families? Each EMS protocol is similar as well as different.
Medical – Diabetic care, non-transports in crisis. Interventions without transports and loss of payments.
Medical – Difficult Pregnancy
Medical – Non-transports. No load calls and crashes are the highest risk patients. Assessments without intervention. Did we go back? Frequency? Types of patients? No load is anything that does not result in a transport.
Trauma – Animal bites Snakes, dogs, iguana, exotic, snakes
System – refusals, how many and why. MIH, Frequent fliers-how to ID and types. Types are: those with intense medical needs, dual diagnosis, mental health issues, substance disorders, MIH (Mobile Integrated Healthcare). Loyal customers, superusers. ID needs with other resources that are available and how this can be done/is being done. Involve hospitals and destinations, how to decide which facility. Run searches to see if agency has been there recently and why are they back? Who has solutions and can we use those. Look at hospital issues with same patients.
Medical - Agitated Delirium
Trauma – TBI
Medical - Stroke
Medical - Sepsis
Medical – STEMI
Medical - Law Enforcement Narcan administration. Public Narcan administration.
System – POST. EMS utilizing section B of POST. Home comfort care kits. EIF (Emerg. Info. Form info)
Suggestion: Establish a Speaker Bureau at the Council. Keep a list of powerful really good speakers and topics.