

Virginia Department of Health
Office of Emergency Medical Services



Quarterly Report to the
State EMS Advisory Board

Friday, August 12, 2011

Executive Management, Administration & Finance

Office of Emergency Medical Services Report to The State EMS Advisory Board August 12, 2011

MISSION STATEMENT:

To reduce death and disability resulting from sudden or serious injury and illness in the Commonwealth through planning and development of a comprehensive, coordinated statewide emergency medical services (EMS) system; and provision of other technical assistance and support to enable the EMS community to provide the highest quality emergency medical care possible to those in need.

I. Executive Management, Administration & Finance

a) EMS Chief Edwards Elected Chair of the State Board of Health (Release Date: City of Virginia Beach Friday, June 17, 2011 12:15 p.m.)

Virginia Beach Emergency Medical Services Chief Bruce W. Edwards has been elected chair of the state Board of Health, effective July 1. Board members chose Edwards at their June 9, 2011 meeting.

“This is a great honor,” Edwards said. “Together with the other very talented board members, I will continue to work closely with the Health Commissioner, Dr. Karen Remley, and the staff of the Virginia Department of Health to ensure the health and safety of all Virginians.”

Now in his 45th year with the city’s volunteer rescue squads, Edwards leads the largest volunteer-based EMS department in the country. His leadership has been instrumental in shaping the face of EMS in the commonwealth. He has been the leader and architect of many advances and innovations in EMS since the early 1970s. Edwards holds a master’s degree in public administration, was in the first cardiac technician class in Virginia, and is the longest-tenured actively running paramedic in Virginia.

In 2009, the Virginia General Assembly added a new position to the Board of Health to represent the EMS community. The governor selected Edwards to fill the inaugural four-year term that began July 1, 2009.

Gary R. Brown, director of the state Office of Emergency Medical Services, praised Edwards. “In only two short years, EMS has not only been approved for a dedicated membership seat on

the Board of Health, but the EMS representative, Bruce W. Edwards, has earned the respect from each of the other 14 members to be elected chair of the board. That's quite an accomplishment."

b) Governor McDonnell Announces Appointments to the State EMS Advisory Board

On July 22, 2011, Governor McDonnell announced the following appointments the State EMS Advisory Board for the 2011 to 2014 term:

Member	Organization Represented	1st Term Appointment	2nd Term Appointment
New Board Appointments			
Anita Ashby	Virginia Hospital and Healthcare Association	2011 - 2014	
B. R. "Beau" Blevins, III	Virginia Association of Counties	2011 – 2014	
Dreama D. Chandler	Virginia Association of Volunteer Rescue Squads	2011 - 2014	
Gary P. Critzer	Central Shenandoah EMS Council	2011 - 2014	
James R. Dudley, MD, MBA	Virginia College of Emergency Physicians	2011 - 2014	
Stephen J. Elliott	Thomas Jefferson EMS Council	2011 - 2014	
R. Christian Eudailey	Rappahannock EMS Council	2011 - 2014	
Marilyn McLeod, MD	Blue Ridge EMS Council	2011 - 2014	
Wayne Myers, Jr.	Virginia Association of Volunteer Rescue Squads	2011 - 2014	
Andrea W. Oakes	Virginia Municipal League	2011 - 2014	
Reappointments			
Robin Foster, M.D.	American Academy of Pediatrics	2008 – 2011	2011- 2014
Ajai K. Malhotra, M.D.	American College of Surgeons	2008 – 2011	2011 - 2014
Larry A. Oliver	Lord Fairfax EMS Council	2008 – 2011	2011 - 2014
Dale Wagoner	Western Virginia EMS Council	2008 – 2011	2011 – 2014
Allen Yee, M.D.	Medical Society of Virginia	2008 – 2011	2011 – 2014
Unknown at this Time – To Be Appointed			
	Northern Virginia EMS Council	2011 – 2014	
	Virginia Fire Chief's Association	2011 – 2014	
	VA Emergency Nurses Association/VA Nurses Association	2011 - 2014	
	Consumer		

State Emergency Medical Services Advisory Board

- **Anita Ashby** of Abingdon, System Director of Flight Services for Wellmont Health System – **Replaces Cheryl Lawson, M.D.**
- **B. R. “Beau” Blevins, III** of Abingdon, Government Liaison with VACo – **Replaces William Quarles**
- **Dreama D. Chandler** of Rural Retreat, Paramedic and Medical Communications for Carilion Clinic – **Replaces Gary Dalton**
- **Gary P. Critzer** of Waynesboro, Director of Emergency Management and EMS for the City of Waynesboro – **Replaces Asher Brand, M.D.**
- **James R. Dudley, MD, MBA** of Gloucester, Emergency Physician & Service Line Chief and Chief Medical Officer at Riverside Tappahannock Hospital – **Replaces Scott Weir, M.D.**
- **Stephen J. Elliott** of Palmyra, Battalion Chief with Albemarle County Fire and Rescue – **Replaces Linda Johnson**
- **R. Christian Eudailey** of Fredericksburg, Fire Chief of Spotsylvania County – **Replaces Kevin Dillard**
- **Robin Foster, MD*** of Richmond, Division Chairman of Pediatric Emergency Services at Virginia Commonwealth University Health System
- **Ajai K. Malhotra*** of Midlothian, Professor of Surgery with Virginia Commonwealth University Health System
- **Marilyn McLeod, MD** of Lynchburg, ER Physician, Medical Director of Blue Ridge EMS, Medical Director of Southside Emergency Department and Associate Medical Director at Lynchburg General Hospital – **Replaces Jason Campbell**
- **Wayne Myers, Jr.** of Blacksburg, Quality Assurance Engineer with Moog Components Group – **Replaces Bubby Bish**
- **Andrea W. Oakes** of Staunton, Insurance Claims Professional with The Cincinnati Insurance Company – **Replaces Clarence Monday**
- **Larry A. Oliver*** of Front Royal, Deputy Chief of Frederick County Fire and Rescue
- **Dale Wagoner*** of Martinsville, Public Safety Director with Henry County
- **Allen Yee, MD*** of Moseley, Operational Medical Director with Chesterfield Fire and EMS

***Reappointment**

c) Orientation Scheduled for New Board Members

A PowerPoint presentation on the Office of EMS programs and services is included in **Appendix A** for new members to review prior to the Orientation scheduled for Thursday, August 11, 2011 at 7:00 p.m. at the Office of EMS. All incumbent Board members are also welcome to attend this orientation. To assure we have adequate chairs and tables, please verify your attendance with either Irene Hamilton, Executive Secretary at: Irene.hamilton@vdh.virginia.gov; or Gary R. Brown, Director at: gary.brown@vdh.virginia.gov by Monday, August 8, 2011.

d) Governor McDonnell Signs “Ashley’s Law”

Governor Bob McDonnell signed SB 762, also known as “Ashley’s Law,” which requires emergency vehicles proceeding through a traffic intersection to flash emergency lights and either sound a siren or horn, or yield the right-of-way, before proceeding. This law is named in honor of Ashley McIntosh who was tragically killed in 2008 when her vehicle was struck by an emergency vehicle as it went through an intersection. The legislation was signed during an afternoon ceremony at Sherwood Regional Library in Alexandria.

Speaking about “Ashley’s Law,” Governor McDonnell remarked, “It is a sobering moment as I sign this legislation today that results from a tragic traffic accident that took the life of a young Fairfax woman with a bright future. We are constantly evaluating how we can improve public safety to protect our citizens, law enforcement and first responders. It is because of the care, concern and activism of Ashley’s family and friends that this change in the law has become a reality, and for that I commend the great work of everyone who advocated for the passage of this bill. Virginia’s streets are safer because of ‘Ashley’s Law.’”

Senator Toddy Puller (D-Fairfax County), who patroned the legislation, commented, “I am very pleased to have carried ‘Ashley’s Law.’ It took several years to get this passed and I am glad we were finally able to get overwhelming consensus on the bill. I hope that it will go far to save other lives in the future.”

Fairfax County Police Department Chief of Police Colonel David M. Rohrer, added, “The Fairfax County Police Department supported ‘Ashley’s Law’ because it puts the safety of the public and emergency responders first, as it should be. I’m pleased to say that our policies and the training our officers receive in emergency and response driving mirror this new law.”

e) Office of EMS Customer Service Satisfaction Survey

Recently, as part of the VDH Office of Emergency Medical Services (OEMS) continuous improvement efforts, individuals were encouraged to comment about their level of customer service satisfaction when transacting business with OEMS. We thank those of you who took the time to provide feedback. A total of 10,000 survey requests were randomly sent by Email to individuals certified as EMS personnel in Virginia. There were 1,687 respondents and 78 bounced Email messages. Of those that responded:

- 40% indicated that they had contact with OEMS in the past six (6) months
- The majority of respondents indicated that they contacted OEMS by either telephone or e-mail.
- 75% of the respondents indicated they contacted OEMS for assistance related to education, training and certification programs. The next largest group indicated they contacted OEMS for assistance related to inspections, licensing, permitting and compliance matters.
- 72% indicated their question or problem was resolved with one contact to the office

A vast majority of the respondents indicated that they were overall satisfied with the customer service provided by the Office of EMS. In fact, 86% of the respondents indicated some level of satisfaction: Satisfied (29%) very satisfied (30%) or extremely satisfied (27%).

Concerning the 14% of respondents who were not satisfied with the level of customer service at OEMS, the following represent some key observations and comments (in no particular order):

- Once a telephone call is initially received by OEMS, it is frustrating to the caller for their call to be transferred to another receptionist or go directly into voice mail,
- Respondents indicated they wanted more direct, easy access to OEMS administrative staff,
- Respondents indicated they wanted more timely response to e-mail messages and voicemail,
- OEMS needs to provide more information to initial certified EMS personnel to help them understand the recertification process,
- A number of respondents expressed frustration related to TRAINVirginia ; does not always operate properly; program times out, course results are not recorded, etc.

In response to the results from the customer service survey, the Office of EMS has developed a work plan to address specific areas of improvement that could lead to improved customer service. The following are some of the key areas that will be addressed:

- OEMS Management will determine if OEMS staff needs additional assistance or training (training on dealing with complex situations) to help with their jobs.
- Policies related to the use of voicemail by OEMS staff will be reviewed.
- OEMS will conduct a general education campaign for EMS agencies, providers and partner organizations to re-advertise the OEMS general e-mail address, e-mail list serves and our social media sites to help EMS providers get news and up-to-date information.
- Redesigned VDH, OEMS website will be deployed in late July 2011 to promote improved customer service. This will include a contact resource list for EMS providers with contact information for each Division within OEMS and who is the best person to speak with when they have questions or issues.

If you have questions or concerns related to customer service issues with the Office of EMS please contact Beth Singer, OEMS Public Relations Coordinator at 1-800-523-6019, 804-888-9115 or by Email at Elizabeth.singer@vdh.virginia.gov.

f) Office of EMS Employee Appointed to National EMS Memorial Service Board of Directors

Congratulations to OEMS Systems Planner **Timothy Perkins**, who was elected to serve on the National EMS Memorial Service Board of Directors at its 2011 General Meeting. The National EMS Memorial Service is held annually to honor EMS providers who have died in the line-of-

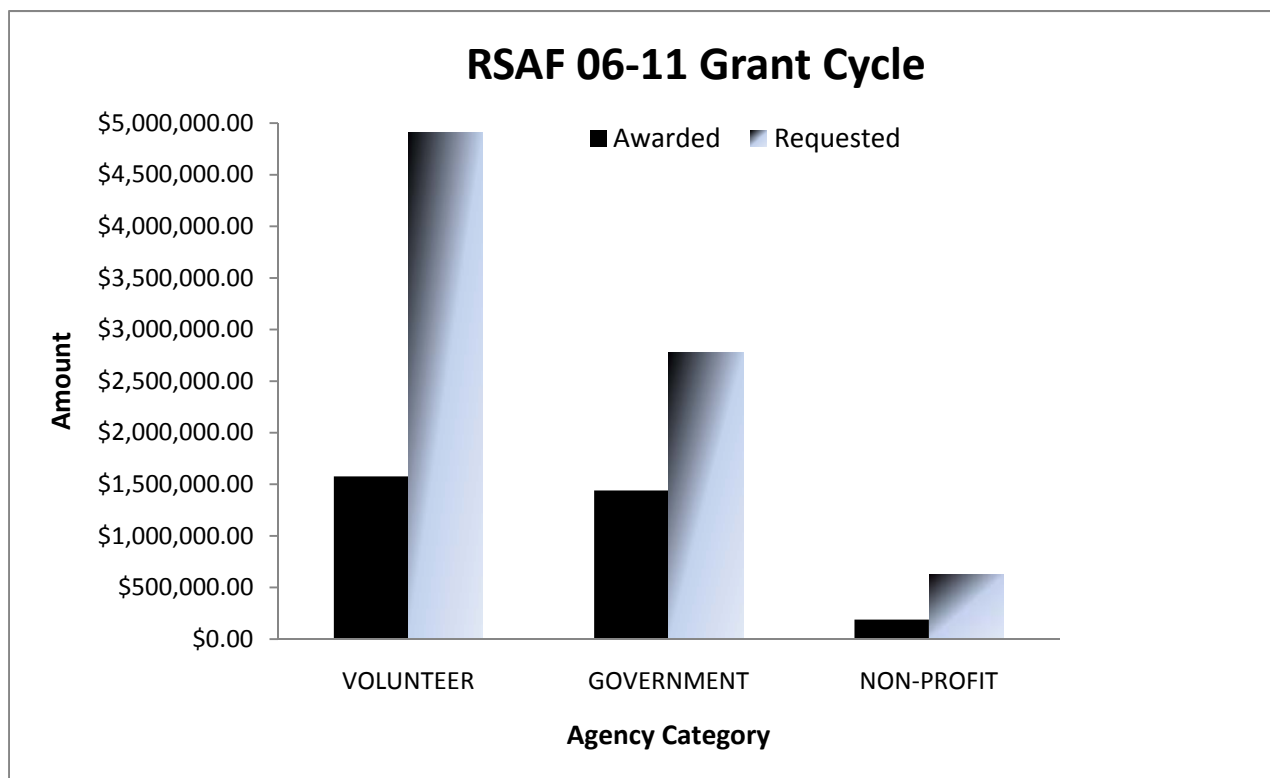
duty. Tim was elected to this prestigious position based on his extensive experience in the EMS field as a paramedic, EMS manager and coordinator, and his dedication to supporting this honorable cause. Tim has shown his support for educating EMS providers and the public about the prevention of EMS line-of-duty injuries and deaths through his travels in four National EMS Memorial Bike Rides and through his EMS podcast, called “Squad cast,” which is featured online on EMS World Magazine.

g) Financial Assistance for Emergency Medical Services (FAEMS) Grant Program, known as the Rescue Squad Assistance Fund (RSAF)

The 2011 RSAF grant deadline was March 15, 2011; OEMS received 130 grant applications requesting \$8,308,374.00 in funding. These grants were awarded on July 1, 2011 in the amount of \$3,205,587.00 to 95 agencies. The following agency categories were awarded funding for this grant cycle:

- 54 Volunteer Agencies were awarded \$1,576,992.00
- 33 Government Agencies were awarded \$1,440,408.00
- 8 Non-Profit Agencies were awarded \$188,186.00

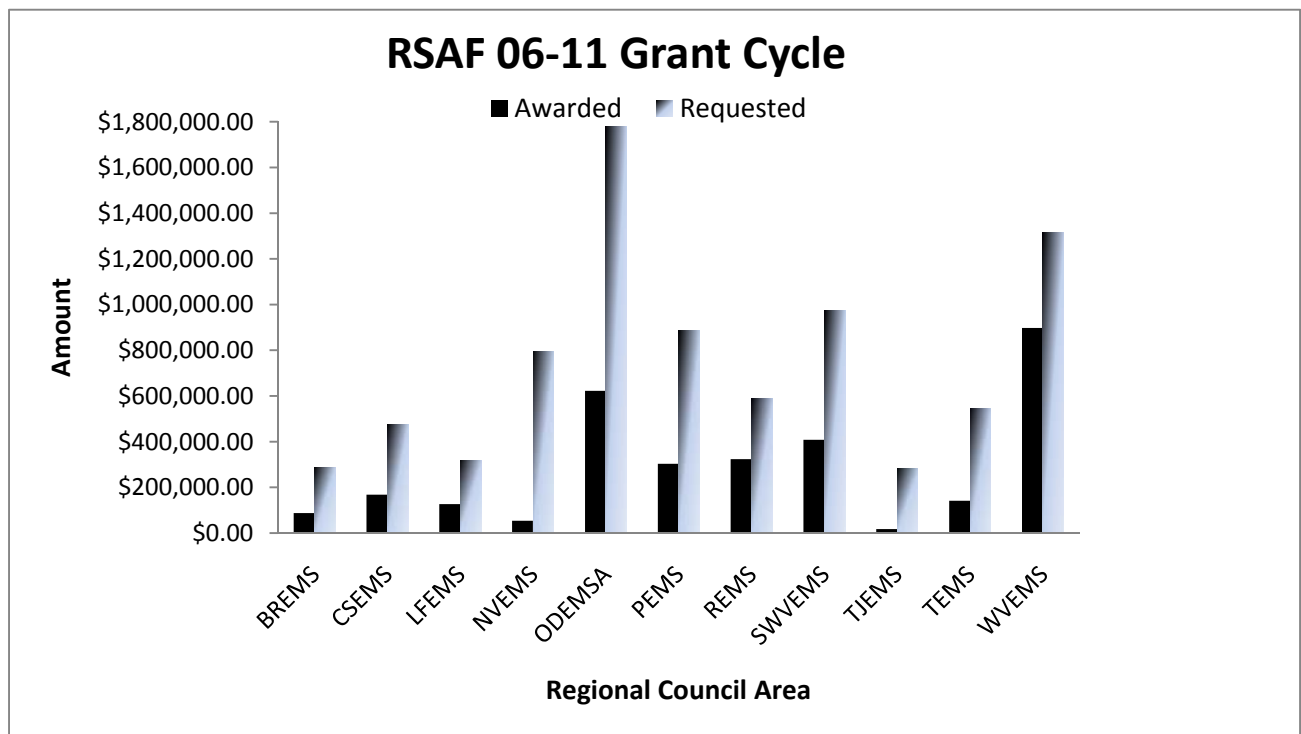
Figure 1: Awarded vs. Requested Amount by Agency Category



The following regional areas were awarded funding in the following amounts:

- Blue Ridge EMS Council – 4 agencies awarded \$87,580.00
- Central Shenandoah EMS Council – 11 agencies awarded \$168,121.00
- Lord Fairfax EMS Council – 5 agencies awarded \$126,903.00
- Northern Virginia EMS Council – 4 agencies awarded \$53,924.00
- Old Dominion EMS Alliance – 12 agencies awarded \$622,677.00
- Peninsulas EMS Council – 6 agencies awarded \$303,039.00
- Rappahannock EMS Council – 11 agencies awarded \$323,504.00
- Southwestern Virginia EMS Council – 13 agencies awarded \$408,287.00
- Thomas Jefferson EMS Council – 3 agencies awarded \$17,645.00
- Tidewater EMS Council – 8 agencies awarded \$141,355.00
- Western Virginia EMS Council – 17 agencies awarded \$897,453.00

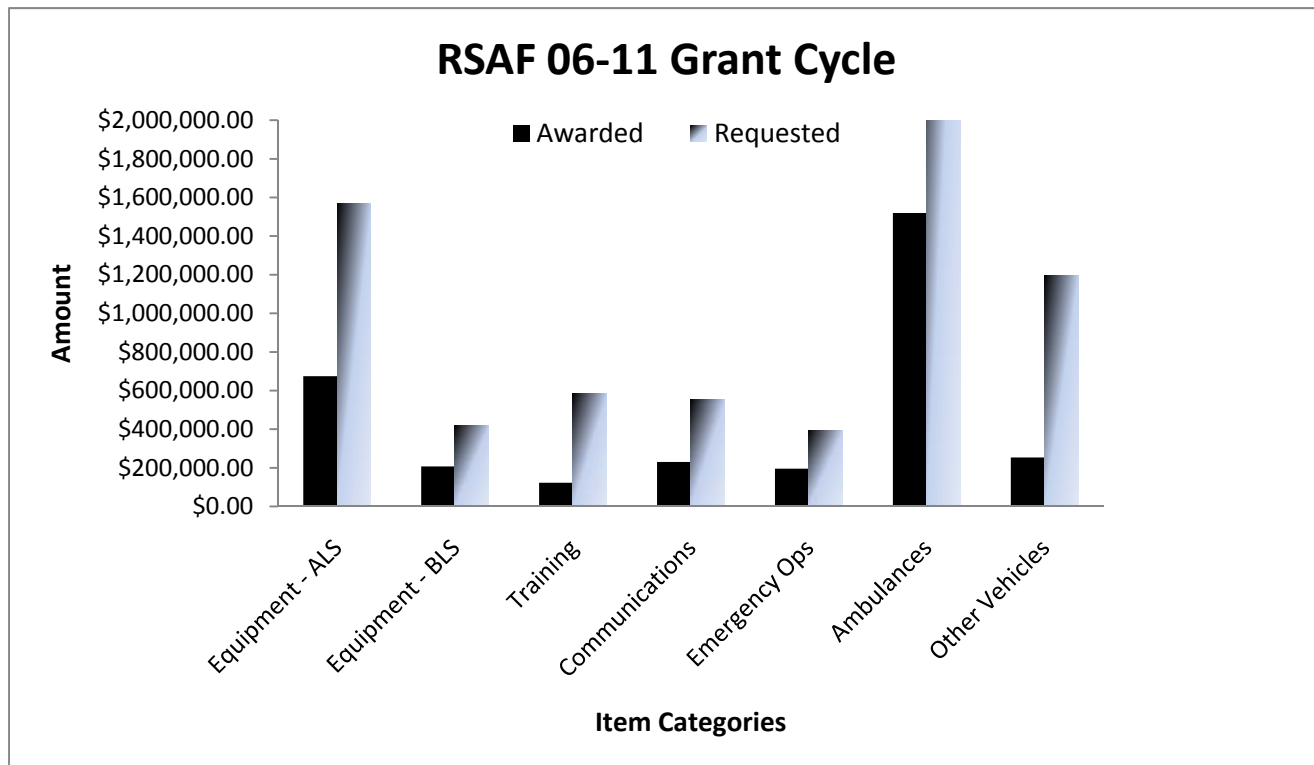
Figure 2: Awarded vs. Requested Amount by Region



RSAF Grants Awarded by item categories:

- Equipment - ALS - \$674,958.00
 - Includes any equipment for Advanced Life Support (ALS) such as defibrillators, EZ-IO's and capnography.
- Equipment – BLS - \$207,648.00
 - Includes any equipment for Basic Life Support (BLS) such as stretchers, cots, CPAP, airway equipment and pulse oximeters and supplies.
- Training - \$122,602.00
 - This category includes all training courses and training equipment such as manikins, simulators, skill-trainers and any other equipment or courses needed to teach EMS practices. This category also includes Recruitment and Retention projects and training courses for Leadership, OSHA, CISM and OMD's.
- Communications - \$230,731.00
 - Includes items for mobile/portable radios, pagers, repeaters and other communications system technology. This category also includes equipment needed for Emergency Medical Dispatch (EMD) and Panasonic toughbook computers.
- Emergency Operations - \$196,093.00
 - Includes items such as extrication equipment, crash/rescue vehicles, turnout gear and emergency warning equipment.
- Ambulances - \$1,519,784.00
 - Includes all Type I, II and III Ambulances needed for patient care transport.
- Other Vehicles - \$253,652.00
 - Includes all other vehicles such as chassis/remounts, quick response vehicles and all-terrain vehicles.

Figure 3: Awarded vs. Requested Amount by Item



NOTE: The “Ambulances – Requested” category request amount was \$3,586,362.00, the graph only represents items requested up to \$2,000,000.00 to visually display other items requested.

The Fall 2011 grant cycle will begin on August 1, 2011 with a deadline of September 15, 2011; these grants will be awarded January 1, 2012.

h) 2011 Department of Homeland Security (DHS) Grant Application

The 2011 DHS grant announcement was made on May 20, 2011 with a 30 day due date to VDEM. OEMS has submitted a grant application in the amount of \$1,565,650.00 for the Virginia Emergency Medical Services Interoperable Communications (VEMSIC) Project. This project will provide portable radios, vehicle chargers, mounting kits for vehicular installation and speaker microphones for each licensed patient-transport vehicle for EMS agencies recognized by OEMS as a designated emergency response agency (DERA) as defined by the Virginia Administrative Code 12 VAC 5-31-370. VDEM suggested that OEMS submit their project to the Statewide Interoperable Communications Coordinator through the Virginia Office of Veterans Affairs and Homeland Security (VOVAHS) to incorporate the OEMS interoperability project with the state-wide interoperability application. OEMS submitted this application on June 7, 2011 to VOVAHS; further discussions regarding the 2011 DHS grant will take place in August 2011 through the Regional Preparedness Advisory Committees (RPAC) scheduled throughout the Commonwealth.

EMS on the National Scene

II. EMS On the National Scene

a) NIOSH Provides Draft Guidance on Emergency Responder Health Monitoring and Surveillance

The National Institute for Occupational Safety and Health (NIOSH) requests comments on the draft guidance document, *Emergency Responder Health Monitoring and Surveillance*, NIOSH Docket Number: NIOSH 223. This draft document proposes a new framework for ensuring responder safety and health by monitoring and conducting surveillance of their health and safety during the entire cycle of emergency response, including the pre-deployment, deployment, and post-deployment phases of a response. The proposed system is referred to as the "*Emergency Responder Health Monitoring and Surveillance (ERHMS)*" system, and includes a guidance section describing the principles involved in ensuring optimal responder safety and health, as well as tools which can be utilized to help facilitate the execution of these principles during an actual response. Several national EMS organizations, including NASEMSO, commented on the document. While the comment period has expired, the draft is still available for review at: <http://www.cdc.gov/niosh/docket/archive/docket223.html>

b) FCC Establishes Deadline for Public Safety Radio Transition

On January 1, 2013, all public safety and business industrial land mobile radio systems operating in the 150-512 MHz radio bands must cease operating using 25 kHz efficiency technology, and begin operating using at least 12.5 kHz efficiency technology. This deadline is the result of an FCC effort that began almost two decades ago to ensure more efficient use of the spectrum and greater spectrum access for public safety and non-public safety users. Migration to 12.5 kHz efficiency technology (once referred to as Refarming, but now referred to as Narrowbanding) will allow the creation of additional channel capacity within the same radio spectrum, and support more users. After January 1, 2013, licensees not operating at 12.5 KHz efficiency will be in violation of the Commission's rules and could be subject to FCC enforcement action, which may include admonishment, monetary fines, or loss of license. To learn more, please read the VHF/UHF Narrowbanding FAQs: <http://transition.fcc.gov/pshs/public-safety-spectrum/narrowbanding-faq.html>. A link to the Powerpoint presentation describing the Narrowbanding proceeding as well as information about the deadline is available at: <http://transition.fcc.gov/pshs/public-safety-spectrum/narrowbanding.html>

c) ESF #9 - Search and Rescue Updated and Available on the NRF Resource Center

Emergency Support Function (ESF) #9 – Search and Rescue (SAR) rapidly deploys Federal SAR resources to provide lifesaving assistance to State, tribal, and local authorities, to include local SAR Coordinators and Mission Coordinators, when there is an actual or anticipated request for Federal SAR assistance. The description has recently been update and is now available at: <http://www.fema.gov/pdf/emergency/nrf/nrf-esf-09.pdf>

d) New National Terrorism Advisory System Released

The National Terrorism Advisory System, or NTAS, replaces the color-coded Homeland Security Advisory System (HSAS). This new system will more effectively communicate information about terrorist threats by providing timely, detailed information to the public, government agencies, first responders, airports and other transportation hubs, and the private sector. After reviewing the available information, the Secretary of Homeland Security will decide, in coordination with other Federal entities, whether an NTAS Alert should be issued. NTAS Alerts will only be issued when credible information is available. These alerts will include a clear statement that there is an imminent threat or elevated threat. Using available information, the alerts will provide a concise summary of the potential threat, information about actions being taken to ensure public safety, and recommended steps that individuals, communities, businesses and governments can take to help prevent, mitigate or respond to the threat. The NTAS Alerts will be based on the nature of the threat: in some cases, alerts will be sent directly to law enforcement or affected areas of the private sector, while in others, alerts will be issued more broadly to the American people through both official and media channels. Go to: <http://www.dhs.gov/files/programs/ntas.shtm>

e) CDC Webcast Highlights Pediatric Emergency Preparedness

Children are extremely vulnerable during disaster situations. States play a critical role in the recovery of pediatric health following a disaster, and should have appropriate “All- Hazards” emergency preparedness plans that address the unique needs of pediatrics. The Centers for Disease Control and Prevention (CDC) recently hosted a COCA conference call to highlight gaps in pediatric preparedness and national recommendations aimed to improve pediatric emergency preparedness at the state level.

The webinar is now available for viewing or can be downloaded as a podcast. Slides and a transcript are also available at: http://emergency.cdc.gov/coca/calls/2011/callinfo_042011.asp

f) HRSA Launches Emergency Medical Services Website

HHS\Health Resources and Services Administration recently unveiled a new EMS website. The site lists HRSA EMS resources, initiatives, publications and programs. Visit the site at: www.hrsa.gov/ems

g) National EMS Culture of Safety Conference Announced

The National EMS "Culture of Safety" strategy is currently under development by the American College of Emergency Physicians through a cooperative agreement with the National Highway Traffic Safety Administration with support from HRSA EMSC. A national conference was held on June 27-28, 2011 at the Crowne Plaza Hotel in Arlington, Virginia.

Emergency Medical Services (EMS) has been identified as a high risk industry with injuries and deaths among both EMS personnel and their patients. EMS personnel are routinely exposed to factors that threaten their personal safety and this, in turn, can impact the safety of the patients they serve. There is also evidence that suggest some of the biggest risk factors for EMS

personnel are combative patients and bystanders whom they encounter in the field. Moreover, there are times when a patient's safety is negatively impacted by the inadvertent actions taken by EMS personnel while providing care for the patient.

To address these and other safety issues, the National EMS Advisory Council (NEMSAC) recommended as its top priority, that the National Highway Traffic Safety Administration (NHTSA) and the rest of its Federal partners move forward with the development of a "Culture of Safety" in the EMS community.

Following a competitive bid process, the American College of Emergency Physicians (ACEP) was selected to lead the project with The RedFlash Group as a primary subcontractor. The three-year National EMS "Culture of Safety" Strategy project provides for the direct involvement of the EMS community through participation of national EMS organizations as members of a Steering Committee for the project. The Steering Committee includes representatives from:

- American Academy of Pediatrics
- American Ambulance Association
- American College of Emergency Physicians
- American College of Surgeons Committee on Trauma
- Commission on Accreditation of Ambulance Services
- Commission on Accreditation of Medical Transport Systems
- Emergency Medical Services for Children National Resource Center
- Emergency Nurses Association
- Governors Highway Safety Association
- International Association of EMS Chiefs
- International Association of Fire Chiefs
- International Association of Fire Fighters
- International Association of Flight Paramedics
- National Association of Emergency Medical Technicians
- National Association of EMS Physicians
- National Association of State EMS Officials
- National EMS Management Association
- National Volunteer Fire Council

Approximately twenty-one other EMS organizations as well as Federal partners, EMS media and trade journals and the public will also be invited to participate.

Work has begun on development of a draft Strategy document that will then be shared with conference attendees and the EMS community for review and comment. The Strategy document will be available for review and comment until a National Review meeting is held in June 2012. The final Strategy document is scheduled to be released in September 2013.

Visit www.EMSCultureofSafety.org for information and registration. Information is also posted at www.ems.gov and www.hrsa.gov/ems.

h) HHS Announces Proposed Changes to HIPAA Privacy Rule

A Notice of Proposed Rulemaking concerning the accounting of disclosures requirement under the Health Insurance Portability and Accountability (HIPAA) Act Privacy Rule, is available for public comment. The proposed rule would give people the right to get a report on who has electronically accessed their protected health information. The U.S. Department of Health and Human Services' (HHS) Office for Civil Rights (OCR) is proposing changes to Privacy Rule, pursuant to the Health Information Technology for Economic and Clinical Health (HITECH) Act.

The proposal would give patients the right to 2 types of information:

- an "access report," which would tell them who has accessed their protected health information "for purposes of treatment, payment and health care operations" in general, but would not divulge the specific purposes for each person's access; and
- an "accounting of disclosures" that would provide more detailed information about disclosures "most likely to impact the individual," such as disclosures to law enforcement or legal authorities, as well as the purposes of such disclosures.

This Proposed Rule would grant patients the right to receive an "access report" telling them who accessed their electronic protected health information over the previous three years. If this Proposed Rule goes into effect, any time an electronic health record is accessed by anyone at the ambulance service or anyone outside of the ambulance service, patients will have the right to know about it.

The proposed changes to the accounting requirements provide information of value to individuals while placing a reasonable burden on covered entities and business associates. People may now read the proposed rule at: <http://www.federalregister.gov/>. Comments were accepted through August 1, 2011.

i) USFA Releases Firefighter Injury Report

The Federal Emergency Management Agency's (FEMA) U.S. Fire Administration (USFA) recently issued a special report today examining the details of firefighter injuries sustained on the fireground or while responding to or returning from a fire incident. The report, *Fire-Related Firefighter Injuries Reported to NFIRS*, was developed by USFA's National Fire Data Center and is further evidence of FEMA's effort to reduce the number of firefighter injuries through an increased awareness and understanding of their causes and how they might be prevented. The report is part of the Topical Fire Report Series and is based on 2006 to 2008 data from the National Fire Incident Reporting System (NFIRS). Go to: <http://www.usfa.dhs.gov/downloads/pdf/statistics/v11i7.pdf>.

According to the report:

- An estimated 81,070 firefighter injuries occur annually in the United States.
- 49 percent of firefighter injuries occur on the fireground and 6 percent occur while responding to or returning from a fire incident.
- Overexertion/strain is the leading cause of fire-related firefighter injuries at 25 percent.
- 38 percent of all fire-related firefighter injuries result in lost work time.
- The majority of fire-related firefighter injuries (87 percent) occur in structure fires.
- On average, structure fires have more injuries per fire than nonstructure fires.
- Firefighter injury fires are more prevalent in July (10 percent) and peak between the hours of 2 and 5 p.m.

Topical reports are designed to explore facets of the U.S. fire problem as depicted through data collected in NFIRS.

j) IAEMSC Announces Open Enrollment in EMS Surveillance System

The International Association of EMS Chiefs (IAEMSC) is pleased to announce it is accepting enrollment in the National EMS Health and Safety Surveillance System. The project was jointly developed by the IAEMSC and Intermedix and provides a secure web based portal for registered EMS organizations to enter and analyze data regarding occupational illness, injuries and fatalities. The online, secure database provides easy reporting of incident, personnel and event data regarding a potential occupational illness, injury or death. An incident level printed report may be generated to fulfill agency reporting requirements. Periodic reports of agency data, with quarterly aggregate reports of all system data will be available for participating agencies. Annual, system-wide data reports and ad-hoc special requests will also be available for participating agencies.

EMS systems and/or agencies should contact Geoffrey Miller, Project Coordinator and IAEMSC Director Emeritus at Geoffrey.Miller@iaemsc.org for additional information and to become an authorized user of the National EMS Health and Safety Surveillance System.

k) NAEMT's EMS Safety Course Wins National Award

NAEMT's new EMS Safety course has won the 2011 Nicholas Rosecrans Award for Excellence in Injury Prevention. The award was presented to EMS Safety Program chair Glenn Luedtke, who accepted it on behalf of NAEMT and the committee. The award is named after Nicholas Rosecrans, a boy who died in a drowning incident and inspired the prevention program.

View the course information at: <http://www.naemt.org/education/EMSSafety/EMSSafety.aspx>.

l) Schumer Introduces Ambulance Reimbursement Bill in Senate

Senator Charles Schumer (NY) has introduced S. 424 – Medicare Ambulance Access Preservation Act of 2011. S. 424 Amends title XVIII (Medicare) of the Social Security Act to

increase to 6% the rate of increase in the fee schedule for ground ambulance services furnished between January 1, 2012, and January 1, 2018, in rural and urban areas. Extends to January 1, 2018, the increase in the base rate of the fee schedule the Secretary of Health and Human Services is required to make for a trip in the case of ground ambulance services furnished on or after July 1, 2004, for which the transportation originates in a qualified low population density rural area.

m) NREMT Announces Integration of 2010 AHA Guidelines

The National Registry of Emergency Medical Technicians (NREMT) is launching exams that incorporate the 2010 International Consensus Guidelines for Cardiopulmonary Resuscitation (CPR) and Emergency Cardiac Care (ECC) according to the following schedule:

- EMT-Paramedic/Paramedic, November 1, 2011
- First Responder/Emergency Medical Responder, January 1, 2012
- EMT-Basic/EMT, January 1, 2012
- EMT-Intermediate (1999)/AEMT, January 1, 2012
- EMT-Intermediate (1985), March 1, 2012

Please visit the Registry's web site: <http://www.nremt.org/> and the Emergency Care & Safety Institute website: http://www.ecsinstitute.org/view_2010GuidelineChanges.cfm.

n) LODD Handbook Published

The American Ambulance Association, American Medical Response and the National EMS Memorial Service today announced the publication of the "Line of Duty Death Handbook." AAA, AMR and NEMSMS recognized, through their experiences with line of duty deaths, that many agencies have no policies or guidelines in place to deal with the worst should a LODD strike. The Duty Death Handbook has been created as a public service to the EMS community in the hopes it will assist in preplanning for such an event and/or aid such agencies at a time on loss.

The handbook is offered as a guide only and is meant to be adopted into an agencies current policies & procedures and incorporate its other traditions. This on-line publication is available to the EMS community by the editors free of charge; however they suggest a donation be made to the National EMS Memorial Service. The Handbook may be downloaded from the American Ambulance Association or the National EMS Memorial Service websites:

<http://www.the-aaa.org/publications/publications.html> and <http://nemsms.org/handbook.htm>.

o) California Grand Jury Issues Scathing Report on Fire-Based EMS

A Santa Clara County civil grand jury has called for a wholesale rethinking of fire departments and emergency responses arguing that sending firefighters to what are now mostly medical calls is outdated and wasteful.

A report by the watchdog panel found that 70 percent of fire department calls are medical emergencies, and just 4 percent are fire-related. But even so, firefighters respond as if they are heading to a fire, sending a crew of three or more on a truck or engine costing an average of \$500,000 -- five times the cost of an ambulance.

Typically only one of the three arriving firefighters has medical training, the report said. That creates a "mismatch between service needed and service provided," with fire departments deploying "personnel who are overtrained to meet the need" -- that is, paramedics also trained as firefighters.

"Taxpayers can no longer afford to fund the status quo," the report said. "Using firefighter-paramedics in firefighting equipment as first responders to all non-police emergencies is unnecessarily costly when less expensive paramedics on ambulances possess the skills needed to address the 96 percent of calls that are not fire-related."

The report comes as firefighters face growing scrutiny for six-figure salaries and pensions. City officials say mounting costs are driving them to insolvency, forcing layoffs and cuts to popular programs such as libraries.

Santa Clara County and city officials have 90 days to formally respond to the report.

County spokeswoman Gwen Mitchell said the county, whose Emergency Medical Services Agency governs response protocols for most of the county, would not comment before issuing a formal response.

But San Jose fire Chief Willie McDonald questioned whether private ambulance services can do the job faster and cheaper than firefighters. He argued that because they already are heavily staffed and widely deployed to tamp down fires, firefighters can respond more quickly, and it's more cost-effective to give them paramedic training. An ambulance company would have to hire more medics to meet the firefighters' response time targets, he said, and those costs would be passed on to patients and their insurers.

"We have the personnel, and the service is compatible with advanced life support," McDonald said.

The report sharply criticized politically influential firefighter unions, accusing them of stymieing efforts to "think outside the box" to protect jobs. It argues that schedules allowing firefighters to live far outside the communities they serve "may unintentionally foster a culture of insensitivity to residents' sentiments" and a perception of being "entitlement-minded."

"Unions are more interested in job preservation than in providing the right mix of capabilities at a reasonable cost, using scare tactics to influence the public," the report said. "The result is a clear impression of firefighters as self-serving rather than community serving."

The jury report also suggested ambulances could respond faster. And it assailed minimum-staffing requirements in firefighter union contracts as hindering flexibility for departments to operate more efficiently.

San Jose Battalion Chief Robert Sapien, the new president of the San Jose firefighters union -- which a 2009 civil grand jury accused of being needlessly hostile toward city leaders -- said the jurors never talked to him before they issued the report.

He noted that the union's new contract calls for 10 percent pay cuts and for further negotiations on pension reforms, in addition to allowing more staffing flexibility to reduce costs.

"The union and Fire Department have been trying to come up with alternative ways to respond so that we can come up with the best ways to respond to both emergency medical and fire protection," Sapien said. "The assertion that we're immovable and not innovative, I don't know where that comes from."

McDonald said that "our union is interested in talking about all this stuff and willing to look at all kinds of options."

The grand jury interviewed all the city managers and fire chiefs in the county and examined data gathered in a December report by the county's Local Agency Formation Commission, which oversees the boundaries of cities and special districts.

In 2003, the report noted, Sunnyvale -- which operates an unusual public safety department in which police serve dual roles as firefighters -- explored using roaming light-response vehicles, similar to ambulances, for medical calls and found it would improve response times.

"In spite of this data," the report said, the "Sunnyvale Public Safety Department could not generate the institutional and political support necessary to implement change."

p) NFPA 1917 Ambulance Standard Open For Comment

The National Fire Protection Association (NFPA) opened an additional public comment period on the revised NFPA 1917, *Standard for Automotive Ambulances*.

Please go to the most recent document available on the NFPA web site:

<https://www.nfpa.org/Assets/files/AboutTheCodes/1917/1917-A2012-ROP.pdf>.

The report incorporates revisions approved by the 1917 Technical Committee such as changes to maximum vehicle speed, seat belts, securing equipment, striping requirements, and more. This is the final opportunity for those interested in the proposed standard to submit comments. The Committee will review and act on all comments at an October meeting in Baltimore. Deadline for comments is August 30, 2011.

National Association of State EMS Officials (NASEMSO)

Note: The Virginia Office of EMS is an active participant in the NASEMSO and has leadership roles in each NASEMSO Council. The National Association of State EMS Officials is the lead national organization for EMS, a respected voice for national EMS policy with comprehensive concern and commitment for the development of effective, integrated, community-based, universal and consistent EMS systems. Its members are the leaders of their state and territory EMS systems.

q) Dia Gainor Joins NASEMSO as Executive Director

The National Association of State EMS Officials (NASEMSO) announces that Dia Gainor joined its staff on May 2, 2011, as the executive director. In this new position, Gainor is responsible for providing strategic leadership to promote and expand NASEMSO's presence and capacity as a national leader in emergency medical services. As executive director, Gainor will act as a spokesperson for NASEMSO, positioning the association to pursue its vision with federal partners and other organizations. Her major duties and responsibilities will include outreach, representation and business development, along with staffing NASEMSO's EMS Data Council and the Pediatric Emergency Care Council. Elizabeth Armstrong, CAE, NASEMSO's executive director since 1996, will become NASEMSO's executive vice president. She will continue to oversee NASEMSO's scope of operations and staff team delivery of services, programs and information beneficial to the members. Dia can be reached at dia@nasemsso.org.

r) NASEMSO HITS Committee Completes MIECE Proof of Concept

The NASEMSO HITS Committee and Highway Mass Casualty Workgroup is pleased to announce the completion of the Model Inventory of Emergency Care Elements (MIECE) Proof of Concept. MIECE is a safety data analysis tool, and the Proof of Concept is intended to demonstrate the feasibility and utility of an emergency care inventory that displays resources and capacity by segments of highway. MIECE was one of two projects undertaken by the multi-disciplinary work group led by NASEMSO in response to the NTSB recommendations following the 2008 Mexican Hat motor coach crash in rural Utah. The MIECE Proof of Concept, as well as additional information on the Highway Mass Casualty Workgroup can be found on the NASEMSO website at: <http://www.nasemsd.org/>

s) NASEMSO I-Team Releases Transition Templates

NASEMSO's Education Agenda Implementation Team ("I-Team") has approved the release of several "Transition Templates" to assist states with achieving the new scope of practice levels. Some states have already identified state-based learning objectives and educational priorities that exist both above and below the Education Standards making it difficult to establish a "national curriculum" for transition. Because a transition course per se would have a limited shelf life as the Education Standards are implemented, available resources have been focused on developing materials that will support implementation of the new practitioner levels and pre-packaged educational materials geared specifically to the changes are generally unavailable. To assist this effort, NASEMSO has utilized the Gap Analysis Template to help identify the generic "Gap Content" that can be used to enhance the knowledge and skills of existing practitioners that

desire certification/licensure at the level of the Education Standards. States still need to determine which content and/or skills must be tested and/or verified to complete state-based transition processes. The templates are available as follows:

- First Responder to Emergency Medical Responder
- EMT-Basic to Emergency Medical Technician
- EMT Intermediate 85 to Advanced Emergency Medical Technician
- EMT Intermediate 99 to Advanced Emergency Medical Technician
- EMT Intermediate 99 to Paramedic
- EMT-Paramedic to Paramedic

These materials are now available in NASEMSO's Implementation Toolkit at:
<http://www.nasemso.org/EMSEducationImplementationPlanning/Toolkit.asp>

t) Rural Emergency Medical Services: The '4th E' Strategies for Safety

A webinar sponsored by the Center for Excellence in Rural Safety in cooperation with the Federal Highway Administration is archived and now available for viewing. Professionals in the emergency medical services (EMS) industry throughout the country have a unique perspective on safety. The extremes of rural scenarios create special challenges, yet EMS personnel can make significant contributions to reducing death and disability following motor vehicle crashes. This webinar focused on some of the behavioral interventions the EMS community is introducing and provided insights about opportunities for rural EMS systems. NASEMSO President Randy Kuykendall outlined specific initiatives aimed at improving the safety of EMS personnel and system performance, such as Colorado's experience in developing a culture of safety through a statewide advisory council and the now-annual Colorado EMS safety conference. Dia Gainor, then EMS Bureau Chief in Idaho, discussed the EMS Incident Response and Readiness Assessment tool developed as part of a recent rural highway mass casualty project in Idaho.

You can watch the webinar at:
<http://fhwa.adobeconnect.com/p23635127/?launcher=false&fcsContent=true&pbMode=normal>.

You can download presentation slides:
http://www.ruralsafety.umn.edu/events/EMSstrategies/documents/EMS_slides.pdf

u) Webinars, Toolkit Provide Tips on Incorporating EMS Projects into Flex Proposals

The Joint Committee on Rural Emergency Care – a partnership between NOSORH and the National Association of State EMS Officials offers two Webinars focused on helping state Flex coordinators work with state EMS Offices to build trauma, stroke and cardiac “systems of care” and incorporate EMS projects into their Flex grant proposals. Viewable recordings and additional materials for both Enhancing EMS in Your State Webinars are available for viewing/downloading in the Past Webinar Materials section of the NOSORH website at:
<http://www.nosorh.org/news/webinars.php>.

Educational Development

III. Educational Development

Committees

- A. **The Training and Certification Committee (TCC):** The committee met on July 6, 2011.
1. One action item is forwarded from the Committee for consideration by the Advisory Board. See **Appendix B** regarding the proposal to move Virginia to National Registry Testing at all levels of certification.
 2. Copies of past minutes are available on the Office of EMS Web page here: <http://www.vdh.virginia.gov/OEMS/Training/Committees.htm>
- B. **The Medical Direction Committee (MDC)** The Medical Direction Committee was scheduled to meet on July 7, 2011. Dr. Asher Brand, chairperson, cancelled the meeting after surveying committee members and determined a quorum was unattainable. The committee is scheduled to meet on October 6, 2011 at 10:30 AM at the Office of EMS located at 1041 Technology Park Dr., Glen Allen, VA.
- Copies of past minutes are available from the Office of EMS web page at: <http://www.vdh.virginia.gov/OEMS/Training/Committees.asp>

National Registry Of EMTs Certification Test Proposal

The proposal for utilizing the National Registry of EMTs (NREMT's) as the initial certification examination process for all EMS levels in Virginia continues to be investigated by the Office. **Appendix C** is a copy of the slide presentation presented to the Training and Certification Committee (TCC) at their last meeting. This presentation is also available on the OEMS web site at (<http://www.vdh.virginia.gov/OEMS/Training/Committees-CTA.htm>).

This is a critical issue that must be addressed in order to allow time for educating all EMS instructors and coordinators concerning new procedures, to address any regulatory changes and to allow for item development. This is one of the most significant issues the certification of Virginia providers has faced. This matter has considerable impact on certification validation, reciprocity, and complying with established national educational and certification standards.

Perhaps the most significant issue is the cost of EMS certification at the basic level. Up until now, the cost of developing certification examinations has been kept to a minimum because the Office participates with other Atlantic EMS Council member states (PA, NJ, WV, DE, DC, MD and NC) in test item construction. Unfortunately, many of the

resources utilized are no longer available and many Atlantic Council members are developing their own plans to utilize the National Registry of EMTs effective within the next year to eighteen months.

This process will have minimal impact upon the EMS provider. The primary change will be that BLS examination eligible candidates will take the written examination via computer at designated testing centers throughout Virginia. This is somewhat similar to the existing process that requires individuals to register with the test site to take the written examination. The difference is there will be greater opportunity to schedule the written test at a time that is convenient to the candidate since the computer test sites have more time flexibility. There will be no change to the practical process.

The only change for ALS testing is candidates' must pay a fee to take the Advanced EMT (AEMT) (currently the Enhanced level) written examination. There will be no change for the Intermediate and Paramedic examination. The Office will continue to conduct all ALS practical examinations. Furthermore, the Office foresees little change in this process except that once implemented, the Enhanced program will be replaced with the AEMT because of their similar educational components.

Although other vendors are available to offer examination tools, the overall cost are similar.

The issue that supports the use of National Registry is that it is recognized nationally for providing a valid and uniform process to assess the knowledge and skills required for EMS professionals throughout their careers. The Office is committed to minimize the impact on EMS certification candidates with any changes to the EMS certification examination process. The move toward National Registry is an action that will preserve the well respected EMS System in Virginia, significantly improve opportunities for reciprocal transfer of certifications across state lines and assure Virginia is compliant with current EMS Standards. In doing so, we will continue to assure the health, safety and welfare of all Virginians when the need arises for EMS services.

- A. Included as **Appendix D** is the document about National Registry testing included in the May EMS Advisory Board report.

Advanced Life Support Program

- A. Tom Nevetral rendered his resignation effective July 6th, 2011. Tom has been an integral part of the Division of Educational Development. He developed and initiated many components that improved Virginia's EMS System. The Office, the Division, and I will surely miss his regular insight and guidance as we move forward, meeting the needs of Virginia's EMS System. The Division asks that each of you be patient with the office as we seek to fill this position. The Division will continue to fulfill the vacated position's responsibilities. Any assistance you can provide such as assuring you allow plenty of time to address issues is appreciated. Warren will be assuming many of functions so you can send

correspondence to him. In closing, we wish Tom the best as he assumes the reigns of another job. The office is confident that Tom's new employer will quickly appreciate the unique qualities Tom possesses and how fortunate they are to have him on board.

- B. The Division of Educational Development participated in the ALS Coordinator's meeting held in Roanoke on Friday, July 15th. The meeting was hosted by the Jefferson College of Health Sciences. Following the meeting, the VEMSES exam was offered.

Basic Life Support Program

A. Instructor Institutes

1. The Office held an EMT Instructor Institute in conjunction with the VAVRS Rescue College June 11-15, 2011 at Virginia Tech. 12 Candidates became EMT-Instructors.
2. The next EMT Instructor Practical is scheduled for Saturday, August 20, 2011.
3. The next Instructor Institute will be held in Richmond, VA , October 8-12, 2011.
4. EMS Providers interested in becoming an Instructor or the process towards becoming an Education Coordinator in the future please contact Greg Neiman, BLS Training Specialist by e-mail at Gregory.Neiman@vdh.virginia.gov

B. VEMSES Exam

1. There have been 114 attempts at the exam (which includes a few retests) and the current pass rate is 60.53%.
2. Current EMT-Instructors/ALS-Coordinators may schedule to take the exam at Regional CTS's.
3. The Office is also offering the exam after in-person updates and ALS-C meetings. Seven candidates tested after the Instructor Update on June 11, 2011 and 14 tested after the ALS Coordinator Meeting in Roanoke on July 15, 2011. The next in-person offering will be after the update at the VAVRS Convention in Virginia Beach on September 24, 2011.

C. EMS Instructor Updates:

1. The Division of Educational Development continues to hold both online and in-person Instructor Updates.
2. Online Updates were held on the first Thursday evening in July. The last in-person update was held in conjunction with the Instructor Institute on Saturday June 11, 2011. Forty-five Instructors/ALS Coordinators attended. The next in-person update is scheduled on Saturday, September 24, 2011

in conjunction with the VAVRS Rescue College in Virginia Beach, VA.
Pre-registration is not required to attend.

3. The schedule of future updates can be found on the Web at
http://www.vdh.virginia.gov/OEMS/Training/EMS_InstructorSchedule.htm

EMS Training Funds

The Office released the contracts for FY12 at the beginning of June.

Financial Update on FY09, FY10, FY11 and FY12 as of July 20, 2011

FY09

	<i>Commit \$</i>	<i>Payment \$</i>	<i>Balance \$</i>
BLS Initial Course Funding	\$814,237.00	\$554,290.52	\$259,946.48
BLS CE Course Funding	\$113,400.00	\$61,976.27	\$51,423.73
ALS CE Course Funding	\$304,920.00	\$102,606.50	\$202,313.50
BLS Auxiliary Program	\$76,000.00	\$19,520.00	\$56,480.00
ALS Auxiliary Program	\$840,000.00	\$184,222.25	\$655,777.75
ALS Initial Course Funding	\$1,028,861.50	\$689,357.59	\$339,503.91
Totals	\$3,177,418.50	\$1,611,973.13	\$1,565,445.37

FY10

	<i>Commit \$</i>	<i>Payment \$</i>	<i>Balance \$</i>
BLS Initial Course Funding	\$442,119.00	\$281,079.57	\$161,039.43
BLS CE Course Funding	\$66,360.00	\$37,108.00	\$29,252.00
ALS CE Course Funding	\$194,880.00	\$83,437.50	\$111,442.50
BLS Auxiliary Program	\$128,000.00	\$13,280.00	\$114,720.00
ALS Auxiliary Program	\$476,000.00	\$97,480.00	\$378,520.00
ALS Initial Course Funding	\$844,815.00	\$454,905.39	\$389,909.61
Totals	\$2,152,174.00	\$967,290.46	\$1,184,883.54

FY11

	<i>Commit \$</i>	<i>Payment \$</i>	<i>Balance \$</i>
BLS Initial Course Funding	\$787,116.00	\$440,294.97	\$346,821.03
BLS CE Course Funding	\$84,000.00	\$33,040.00	\$50,960.00
ALS CE Course Funding	\$235,200.00	\$94,412.50	\$140,787.50
BLS Auxiliary Program	\$98,000.00	\$8,600.00	\$89,400.00
ALS Auxiliary Program	\$391,680.00	\$109,720.00	\$281,960.00
ALS Initial Course Funding	\$1,008,576.00	\$420,516.33	\$588,059.67
Totals	\$2,604,572.00	\$1,106,653.80	\$1,497,918.20

FY12

	<i>Commit \$</i>	<i>Payment \$</i>	<i>Balance \$</i>
BLS Initial Course Funding	\$333,555.00	\$2,142.00	\$331,413.00
BLS CE Course Funding	\$41,160.00	\$0.00	\$41,160.00
ALS CE Course Funding	\$119,280.00	\$0.00	\$119,280.00
BLS Auxiliary Program	\$36,000.00	\$0.00	\$36,000.00
ALS Auxiliary Program	\$164,000.00	\$0.00	\$164,000.00
ALS Initial Course Funding	\$660,960.00	\$0.00	\$660,960.00
Totals	\$1,367,195.00	\$2,142.00	\$1,365,053.00

EMS Education Program Accreditation

A. EMT accreditation program.

1. Emergency Medical Technician (EMT)
 - a) No applications on file.
2. Advanced Emergency Medical Technician (AEMT)
 - a) No applications on file.
3. Intermediate – Reaccreditation
 - a) Rappahannock Community College
 - (1) Application received and on file
 - (2) Site Visit Team Assigned
 - (3) Site Visit Scheduled and Conducted on July 11 and 12, 2011.
 - b) Norfolk Fire-Rescue
 - (1) Application received and on file
 - (2) Site Visit Team Assigned
 - (3) Site Visit Scheduled for August 11 and 12, 2011.
4. Intermediate – Initial
 - a) Dabney S. Lancaster Community College in Clifton Forge.
 - (1) The Final Report was submitted by the Site Visit Team and the college was informed of the decision to not grant accreditation until several structural issues are corrected.
5. Paramedic – Initial
 - a) No applications on file.

B. For more detailed information, please view the Accredited Site Directory found on the OEMS web site at:

1. <http://www.vdh.state.va.us/OEMS/Training/Accreditation.htm>

C. Beginning January 1, 2013, paramedic students who are candidates for certification testing through the National Registry of EMT's (NREMT – www.nremt.org) are required to have graduated from a nationally accredited paramedic program—national accreditation is offered through the *Committee on Accreditation of Educational Programs for the EMS Professions* (CoAEMSP – www.coaemsp.org).

1. Virginia is well positioned to ensure that students completing paramedic training programs in the Commonwealth will be eligible to test NREMT beginning January 1, 2013.

2. Of 16 accredited paramedic training programs, there are only a handful of programs which still need to obtain national accreditation through CoAEMSP/CAAHEP.
 - a) Lord Fairfax Community College
 - (1) Has submitted their self-study to CoAEMSP and is awaiting a site visit from the national accrediting body.
 - b) Patrick Henry Community College
 - c) Rappahannock EMS Council Paramedic Program
 - d) Southside Community College
 - (1) Has submitted their self-study to CoAEMSP and is awaiting a site visit from the national accrediting body.
 - e) Prince William County Paramedic Program
- D. For programs and entities NOT currently accredited at the paramedic level, accomplishing accreditation at this level will require the following steps:
 1. Currently accredited Virginia Intermediate programs wanting to conduct paramedic education will be required to first seek Virginia paramedic accreditation through the Office of EMS.
 - a) If the site successfully completes the state paramedic accreditation process, they will be issued a grant of accreditation which will allow them to complete one (1) initial basic program (a cohort). CoAEMSP requires that each program seeking national accreditation have successfully completed an initial paramedic cohort.
 - b) During training of this initial cohort, the program will be required to complete the CoAEMSP self study.
 - c) At the completion of the first cohort, the program will need to submit their self study to CoAEMSP.
 - (1) When submitting the CoAEMSP self study, the program will have to request a *Letter of Review* from CoAEMSP. If the self study is complete and meets CoAEMSP requirements, the CoAEMSP staff will issue a *Letter of Review* attesting to the fact that the program has applied for national accreditation.
 - d) The program will be required to submit the *Letter of Review* to NREMT and request that their initial cohort be allowed to apply for and complete NREMT certification testing.
 - (1) The ability for programs to announce and conduct additional initial paramedic training programs in Virginia will require that the program have successfully completed and been granted national accreditation through CoAEMSP/CAAHEP

On Line EMS Continuing Education

OEMS continues to work with third party continuing education vendors seeking to offer web-based continuing education in Virginia. To date, the Office has approved (five) 5 third party vendors: 24-7 EMS, CentreLearn, HealthStreams, Medic-CE and TargetSafety.

There are more than 475 OEMS approved online CE courses currently offered through these vendors. A vigorous screening process assures the programs are of quality and allows for the electronic submission of continuing education to the OEMS technician database.

For more information, visit the OEMS Web page at:

<http://www.vdh.virginia.gov/OEMS/Training/WebBasedCE.htm>

EMSAT

- A. The Summer-Fall 2011 EMSAT Schedule contains 5 category one BLS and 6 category one ALS training programs. All programs feature either physicians or nurses as instructors. The September program, “Dealing with LVADs, in being co-produced by OEMS and Virginia Beach Fire Department.
- B. EMSAT programs for the next three months include:
 - 1. Aug. 17, Intraosseous Infusion
 - 2. Sept. 21, Dealing with LVADs
 - 3. Oct. 19, Abdominal Trauma

The EMS Provider Portal

The Office extends an appreciation to the EMS constituents who are assisting in promoting the EMS Provider Portal. As of July 22, 2011, provider compliance is at 54%. The Office is hoping for full compliance before the end of the year. We will keep this as part of the report as a reminder to encourage your EMS peers that have not logged into the portal, to do so. As the portal expands to agencies, it will be most important that all providers have an active and up to date portal.

The EMS Provider Portal is an all encompassing electronic dossier which provides unrivaled, 24/7/365 access to Virginia EMS personnel. Some of the features of the EMS Provider Portal include access to:

- EMS Agency affiliation data
- Continuing Education (CE) reports
- Enrolled course data
- Certification Test Eligibility letters
- Certification Test Results
- E-mail notifications of certification expiration
- Access to update/change address, phone number and e-mail address
- E-mail opt-in/opt-out functionality allowing for updates from various Divisions within the Office of EMS.

In addition, the approximately 600 EMS educators have the following additional access:

- Online course management tools

- Course Approval documents and notifications
- EMS Training Funds Contracts
- Various instructor reports
- Course statistics

The Office continues to see growth in the submission of CE from those using handheld scanners. The scanners also drastically reduce the number of errors in continuing education submissions, radically improving the efficiency in reporting. This innovative application of technology also reduces the time it takes to record continuing education from three to seven days to less than 24 hours. The long term payoff in scanner use is realized by:

- Reducing the need to hand deliver (drive) continuing education to the Office of EMS.
- Reducing the number of errors which result in additional mailings and staff time.
- Reducing the number of errors resulting in less recertification issues.
- Reducing the cost of printing and mailing by the office of continuing education cards (approximately savings of \$4000 a year)
- An improved customer service environment.

If you would like information about the scanners, contact Chad Blosser at chad.blosser@vdh.virginia.gov.

Other Activities

- A. The division participated in the summer meeting of the Atlantic EMS Council on July 25 through July 26.
- B. Interviews were conducted on July 14th for the part time position of Certification Coordinator Supervisor.
- C. Interviews were conducted on July 20th and 21st for the part time positions for Certification Examiner – NR level.

Emergency Operations

IV. Emergency Operations

Operations

- **Virginia 1 DMAT**

Gary Brown and Jim Nogle attended the June 21st DMAT meeting in Williamsburg, VA. Discussion was mainly centered on the new reorganization of the DMAT teams and how Virginia 1 DMAT will be meeting the requirements. The team was also advised that Marsha Hawkins, Virginia 1 DMAT Deputy Commander, will be resigning from this position but will stay on with the team in the position of Historian. A leadership meeting was held July 26, 2011.

- **HMERT Operations**

EMS Task Force Thomas Jefferson 2 (TJ-2) participated in the annual Rural Access Medical event in far Southwest Virginia July 21-24, 2011. The event provides an opportunity for residents of the area to receive medical treatment that they may not receive throughout the year. TJ-2 provided EMS support during the event, seeing patients and transporting as necessary to the area hospital.

- **Bull Run Anniversary Celebration**

The Division of Emergency Operations continued to assist in VDH planning for the 150th Anniversary of the First Battle of Bull Run. During the event, the HMERT Coordinator placed teams on alert, updated Program Reps and monitored activities to ensure state assistance was not requested. The Emergency Operations Assistant Manager also assisted in an after action teleconference.

- **VDH Statewide Exercise**

Winnie Pennington, Emergency Planner, participated in the VDH Statewide Exercise on June 22, 2011. She served as a liaison to provide EMS information during the exercise. Winnie also participated in the After Action Meeting to review the activities and lessons learned during the exercise.

- **OEMS COOP Activation**

On May 23, 2011 the Office of EMS suffered a prolonged power outage as the result of a blown transformer. During the power outage the determination was made to activate the OEMS COOP. The Division of Emergency Operations played an integral role in the activation of the plan, sending the Emergency Operations Manager and Assistant Manager to activate the off-site Emergency Support Center. The Emergency Planner developed an After Action report to review the activation of the COOP and any issues that arose during it.

- **Emergency Operations Support to Outside Agencies**

During this quarter, the Division of Emergency Operations provided logistical support to multiple events within the Commonwealth. This includes the Hanover Tomato Festival on July 9, 2011 and the Riverfest in Tappahannock on June 25, 2011.

- **West Virginia EMS Meeting**

July 7-8, 2011, the Emergency Operations Manager and Assistant Manager traveled to Flatwoods, West Virginia to attend a meeting of EMS representatives from several states, including West Virginia, Virginia, Maryland, Pennsylvania, Kentucky, and Ohio. The meeting's main purpose was to discuss the impacts a failure of the Bluestone Dam would have on the states and also to provide an update on the Boy Scout Jamboree activities in West Virginia.

- **CBS 6 Health Segment**

Karen Owens participated in a short segment on CBS 6 news discussing the signs, symptoms, and treatment of heat rash, heat exhaustion, and heat stroke.

Planning and Preparedness

- **Review of Regional Council Plans**

Winnie Pennington, Emergency Planner, reviewed the Continuity of Operations Plans and Mass Casualty Incident Management (MCIM) Plans of the Regional Councils. During her review she provided feedback for strengthening the plan. As part of her review, Winnie also met with the Old Dominion EMS Alliance Director to review options for rewriting that region's MCIM plan.

Committees/Meetings

- **Narrowbanding**

Karen Owens, Emergency Operations Assistant Manager, participated in multiple meetings of ODEMSA area agencies to discuss the impact of the narrowbanding mandate on EMS operations. A survey was developed and sent to ODEMSA agencies to see which agencies knew about the narrowbanding mandate, and which agencies would need assistance in completion of the narrowbanding requirements. Meetings were held May 19, June 27, and July 28, 2011.

- **Family Assistance Center (FAC)**

On June 7, 2011 the Emergency Planner attended by teleconference state FAC committee meeting to review final draft of state plan

- **OEMS/DFP Meeting**

On May 18, 2011, the Emergency Operations Assistant Manager participated in the joint OEMS and Department of Fire Programs meeting. The meeting is an opportunity for both groups to share ongoing activities and discuss issues that impact both Fire and EMS providers.

- **EMS Emergency Management Meeting**

The EMS Emergency Management Committee met on March 17, 2011 and April 28, 2011. The committee continued work on finalization of the 2011 update of Mass Casualty Incident Management Module I and II.

- **Hurricane Evacuation Committee**

Frank Cheatham, HMERT Coordinator, continues to participate in the Hampton Roads Hurricane Evacuation Committee meetings.

- **EP&R Team Meetings**

The Emergency Planner continues to participate in the monthly EP&R meetings.

- **Metropolitan Washington Council of Governments**

Jim Nogle attended the Department of Defense and Federal Assets Integration into National Capital Region Emergency Medical Services Response, Concept of Operations meeting on July 19, 2011 at Ft. McNair in Washington D. C. This meeting reviewed and tested the draft information provided. A major accomplishment of this group was putting together information regarding the vast amount of career, military, and Federal EMS resources in this area and discussing the ability to share those resources should a major event occur.

- **EMS Communications Committee**

The EMS Communications Committee held a meeting June 29, 2011 at the City of Lynchburg Emergency Communications Center. Discussion included OEMS PSAP reaccreditation standards being modified to require PSAP's to maintain an 85% or greater score for compliance with EMD protocols through quality assurance/quality improvement review. Further discussion was had regarding a White Paper to be completed by the committee promoting the employment of EMD protocols to agencies and jurisdiction not yet providing that service to its citizens. Committee Chair Pokey Harris also proposed the committee membership include representation from the following agencies and/or organizations;

- Association of Public Safety Communications Officials, Virginia Chapter
- National Emergency Number Association, Virginia Chapter
- State EMS Advisory Board
- Regional EMS Council Director
- State Interoperability Executive Committee
- Virginia Association of Counties
- Virginia Municipal League
- Virginia Dept. of Emergency Management
- Va. Information Technologies Agency – Public Safety Division
- Member at large (preferably from the 9-1-1 community)

- **COOP Committee**

Winnie Pennington, Emergency Planner, continued to review and update the COOP Committee on changes to the COOP. On July 25, 2011 a meeting was held to review the lessons learned from the COOP exercises and determine changes needed to the COOP. Winnie continues to work on a checklist for all OEMS staff members.

- **Critical Incident Stress Management (CISM) Committee**

A meeting of the CISM Committee was held May 11, 2011. The meeting focused on the accreditation process for CISM teams.

- **REMS CISM Meeting**

On June 20, 2011, the Emergency Operations Assistant Manager travelled to the Rappahannock EMS Council to meet with the CISM Team. The meeting focused on the accreditation process and the steps necessary for teams to receive accreditation.

- **Traffic Incident Management**

Frank Cheatham, HMERT Coordinator continues to work on a Traffic Incident Management Program with VDOT and other agencies.

Training

- **CISM Training**

On June 2-5, the Office of EMS sponsored a CISM Training program in the Tidewater EMS Region. The course prepares individuals to assist in recognizing the effects of critical incident stress in first responders.

- **VOPEX 2011**

On July 19, 2011, Winnie Pennington, Emergency Planner, and Dan Norville, OEMS Coordination Team Member, participated in the annual VOPEX exercise. Held at the State Emergency Operations Center, the exercise is designed to practice response to an incident at the nuclear power plants.

- **COOP Exercise 2011**

The Emergency Operations Planner,. With assistance from the COOP committee continued to host COOP Exercise Trainings for OEMS staff. The following is a list of Divisions and dates the exercises were conducted.

- Administration – May 18
- Emergency Operations – May 25
- Regulation and Compliance – June 1
- Public Information and Technical Assistance – June 8
- Trauma/Critical Care – June 27

- **American College of Emergency Physicians (ACEP)**

For a webinar produced on July 6, 2011, Jim Nogle, was asked by ACEP to serve as a subject matter expert (SME) on Virginia Building Collaborative Disaster Planning Processes between Hospitals and Emergency Management. This webinar was produced in collaboration with DHS/FEMA for a nationwide program addressing preparation, response, mitigation, and recovery joint planning between hospitals and emergency management.

- **Heath Alert Network Training**

Division of Emergency Operations staff participated in Health Alert Network Training on July 25, 2011. Frank Cheatham, HMERT Coordinator, and Ken Crumpler, Communications Coordinator, attended additional training on July 27, 2011 to become site administrators.

Communications

- **OEMS Public Safety Answering Point (PSAP) & 911 Center Accreditation**

Ken Crumpler visited the Amherst County 9-1-1 Center for biannual OEMS PSAP reaccreditation. All training and certifications were in order, assistance will be provided with documentation for quality assurance/quality improvement. The PSAP accreditation certificate and plaque was presented to Newport News Police, Communications Division on July 11, 2011 from their accreditation on November 11, 2010. There are no pending applications at this time.

- **Virginia State Interoperability Executive Committee (SIEC)**

OEMS was represented by Ken Crumpler at the State Interoperability Executive Committee, Operations Sub-Committee Meeting on July 27, 2011 at the Virginia Emergency Operations Center in Chesterfield County.

- **Association of Public Safety Communications Officers (APCO)**

OEMS was represented by Ken Crumpler at the combined Virginia Chapter APCO/NENA Conference in Virginia Beach May 18-20, 2011. Mr. Crumpler also represented OEMS at the Virginia Chapter APCO and Virginia Chapter NENA meetings held in conjunction with the conference. Ms Amanda Davis, OEMS Grants Administrator attended to assist with meetings concerning public safety communications grants.

Planning and Regional Coordination

VI. Planning and Regional Coordination

Regional EMS Councils

Regional EMS Councils

The Regional EMS Councils are in the process of submitting Fourth Quarter contract reports throughout the month of July. Submitted deliverable items are under review by OEMS.

OEMS also entered into contracts with the Regional Councils for the current fiscal year, with some minor contract modifications.

The EMS Systems Planner attended regional award programs for the Central Shenandoah, Lord Fairfax, Northern Virginia, Old Dominion, Peninsulas, and Western Virginia Councils, and served on the interview panel for the Executive Director position at the Peninsulas EMS Council.

Medevac Program

The Medevac Committee met on August 11, 2011. The minutes were not available at the time of the submission of the GAB quarterly report. At a prior meeting, Dr. Remley has tasked the State Medevac committee to examine the future shape of air medical medicine in Virginia. Dr. Remley's directive also tasks the committee to partner with other stakeholders to propose a comprehensive voluntary statewide network committed to safety, access and quality. A draft was presented to VDH administration in May, and feedback has been received, leading to revisions, and the involvement of the Medical Direction Committee.

OEMS and Medevac stakeholders continue to monitor developments regarding federal legislation and other documents related to Medevac safety and regulation. These documents can be found on the Medevac page of the OEMS web site.

State EMS Plan

The Virginia Office of EMS Strategic and Operational Plan is mandated through *The Code of Virginia* to be reviewed and revised on a triennial basis. The current version of the plan was approved by the State Board of Health in March of 2011. There have been no changes to the plan since that approval.

Public Information & Education

V. Public Information and Education

Symposium

Registration for the symposium opened on Monday, August 1st. The symposium course catalog was completed and posted to the website along with all of the registration information. Registration will remain open until Friday, September 30th.

We significantly cut back the number of printed catalogs this year, but are producing a promotional brochure that will be sent to all affiliated EMS providers. This new advertisement may help boost attendance numbers and is more cost effective than printing a large quantity of the brochures.

We are working on promotional efforts for the symposium and special events that will be taking place during the symposium like the career fair. We are also working on a media outreach plan to get additional media coverage for the symposium.

PI&E continues to support AEMER with sponsorship requests to help support the symposium.

Governors Awards

All of the regional award nominees were submitted to PI&E and we have sent the information to the awards selection committee for their review. The committee will meet August 19th to discuss the nominees and select the winners.

PI&E staff will be discussing some changes to the program that the regional council directors have suggested.

A new section of the OEMS website has been created just for the awards program. Information will be available year-round, and when nominations are being accepted, the forms and deadlines will be available on this website.

Marketing & Promotion

OEMS Website Redesign

The entire VDH website underwent redesign. The OEMS section has been updated to follow this new design. PI&E worked with the web manager and the program managers to transfer, update and create new content for the website. The updated site has been promoted through our list serv and social media. We have asked providers to familiarize themselves with the site and contact PI&E with any questions or comments.

Mental Health Awareness

PI&E provided information and resources on mental health awareness for EMS providers on our website, social media and in the Bulletin. This topic is part of the outreach on provider and health and safety.

Training Catalog

PI&E is working with the training division to update the training catalog and is working on getting approval to print the catalog to provide to agencies and have at events and the symposium.

Conferences

PI&E managed the registration for the VAVRS Convention and will work with the program managers who are attending to staff the OEMS booth in the vendor area of the convention.

National EMS Week

PI&E promoted National EMS Week to various media outlets and focused on 911 dispatch centers. We also provided information and topics for the VDH social media sites and our own social media sites.

OEMS Media

The PI&E Coordinator worked with Division of Regulations and Compliance on media requests about Gladstone Rescue Squad losing the support of the local government. We also answered media inquiries about Riner Rescue Squad opening.

We coordinated an interview with Karen Owens, Emergency Operations Assistant Manager about heat safety <http://www.wtvr.com/videobeta/43bd4093-60ba-47ce-97fe-e9b23acc45db/News/Heat-Related-Illnesses>.

VDH Communications

Office of Licensure and Certification –The OEMS PI&E Coordinator provides media coverage and guidance for the Office of Licensure and Certification and continues to manage media inquiries for the office on a variety of topics like COPN, medical facility complaints and more.

Abortion Clinic Regulations – The PI&E Coordinator has been working with VDH leadership to manage media inquiries about the new legislation that has required abortion clinics to become licensed facilities.

VDH Media Coverage – The OEMS PI&E Coordinator provided support for a variety of media requests for VDH programs.

VDH Web Site Policy, Procedures and Design Committee – The PI&E Coordinator is managing the process to redesign the VDH website with the website committee. Contractors were hired to help with the design and content and are working with the various offices and health districts to manage the rollout of the new site.

VDH Branding – The PI&E Coordinator is on the ORCE Strategic Planning Committee assigned to the task for VDH Branding. This includes logo use policies, creating an agency style guide and templates for documents and more. The PI&E Coordinator created VDH PowerPoint templates that will be used by all offices and districts. The PI&E Coordinator is creating an agency style guide that includes approved fonts, logos, colors and templates.

The PI&E Coordinator continues to collect updates and information on OEMS projects and programs to include in the report to the Secretary and the weekly e-mail from the Commissioner.

Regulation & Compliance

VII. Regulation and Compliance

Compliance

The EMS Program Representatives continue to complete ongoing investigations pertaining to EMS agencies and providers. These investigations relate to issues concerning failure to submit prehospital patient care data (VPHIB), violation of EMS vehicle equipment and supply requirements, failure to secure drugs and drug kits, failure to staff the ambulance with minimum personnel and individuals with criminal convictions. The following is a summary of the Division's activities for the second quarter of 2011:

Enforcement

Citations Issued: 16
Providers: 11
EMS Agencies: 2

Compliance Cases

New Cases: 102 Cases closed: 67
Suspensions: 7 Temporary Suspensions: 7
Revocations: 1
Consent Order: 1

EMS Agency Inspections

Licensed EMS agencies: 679 Active

Permitted EMS Vehicles: 4,242
(Active, Reserve, Temporary)

Recertification:
Agencies: 91
Vehicles: 525

New EMS agencies: 2

Spot Inspections: 32

Hearings (Formal, IFFC)

April 4, 2011 – Boyd; Lohr; Nixon

April 13, 2011 – Horn; Salyer; Hicks

June 8, 2011 – American Medical Response; Wilson

June 15, 2011 – Norfolk Fire and Rescue; Newport News Fire Department

June 30, 2011 – Reid; Gee

Variances

Approved: 3

Disapproved: 2

Consolidated Test Sites

Scheduled: 57 Cancelled: 3

OMD/PCD Endorsements

As of April 25, 2011: 211 Endorsed

Regulations

1. The Durable Do Not Resuscitate (DDNR) Regulations 12VAC5-66 became effective on July 20, 2011.
2. The final draft of the Virginia Emergency Medical Services Regulations 12VAC5-31 resides with the Secretary of Health and Human Services awaiting his review and approval (4/25/2011).

Notable Information

The *National Fire Protection Association* (NFPA) opened an additional public comment period on the revised NFPA 1917, *Standard for Automotive Ambulances*. Click on the following: <http://www.fireengineering.com/index/articles/generic-article-tools-template.articles.fire-engineering.fire-ems.hot-buttons.2011.07.ambo-standard-comment.html>. Deadline for comments is August 30, 2011.

Personnel Matters

Mr. Adam Harrell started his employ as the newest member of this Office and as an OEMS Program Representative for the Northern Virginia area (previously held by Ken Pullen, retired) on May 25, 2011. Adam comes to us from the Halifax area as a practicing paramedic, most recently employed at the Halifax Regional Hospital as the Emergency Management Coordinator. He now resides in the Fairfax area with his wife and son and is swiftly acclimating himself to the agencies and his roles.

Division Work Activity

1. Regulation and Compliance staff represented the Office of EMS in Fire/EMS studies conducted by the Virginia Fire Service Board for the following jurisdiction: Augusta County.(report presented to Board of Supervisors on April 11, 2011) In addition, staff has participated as team members for the following locations: Northampton County, Washington County and King George County.
2. Staff continues to offer technical assistance to EMS agencies, entities and local governments as requested.
3. Field staff continues to assist the Grants Manager and the RSAF program by offering reviews for submitted grant requests as well as ongoing verification of RSAF grants awarded each cycle.
4. Staff is refining the final proposal for review and approval by VDH executive management for the replacement of the OEMS Program Representative's vehicle over the course of the next several budget cycles. Emphasis will be placed on fuel economy as well as program support and needs.
5. Staff has also participated and /or supported the following events during the second quarter of 2011:
 - a. Met with state coordinator of Medical Reserve Corps (MRC) to understand role of EMS provider who are members of the MRC (April 6, 2011).
 - b. Participated along with Emergency Operations staff in discussions for planning of the 150th Anniversary of Bull Run events (April 18, 2011).
 - c. Staff represented the Office at the Fire Service Board meeting (April 7, 2011).
 - d. Staff attended the regional awards events for TJEMS (May 11, 2011) and BREMS (May 19, 2011) on behalf of the Office.
 - e. Staff participated in the combined OEMS/DFP meeting (May 18, 2011).
 - f. Staff conducted their quarterly meeting on June 1-3, 2011 in Richmond.
 - g. Staff attended the combined Stakeholders Legislative Summit (June 10, 2011).
 - h. Staff attended the State Fire Chiefs meeting (June 21, 2011).
 - i. Staff attended RIS training (June 22, 2011) (Regulatory activity).

Technical Assistance

VIII. Technical Assistance

EMS Workforce Development Committee

The Workforce Development Committee met on July 20, 2011.

The committee was given an update on the Volunteer Rescue Squad Assistance Work Group (VRSAG) Retreat on July 20 and 30. The purpose of this retreat is to create a strategic plan to assist volunteer rescue squads succeed. The retreat will be facilitated by Ray Kniphuisen and Robin Bichy.

The committee discussed having representation at the upcoming VAVRS District meetings to provide an overview of the EMS Officer Standards and the Standards of Excellence programs. In addition, it is important that the committee stay up to date with the issues being discussed at these meetings.

WDC Sub-committee Reports:

a) Standards of Excellence

The Standards of Excellence program sub-committee has met recently to complete the review of the Areas of Excellence. The specific Areas addressed are:

- Clinical Care Measures/Standards
- Community Involvement
- Leadership/Management
- Life Safety
- Medical Direction
- Performance Improvement
- Recruitment & Retention

A change in direction of the program has been discussed – Standards of Excellence will be first rolled out as an EMS Agency Self-Evaluation; Resource and Improvement Program. Virginia's smaller, rural EMS agencies are the ones that can really benefit from this program.

The Office of EMS is seeing many of these agencies having difficulties staying in business. There are many reasons for an EMS agency to close or be closed – the top three are as follows:

- 1: The agency was not run as a business
- 2: Poor leadership and lack of planning
- 3: No member retention and mentoring programs

Using the Standards of Excellence program as a guide –

- An EMS agency can identify their own problem areas (with the self-evaluations survey)

- Using the reference materials (sample documents, forms and articles on EMS best practice) an agency can begin to improve in specific areas.
- Teams will also be available to provide guidance and assistance

The sub-committee has discussed rolling this program out with 1-day regional introduction programs – starting this fall. We welcome your comments and/or participation in the process.

b) EMS Officer Standards

The draft of the competencies for EMS Officer I have been completed and is included as **Appendix E.**

The decision has been made to have a multi-faceted approach to obtaining the required training for Virginia EMS Officer I. Each candidate will have the choice of using the following avenues (in whole or part) to complete the training requirements:

- Community College courses
- National Fire Academy course
- National Fire Protection Association residency programs
- Virginia Department of Fire Programs courses
- Virginia Office of Emergency Medical Services courses

Potential Existing EMS Officer Program:

The sub-committee has discussed providing a program for those individuals that are currently EMS Officers. For those current EMS Officers who are interested in this portion of the program – a process will be established to account for the officer's knowledge, training, skills and experience. After the review and acceptance of the documentation, each officer candidate would be allowed to challenge the test up to level that they have qualified for. This option would only be available for a limited time - a year to 2 years after the program is starts. We welcome your comments and/or participation in the process.

The sub-committee will begin working on EMS Officer II this fall.

EMS Career Fair 2010 EMS Symposium

The Second Annual EMS Career Fair will be held on November 10, 2011 at the EMS Symposium. The event will be held from 5:00 PM (right after classes end) and end at 7:00 PM.

The Virginia Recruitment and Retention (R&R) Network

The Recruitment and Retention Network met on June 10, 2011 in Augusta County. A discussion was held on Planning for an EMS Recruitment Campaign. One of the key items discussed was making sure that an EMT-B class can be available to start within 45 to 60 days after the campaign begins as new member can lose interest if they have to wait too long.

Funding of the campaign was also discussed including what material should be included if requesting any type of grant funds and what campaign information to track. For each individual responding to the campaign the following data should be collected and kept:

- Individual contact info
- Type of media responded to
- Date visited agency
- Date completed agency application
- Date started in EMS-B class
- Date left class or
- Date completed class with passing grade
- Date assigned to a crew
- Date completed re-certification
- The next meeting will be on August 12, 2011 in Hampton.

The Community Health Ambassador Program (CHAPS)

The Community Health Ambassador Program (CHAPS) just completed the 7 week series of lay health classes that included basic classes in health, hypertension, Type 2 Diabetes, home safety, nutrition, etc. in the Essex County/Tappahannock area.

The Tappahannock Volunteer Rescue Squad participated in the several of the classes. In addition to participants being empowered by learning the signs and symptoms of illness (that will encourage early medical intervention) they learned their local rescue squad is a community health partner.

Additional CHAPS programs are planned for Rockbridge, Highland, Bath August and Alleghany counties later this year.

Trauma and Critical Care

IX. Trauma and Critical Care

This section includes:

- Durable Do Not Resuscitate
 - New regulations took effect on July 20, 2011
- Patient Care Information
 - New Informatics Coordinator/Statistician
 - VPHIB (Virginia Pre-Hospital Information Bridge)
 - What happened this quarter;
 - Compliance Rate
 - The focus for the upcoming quarter
 - “Don’t say you didn’t know”
 - Be contractually prepared for NEMSIS version 3
 - On the technical side
 - ImageTrend EDS Conference Highlights
- Trauma Registry (VSTR)
 - VSTR upgrade
 - VSTR compliance
- Trauma System
 - Trauma System Oversight and Management Committee
 - Revised Trauma Designation Manual
 - Trauma Center Fund
 - Disbursements
 - New annual percentage rates
- EMS for Children
 - EMSC Committee
 - Hospital Pediatric Designation
 - EMSC Performance Measures
 - Pulse Ox and Broselow Tapes for EMS
 - Transporting Children in Ambulances
 - Pediatric Preparedness
 - NASEMSO – Pediatric Emergency Care Council
 - HRSA EMSC State Partnership Grant
- Stroke System
- STEMI System

Durable Do Not Resuscitate (DDNR)

The revised Durable Do Not Resuscitate (DDNR) regulations became effective on July 20, 2011. Please see **Appendix F**. OEMS is developing informational resources to provide education on the changes. The amendments to the regulations regarding DDNR orders add several definitions, specify that DDNR forms may be obtained from the Office of Emergency Medical Services' website, and allow legible electronic copies of DDNR orders to be used and recognized as valid by healthcare facilities.

The changes made since publication of the proposed regulations amend and revise portions of the regulation to highlight corrections in terminology, clarify the honoring of the DDNR by all levels of healthcare providers, and allow utilization of current technology to obtain and implement the DDNR forms.

Key facts about the revised DDNR regulations includes:

Information for Virginia Certified Emergency Medical Service (EMS) Providers:

- Do EMS Providers need to see an original Durable DNR or Other DNR Order?

NO; as of July 21, 2011 legible copies of a DDNR order may be accepted by qualified health care providers

- What types of DDNR forms or orders can be honored by EMS providers?
 - The VDH/OEMS “State” DDNR form (old or new) can be honored at any time;
 - Authorized “Alternate DDNR Jewelry” can be honored at any time, but it must contain equivalent information to the State form;
 - A verbal order from a physician can be honored by a certified EMS provider. The verbal order may be by a physician who is physically present and willing to assume responsibility or from on-line medical control.
 - “Other” DNR Orders: this is the term used to define a physician’s written DNR order when it is in a format other than the State form. “Other” DNR Orders should be honored by EMS providers’ when the patient is within a license health care facility or being transported between health care facilities. Examples of “Other” DNR orders include facility developed DNR forms, POST forms, or other documents that contain the equivalent information as the State form.

Information and Responsibilities for Health Care Provider’s Issuing (DNR) orders:

- The use of the State’s DDNR form is encouraged for uniformity throughout the health care continuum.
- The State’s DDNR form can be honored by qualified health care providers in any setting.
- Patient’s that will not be within a qualified health care facility must have a State DDNR form in order for the DDNR to be honored.

- “Other DNR” orders can be honored anytime that a person is within a qualified health care facility or during transport between health care facilities when attended by a qualified health care provider (i.e. by ambulance.)
- If the option of a DDNR is agreed upon, the physician shall have the following responsibilities:
 - Explain when the DDNR order is valid;
 - Explain how to and who may revoke the DDNR;
 - Document the patient’s full legal name;
 - Document the date the DDNR was executed;
 - Obtain the patient’s signature or the person who is authorized to consent on behalf of the patient;
 - The physician’s printed name and signature must be included;
 - Note a valid contact number for the physician signing the DDNR order.

How to Download the DDNR and Find Additional Information on the DDNR program:

As of July 21, 2011 the State DDNR form has been changed to a downloadable document that will soon be made available on-line on the VDH/OEMS website at <http://www.vdh.virginia.gov/oems/ddnr/ddnr.asp>.

- The new downloadable DDNR form:
 - The revised DDNR form can be printed on any color paper (white paper printed on a color printer is the recommended.)
 - Health care providers may honor a legible copy of any of the three paged revised DDNR form. The patient copy, medical record copy, or DDNR jewelry copy all may be honored.
 - It is recommended that all photocopies of DDNR forms, of any type, be of actual size
- The previous golden rod colored State DDNR form:
 - May still be honored no matter when it was dated;
 - Physicians may still complete the golden rod State DDNR forms until supplies are exhausted;
 - Photocopies of completed golden rod colored State DDNR form may be honored indefinitely.

This Web site includes:

- DDNR Fact Sheet
- How to Fill Out the Durable Do Not Resuscitate Form
- How to download the authorized Durable Do Not Resuscitate form
- How to Purchase DDNR Bracelets and Necklaces
- The applicable Virginia laws (Code of Virginia) related to DDNR
- Virginia Durable DNR Regulations

Information for the public related to obtaining a DDNR order/form:

- Who Can Obtain a Durable Do Not Resuscitate (DNR) Order?

Persons desiring to have a DDNR order in place need to speak with a physician that they have a “bona-fide” patient-physician relationship with, such as your primary care physician. A nurse practitioner (NP) may also write a DDNR order following the same rules that apply when prescribing other treatments.

If the person desiring a DDNR order is a minor or is otherwise incapable of making an informed decision regarding consent for such an order; the person authorized to consent on the person's behalf may initiate a DDNR order with the person's physician.

For technical assistance downloading the form you may contact Mr. Russ Stamm at the Office of Emergency Medical Services at (804)888-9146 or Russ.Stamm@vdh.virginia.gov or write 1041 Technology Park Drive, Glen Allen, Virginia 23059.

- Eliminate the need to print forms on unique distinctive paper (discontinuance of the yellow DDNR).
- The State will maintain a standardized form that can be downloaded by prescribing health care providers.
- Original copies of DDNR's will not be required; legible photo copies will be honored
- The lists of procedures and equipment that can or cannot be used to control an airway have been updated to reflect current practice.

Patient Care Information System

The Division of Trauma/Critical Care (TCC) has successfully recruited and filled the informatics Coordinator/Statistician position. On August 10, 2011 Ms. Carol Pugh will join the OEMS. Ms. Pugh comes with a wealth of knowledge and experience. Ms. Pugh originally received her Doctor of Pharmacy and later returned to school to obtain an additional graduate degree in Biostatistics. Her work experience includes healthcare data analysts work with a non-profit healthcare program, VCU Health System, the Dept. of Medical Assistance Services, and she has served as an associate professor of in epidemiology and high school mathematics.

Virginia Pre-Hospital Information Bridge (VPHIB)

What happened this quarter: TCC and the Department of Motor Vehicles (DMV) have completed the necessary agreements needed to establish integration between OEMS's VPHIB database and DMV's TREDs program. TREDs stands for the Traffic Records Electronic Data System and is the program that collects accident reports from law enforcement agencies. TREDs and VPHIB are extremely similar programs and have worked in cooperation since their project planning began within months of each other.

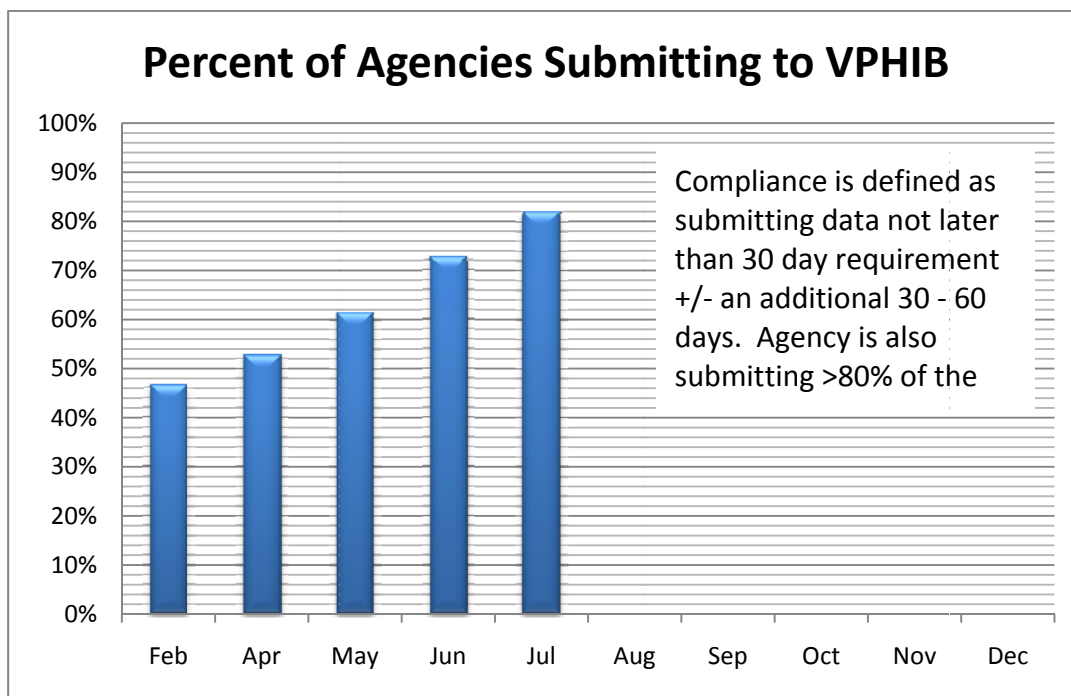
The TREDs and VPHIB integration is being financially supported by the National Highway Traffic Safety Administration's (NHTSA) "408" funding. Section 408 is the State Traffic Safety

Information Systems Improvements Program and is aimed at decreasing morbidity and mortality related traffic accidents. TCC believes this is a historic event that demonstrates the value that EMS data collection can have with effecting improvements in public health, public safety, and other disciplines.

On June 30th, the first XSD (import technical requirements) change took effect. The only change in this XSD update was to implement the requirement that imported records that where the incident disposition was treated and transported to a hospital; as of June 30 the hospital name would have to be reported by its State assigned code. The hospital numbers are the same numbers OEMS has used since 2000 with the addition of multiple out of state hospitals. The reason for this change was due to approximately 30 percent of records for patients being transported would not show in most reporting tools because the hospital name did not match the name in the State database. Hospital users should see a significant increase in their ability to find records for patients transported to their hospital. Agencies will be able to create reports by destination transferred to now as well.

As is now the routine for the VPHIB program, a monthly reminder to submit is sent out via the VPHIB list serve (an e-mail address is required in the minimum dataset) five to seven days prior to the monthly compliance report be developed. OEMS posts this report to the VPHIB support suite knowledgebase and VPHIB program's knowledgebase, so agencies will not be caught unaware. The system does not currently identify agencies that have not submitted and send them an individual notice. Figure 1 below shows the rate of submission since OEMS re-established monitoring compliance.

Figure 1



The focus for the upcoming quarter turns to evaluating data quality. To assure that the minimum dataset is being submitted at the quality level stated in the VPHIB data dictionary. Each data element has been reviewed and those elements that are not meeting quality standards at a rate of 95 percent or better will have a validation rule added to the upload XSD to prevent submission of poor data. OEMS will publish a list of new validation rules and provide several months advanced notice to allow for adjustments to be made on the agency end. It is our goal to provide the details of the XSD changes in early August with an effective date in the late fall.

The data appears to demonstrate that when agencies are trying to get their data to the quality needed for submission to the State, many agencies data has been focused on the technical requirements, rather than from a data quality perspective. This scenario is most obvious when a software programmer is the sole person trying to setup your export/import. The data shows that required elements are being filled by null values or left blank when allowed. Mapping inaccurate data to fill an element may pass a file validation, but does not provide the quality level required.

A simple example is data element E02_05, Primary Role of the Unit. E02_05 is responsible for 208,749 records that have been collected since VPHIB was implemented from being submitted to the national EMS database. As you can see in Figure 2 below, the field values section, Virginia collects ALS vs. BLS, transport vs. non-transport, supervisor, and Medevac as unit roles. If your agency collects equivalents to these fields they can be mapped well. If you happen to have a system that has BLS engine first response, BLS ambulance, ALS QRV's, and supervisors and you are reporting that 100% of your units as ALS transports you may pass an upload validation, but you are not passing quality data that truly represents your system.

However, OEMS performs random quality audits and uses the “validation rules” listed in the VPHIB data dictionary. OEMS measures your data not only by has the agency “submitted something” and on-time, but also is the data accurate 95% of the time. The VPHIB Data Dictionary list the quality measures for each data element required to be submitted. Providing the quality measures in the data dictionary was done specifically because of feedback received when past PPDR records were rejected.

Again, merely submitting “something” does not make an agency compliant. To continue with the same example: If it is discovered that multiple agencies are submitting all records as ALS transport units as the primary role and it is known that there should be BLS units, supervisors etc. then a quality rule will need to be built into the system. Unfortunately, if OEMS applies a quality rule to the import validation tool, it requires the records be accurate 100% of the time instead of 95%. This can be frustrating when trying to upload files and five files are preventing you from uploading 5,000 files.

An agency can prevent future issues due to quality problems by looking through the VPHIB data dictionary. Each data element in the dictionary is a “mandated” item and needs to be collected and submitted accurately. If there is a data element (i.e. E02_05) that you are not collecting, this will eventually become an issue for you. If you are not reporting a field (i.e. ALS Ground Transport) accurately, this will also eventually also become an issue. Very simply, if you are collecting and reporting the items as noted in the VPHIB data dictionary, none of the XSD changes will affect your agency until the State moves to NEMSIS version 3. OEMS does not change what it collects; it only changes how it prevents poor data quality from being entered.

Figure 2:

PRIMARY ROLE OF THE UNIT

E02_05

Required to be reported in VA – Yes
National Element - Yes

Definition

The primary role of the EMS service which was requested for this specific EMS incident.

Field Values

411000 ALS Ground Transport	411001 BLS Ground Transport
65 ALS First Responder	411015 BLS First Responder
4 11006 Medevac/HEMS	70 Supervisor
411002 Critical care Ground Transport	411003 Rescue (extrication etc.)
411005 Other Transport	

Uses

- A component of the EMS Medical Record
- Allows data to be sorted by the role of the responding unit
- Provides descriptive data on EMS call volume and service provided

Data Collector

- EMS agency or may be electronically provided through the 911 or dispatch center

Other Associated Elements

Validation Rules: Included in all submitted records

Quality Measure: 95%

Technical Info:

Data [combo] single-choice

Required to be reported in VA – Yes

XSD Data Type *xs:integer*

XSD Domain (Simple Type) *PrimaryRollOfTheUnit*

Required in VA Specific XSD – Yes

Accepts Null Values **No**

Multiple Entry Configuration: No

Table Location (for OEMS & Service Bridge Users)

Stored in Table: INC_UnitInformation

Stored in Field: PrimaryRoleofUnit

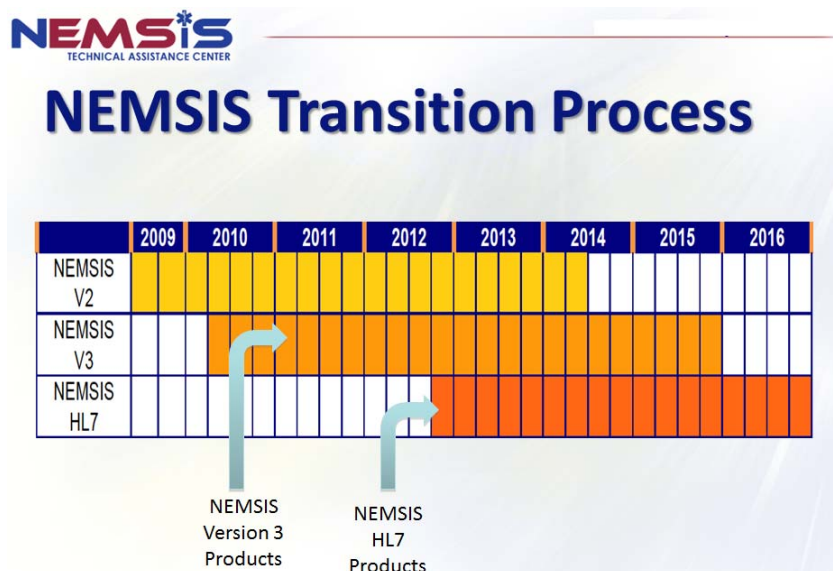
This quarter’s “don’t say you didn’t know”: On July 21, 2011 NEMSIS released the first round of Version 3 (v3) implementation resource documents. These documents included the new NEMSIS data dictionary. OEMS will begin working on the Virginia specific version 3 (Vav3) VPHIB Data Dictionary and implementation timeline and will release them as soon as possible with as much advanced notice that is practical for statewide implementation.

NOW is the time that EMS agencies using third party software to collect EMS data should begin considering the impact of v3. V3 is very likely to take affect during the contract period you have with your vendor. NEMSIS has estimated that 2/3 of current EMS software vendors will discontinue providing EMS software or merge with an existing company. This estimate is based on the significant maturity that EMS data collection will undergo with v3 and HL7 certification. EMS medical document is being driven to be equivalent to all other health care documentation. Protect yourself! Some things to consider:

- Will your vendor continue to provide an EMS product with v3?
- Will your product collect v2 and v3 simultaneously to allow for the transition of State data submission and billing services?
- Does your contract include a clause that your software will be capable of meeting State requirements without additional costs or at least at a set rate so you know what to expect?
- Has your vendor already begun developing a v3 product?
- When does your vendor plan to test its v3 product? Testing starts in October 2011.
- Has your vendor attended any of the NEMSIS software development meetings? These meetings have allowed vendors to express their needs and concerns and have input into the changes being implemented in v3.

Figure 3 shows the current daft timeline proposed by NEMSIS to move the nation from v2 to v3. Each state will determine the exact timeline that it will move from v2 to v3. On a state level it is not in the systems best interest to support two versions simultaneously for such a long period as demonstrated below.

Figure 3



NOTE: This is not the Virginia timeline!

On the technical side: During the upgrade to State Bridge version 4.5.6 the application servers became 96% full to capacity. An additional 200GB of space has been requested from VITA/NG and a “solution” is being developed. Once the additional space has been added we will complete the 4.5.6 upgrade and also make some changes that will allow Report Writer to serve a larger volume of records.

An additional URL has also been requested which will allow ImageTrend and OEMS to load two additional modules on independent servers.

ImageTrend EDS Conference: OEMS staff attended the 2011 ImageTrend Emergency Data System (EDS) education and conference event from July 20 thru July 22. Highlights from this event included:

- Education on:
 - Basic Field Bridge training
 - Configuration of EKG and Field Bridge integration
 - Building Validation Rules (presented by VA Beach EMS!)
 - Building Ad-hoc Reports
 - Building Run Forms
 - Getting the Most out of Mapping
- State System Management Included:
 - NEMSIS v3 & the ImageTrend product
 - Round Table discussions related to product enhancements and challenges
 - The “Dynamic Run Form (DRF)” developed for the State of New Hampshire. The DRF is a single run form that functions based on clinical pathway like documentation. This format will hide items on the run form that do not relate to the current response. This may be the run form of choice for Virginia and its use may be implemented in 2012.
 - EMS and hospital data integration (also presented by VA Beach EMS!)
- Other ImageTrend product education attended by staff included
 - Managing agency and provider licensing
 - Patient Registry (Trauma, STEMI & Stroke registry)
- State Bridge version 5 preview
 - Increased speed of programs
 - Increased ability to communicate back uploaded data errors and status of submissions
 - New organization of main pages for ease of finding features
 - Removal of the “I Want To” tree of features to move these features to the main page
 - Improvements to the PowerTools features to allow additional PowerTools, more flexibility of PowerTool setup and more.
- Future of ImageTrend
 - Development of their products ability to function on all formats i.e. Ipad, mobile apps, Android, etc.
 - Focus on the development of their fire service products

Trauma Registry Upgrade

TCC is exploring the best approach to upgrading the Virginia Statewide Trauma Registry (VSTR). Currently we are exploring the upgrade of the existing homegrown program with the Office of Information Management and having discussion with ImageTrend related to upgrading the VPHIB program to include an integrated Patient Registry. The desire to upgrade the trauma registry has moved from a desired task to an essential task. According to the Centers for Medicare & Medicaid Services (CMS) the cut over date from ICD9 to ICD10 is October 1, 2013. This is a hard date. CMS will require that any patient treated by health system on or after this date will be required to be submitted in ICD10 format. The volume of codes will be expanded from 13,600 to 69,000 and a two year period will be necessary to continue to collect ICD9 coded data being mapped into ICD10.

CMS has multiple resource materials available including the code set, mappings, code tables etc. at http://www.cms.gov/ICD10/11b1_2011_ICD10CM_and_GEMs.asp#TopOfPage. The use of ICD10 will apply to all HIPAA related data.

OIM has been asked to provide some cursory information on the resources and capabilities that OIM will require to perform this upgrade. TCC would like to start to formulate a business case as to what is the best way to move the trauma registry to the next stage i.e. upgrade of the existing application vs. a COT product. Items being consider outside of the ICD10 code change are:

- Transition from ICD9 to ICD 10 code set
- Legacy data conversion
- Ability to collect ICD9 data for a period of 2 years and have it mapped into the ICD10 Codes automatically on import
- The ability to store/link/cube data so it can be linked to EMS data (JLARC recommendation) short-term plan with traffic data link.
- Addition of 5-10 additional elements missing from the national trauma dataset
- Ability to expand integration with hospital medical records to help hospitals eliminate manual data entry
- Import tools that do not require manual data loads (users should be able to independently upload data and receive detailed enough information on data structure and validation information to manage uploading independently.)

Virginia Statewide Trauma Registry (VSTR)

The first quarter's official audit for 2011 data submissions disclosed two facilities were not compliant and letters of non-compliance were sent to the Trauma Registrars with copies to the CEO. One of the facilities is now back in compliance, but the other has not communicated with us. Our pre-audit conducted in April originally showed twenty facilities were not compliant but we were able to work with them to get the data in before the official audit was conducted.

Our pre-audit conducted on 07/14/2011 for the second quarter disclosed 14 facilities have not submitted any data for that first quarter. Reminder notifications were sent out so they could ensure data was sent to the VSTR by August's official audit.

Trauma System

a) Trauma System Oversight and Management Committee (TSO&MC)

The TSO&MC last met on June 2, 2011 and the draft minutes to this meeting can be found posted on the Virginia Town Hall website as required. The key item for this meeting was the final approval of the revised Trauma Center Designation Manual. The revisions to the manual focused on nursing education and staffing and burn center criteria. The manual will be presented for approval at the August EMS Advisory Board meeting and is attached as **Appendix G**.

Burn criteria: Although burn trauma has been included in the trauma designation process, it was difficult to assess during Trauma Center site reviews due to the lack of criteria in the Trauma Center Designation Manual. The Committee is approaching the burn criteria revision by creating an additional designation level that will indicate that the hospital is Trauma and Burn Center. This effort has been performed in collaboration with the State's three Burn Centers. The final burn language is now incorporated into the Trauma Center Designation Manual and was adopted by the Committee at its June meeting. The nursing criteria, burn criteria and other clean-up and formatting of the manual is being presented to the State EMS Advisory Board for adoption at its August meeting.

b) Trauma Center Fund

Table 1 below are the most recent distributions to designated Trauma Centers from the Trauma Center Fund.

Table 1

Trauma Center & Level	Percent Distribution	Previous Quarterly Distribution	May 2011 FY11	Total Funds Received Since FY06
I				
Roanoke Memorial Hospital	14.67%	\$197,397.63	\$480,658.62	\$5,405,943.84
Inova Fairfax Hospital	13.65%	\$183,672.64	\$447,238.60	\$10,089,284.75
Norfolk General Hospital	12.69%	\$170,755.01	\$415,784.45	\$5,991,363.78
UVA Health System	13.91%	\$187,171.17	\$455,757.43	\$6,180,771.08
VCU Health Systems	25.96%	\$349,314.42	\$850,572.45	\$10,369,655.78
II				\$0.00
Lynchburg General Hospital	3.28%	\$44,135.26	\$107,468.32	\$1,211,354.29
Mary Washington Hospital	4.33%	\$58,263.92	\$141,871.29	\$381,994.32
Riverside Regional Medical Ctr.	2.96%	\$39,829.38	\$96,983.61	\$1,129,304.16
Winchester Medical Ctr.	3.61%	\$48,575.70	\$118,280.68	\$1,570,121.86
III				\$0.00
New River Valley Medical Ctr.	0.15%	\$2,072.20	\$5,045.77	\$112,793.72
CJW Medical Ctr.	1.03%	\$13,859.55	\$33,747.67	\$457,215.51
Montgomery Regional Hospital	0.25%	\$3,417.79	\$8,322.24	\$137,172.20
Southside Regional Medical Ctr.	0.62%	\$8,369.55	\$20,379.66	\$238,446.94
Virginia Beach Gen'l Hospital	2.88%	\$38,752.91	\$94,362.43	\$1,639,217.68
Total		\$1,345,587.13	\$3,276,473.22	\$44,914,639.91

The most recent trauma fund distributions and more information on the Trauma Center Fund can be found on the OEMS Trauma System Web page at:

<http://www.vdh.virginia.gov/OEMS/Trauma/TraumaSystem.htm>

Each year the percentage of funding that each designated trauma center receives from the trauma fund is re-evaluated based on actual patient volume. Table 2 below shows the revised percentages for FY12 and the difference from FY11

Table 2

Trauma Center & Level	Percent Distribution FY12	Difference FY11 & FY12
I		
Roanoke Memorial Hospital	16.75%	2.08%
Inova Fairfax Hospital	15.49%	1.84%
Norfolk General Hospital	11.00%	-1.69%
UVA Health System	13.75%	-0.16%
VCU Health Systems	24.11%	-1.85%
II		
Lynchburg General Hospital	1.99%	-1.29%
Mary Washington Hospital	4.03%	-0.30%
Riverside Regional Medical Ctr.	3.19%	0.23%
Winchester Medical Ctr.	4.81%	1.20%
III		
New River Valley Medical Ctr.	0.37%	0.22%
CJW Medical Ctr.	0.70%	-0.33%
Montgomery Regional Hospital	0.31%	0.06%
Southside Regional Medical Ctr.	0.45%	-0.17%
Virginia Beach Gen'l Hospital	3.06%	0.18%

Emergency Medical Services for Children (EMSC)

EMSC Committee Meeting Update

- The EMS for Children Committee of the Governor's EMS Advisory Board had its quarterly meeting July 7, 2011. Some highlights of the meeting are below:
 - Discussed recent presentation seen by EMSC Chair Robin Foster regarding inhalant abuse; plans are to have a special presentation relating to this at the October 6, 2011 EMSC Committee meeting, and potentially an EMSAT video.
 - Special demonstration by David Edwards (VA EMSC Coordinator) of extracting aggregate pediatric data from the National EMS Information System (NEMSIS) using the NEMSIS Data Cube.
 - Discussion of state child abuse statistics (which seemed to be significantly up). Virginia's EMS Registry also has 55 cases in the last year of EMS providers reporting potential abuse—all cases were transported. State statistics related to the child abuse hotline are problematic—will be investigated and clarified.

- Dr. Foster is proposing to have the EMSC Committee facilitate the provision of pediatric education with CEU's to hospital EDs (by pediatric care professionals—most from hospitals); some of the funding may come from the EMSC State Partnership Grant.
- ENPC (Emergency Nurses Pediatric Course) to be offered in Roanoke this fall. Cathy Fox, RN, the ENA (Emergency Nurses Association) representative to the EMSC Committee can provide details (ccfox@sentara.com).
- EMSAT video just completed about “The Choking Game” starred Cathy Fox.
- Virginia Powell, PhD (representative to EMSC Committee from the Office of the Chief Medical Examiner-OCME) led a discussion of recent work by the State Child Fatality Review Team (CFRT). The EMSC Committee will work with OEMS’ Terry Coy to help produce an EMSAT video about “Managing Infant Death Scenes” for Virginia EMS providers.
- Recent awards to EMSC Committee members:
 - Theresa Guins, MD (*Frank M. Yeiser, Jr. Outstanding EMS Physician Award--Tidewater EMS Region*)
 - Cathy Fox, RN (*National ENA Barbara A. Foley Injury Prevention Award*) and (*EMSC Award—Tidewater EMS Region*)
- Barbara Kahler, MD and Sam Bartle, MD (both of the EMSC Committee) were among several Virginians who attended the joint CDC and AAP H1N1 Summit in Chicago in April. Ten states, including Virginia, worked on State Action Plans for Emergency Pandemic Preparedness. Virginia has already made a good start on the prioritized list of steps. This is an ongoing process in conjunction with VDH to get the pediatric steps into the emergency preparedness plan.
- Alice Ackerman, MD discussed continuing pediatric preparedness efforts in southwest Virginia, using physicians and nurses for educational outreach to smaller emergency departments. More details can be shared after the program progresses further and some evaluation made.
- Meeting dates of the EMSC Committee were tentatively confirmed for 2012; they are January 5, March 29, July 12 and October 4.
- All of the other items discussed in the body of this report to the EMS Advisory Board were also discussed at the EMSC Committee meeting. The next meeting is scheduled for October 6, 2011 at 1041 Technology Park Drive in Glen Allen, VA at 3:00 pm.
- In review, the EMSC Committee of the Governor’s EMS Advisory Board acts as an advisory committee to the Office of EMS EMS for Children (EMSC) Program, and the EMSC Manager for the Commonwealth sits on the EMSC Committee (and provides staff support).

Hospital Pediatric Emergency Department (PED) Designation (*Performance Measure 74*)

The EMSC Committee PED Designation Work Group has outlined draft criteria for three levels of pediatric ED designation as work continues to create a *voluntary hospital pediatric emergency department designation* program for Virginia. This work group meets again August 13 to approve final format changes before distributing the draft criteria to stakeholders for comment.

Site Visits for Small and Rural Hospital EDs (*Performance Measure 74*)

The EMSC project continues visiting small and rural Virginia hospitals to assess their pediatric needs and capabilities continues. Hospitals still targeted for site visits are:

- Carilion Stonewall Jackson Hospital (Lexington, VA)
- Carilion Giles Memorial Hospital (Pearisburg, VA)
- Dickinson Community Hospital (Clintwood, VA)
- Page Memorial Hospital (Luray, VA)
- Shenandoah Community Hospital (Woodstock, VA)

Grant-funded supplies/equipment are being distributed to the EDs being assessed, such as:

- Pediatric Broselow/Hinkle™ ALS System (portable supplies bag with essential color-coded pediatric emergency care supplies organized within it)
- Pediatric length-based resuscitation tapes (Broselow™)
- EZ-IO Intraosseous Infusion Systems (two power drivers, assorted IO needles, stabilizers, training bones)

Goals for EMSC Performance Measures

- At the last meeting a list of the EMS Advisory Board, a list of the EMSC National Performance Measures was included as part of this report. A more detailed version of this list, which includes dated goals, is available upon request from the EMSC Program (david.edwards@vdh.virginia.gov).
- During December, January and February, surveying of EMS agencies and hospitals was conducted in collaboration with NEDARC. EMS agencies were queried in relation to Performance Measures 71, 72 and 73, while hospitals were queried in relation to Performance Measures 76 and 77. The data are still being compiled and analyzed, and results will be shared with EMSC Committee at the October 6, 2011 meeting.

Broselow™ Tapes and Portable Pediatric Pulse Oximeters (*Performance Measure 73*)

Purchases of length-based pediatric resuscitation tapes (for ALS and BLS ambulances) and portable pediatric pulse oximeters (for BLS ambulances) will be occurring in the next three months. The Virginia EMSC program will be offering these items free of charge to EMS agencies that need them. Details will be available soon.

Transporting Children in Ambulances (*Performance Measure 80*)

The official release of the final version of the National Highway Transportation Safety Administration (NHTSA) recommendations on safely transporting children in ambulances is still supposed to occur at any moment. For a DRAFT version of this report, visit the following link: [DRAFT 2010 Recommendations for the Safe Transportation of Children in Ground Ambulances, NHTSA](#).

Pediatric Disaster Preparedness (*Performance Measure 80*)

Virginia's EMSC program is compiling resources to aid in pediatric disaster preparedness in Virginia and as part of its participation in activities of the Pediatric Emergency Care (PEC) Council of NASEMSO. The EMSC Committee will receive copies of the resources for their reference, as will Virginia EMS agencies.

NASEMSO--Pediatric Emergency Care Council (PEC)

The National Association of EMS Officials (NASEMSO) will hold its annual meetings this October in Wisconsin. The Pediatric Emergency Care (PEC) Council (composed of EMSC managers from all 50 states and 6 US protectorates) is a standing council of NASEMSO and works on national issues concerning emergency care and children, providing input to

NASEMSO in advising its federal partners and policymakers on pediatric issues. Virginia's EMSC Manager is Vice-Chair of the PEC Council and will also be participating in meetings of the Atlantic EMSC Council being held that week.

HRSA EMSC State Partnership Grant Update

- The carryover funding request submitted in June was approved, so purchase of the items previously mentioned in this report (Broselow™ tapes and portable pediatric pulse oximeters) will soon begin.
- In addition, *updated* PEPP (Pediatric Education for Prehospital Professionals) Instructor Resource Kits will be purchased when they become available (December or January) and provided to the PEPP instructors trained two years ago as part of the *Continuing Concepts for Prehospital Medicine Conference* hosted by the Tidewater EMS Council. 24 students were funded by the EMSC grant and about 16 others also attended (some from out of state). All of these instructors will be given the updated resources.
- In May, HRSA convened all the state and US protectorate EMSC Managers for the Annual EMSC Grantees Program Meeting. This year HRSA chose to only include the EMSC managers for the focused 3-day meeting in Annapolis. Presumably, HRSA will again convene the larger group (EMSC Medical Director, EMSC Principal Investigator, EMSC Family Representative) for the 2012 Annual EMSC Program Meetings.
- HRSA's federal EMSC program has been undergoing internal restructuring. As part of that process, Virginia's EMSC program has been assigned a new HRSA EMSC Project Officer (Tina Turgel) to work with when communicating with the federal program.
- Virginia's EMSC Manager attended a required NEDARC (National EMSC Data Analysis Resource Center) workshop titled "Introduction to NEMSIS: Access & Analyze National EMS Pediatric Reports" in late June.

EMSC Program Ideas Always Welcome

Ideas are always being accepted for additional EMSC toolkits for the EMSC website, and for any other aspect of Virginia's EMSC program housed in the Office of EMS. Direct those ideas to David Edwards, VA EMSC Coordinator, by e-mail (david.edwards@vdh.virginia.gov), by phone (804-888-9144) or by mail (EMSC Program, Office of EMS, 1041 Technology Park Drive, Glen Allen, VA 23059).

Stroke System

OEMS continues to review and approve or make recommendations to the regional stroke triage plans. Challenges with the plans tend to be relating to the creation of non-sanctioned designation levels and maintaining the primary acute phase as a three hour window. The goal of regional plans is not to change the clinical criteria. Instead, regional plans should be focused on how these criteria will be met with the resources available to that region. We look forward to the conclusion of the development of these plans.

STEMI System

No report. Current resources have not allowed for much effort in this area by staff.

Respectfully Submitted

Office of EMS Staff

Appendix A

Virginia Emergency Medical Services

A System Saving Lives



What We Do

VDH through its OEMS is:

- responsible for planning and coordinating an effective and efficient statewide EMS system
- designated by the Code of Virginia to license EMS agencies, certify EMS personnel and inspect and permit EMS vehicles.
- designed to improve patient care, from the time the call for help is received by the 911 center to the delivery of the patient to a trauma center or hospital, through its programs and services.

Mission of the VDH Office of EMS

To reduce death and disability resulting from sudden or serious injury and illness in the Commonwealth through planning and development of a comprehensive, coordinated statewide emergency medical services (EMS) system; and provision of other technical assistance and support to enable the EMS community to provide the highest quality emergency medical care possible to those in need.

The Virginia EMS System

EMS Agencies

- 681 Licensed Agencies
 - Commercial
 - Governmental
 - Volunteer
 - Industrial
 - Non-Profit
 - Other
- 4,232 permitted vehicles

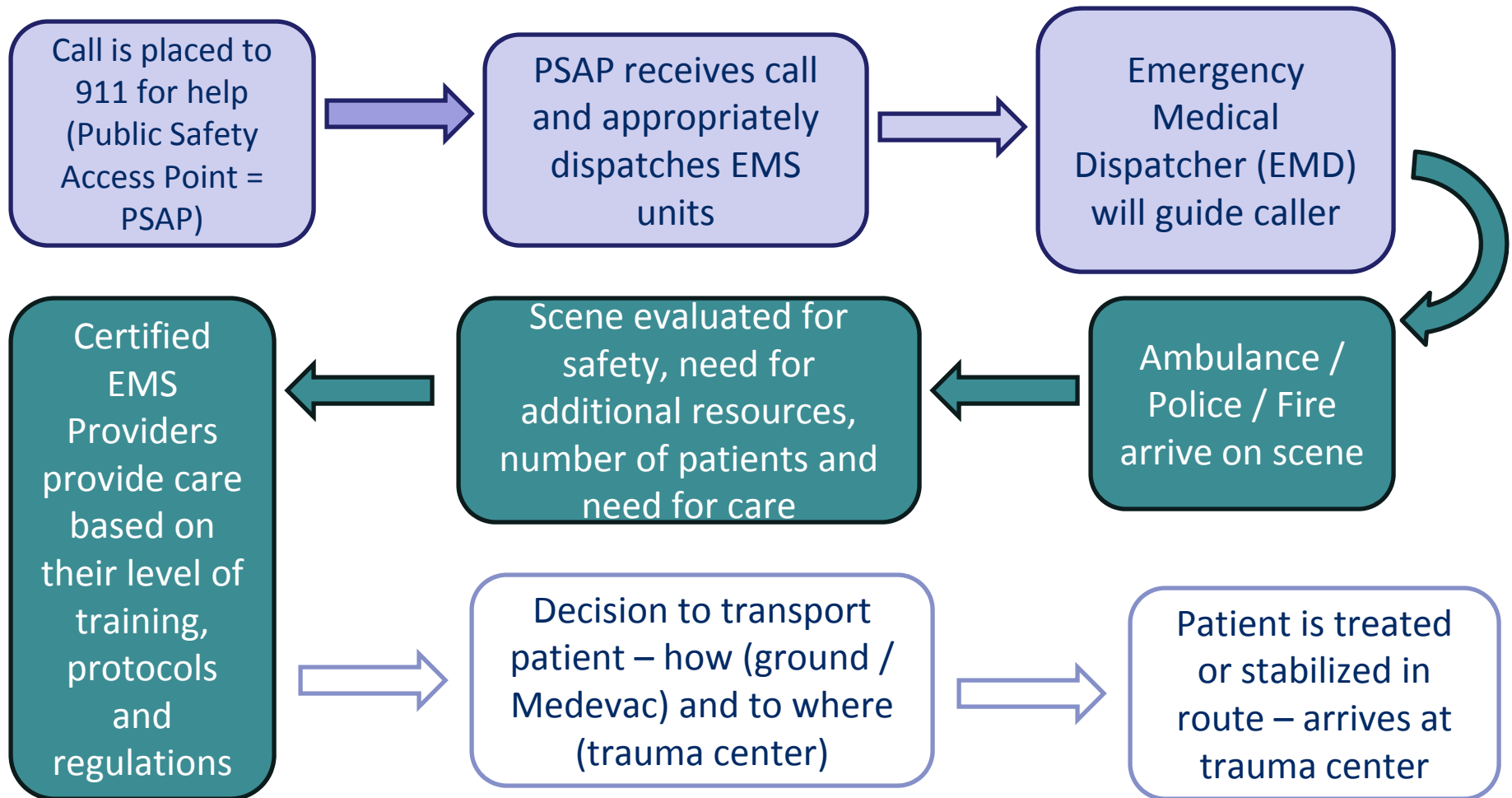


EMS Providers

There are 35,571 Certified EMS Providers in Virginia

- **Basic Life Support**
 - First Responder 1,268
 - EMT 24,660
 - Enhanced 2,382
- **Advanced Life Support**
 - Intermediate 2,966
 - Paramedic 4,294
- **Instructors**
 - EMT Instructor 573
 - ALS Coordinator 518
- **Physicians**
 - EMS Physicians 209

From 911 to Trauma Center



The “First” First Responder



- The dispatchers who answer the calls are the “first” first responders
- There are over 130 local 911 centers in Virginia, also referred to as Public Safety Answering Points (PSAP)
- OEMS is working with the local PSAPs to help them implement Emergency Medical Dispatch

Becoming an EMS Provider

EMS providers not only transport injured or sick people to medical facilities. They perform emergency care that includes administration of oxygen, fluids and medications. They open airways, control bleeding, defibrillate patients to restart their hearts and much more.

- **EMS First Responder** - 40 hours
- **EMT-B** - 111 hours of classroom/skills instruction & 10 hours of Clinical/Field rotations
- **Enhanced** - 80 hours plus a minimum of 48 hours for extensive clinical rotations
- **Intermediate** - 272 hours with a minimum of 68 hours devoted to extensive clinical rotations in specialty units
- **Paramedic** - 800 - 1200 hours of instruction with a minimum of 136 hours is devoted to extensive clinical rotations in specialty critical care units.

EMS Training

- The level of patient care that EMS agencies provide continues to increase every year.
- Through training and continuing education, OEMS helps providers achieve and maintain a high level of patient care proficiency. Training is provided for all levels of emergency patient care.
- Every year, approximately 12,000 providers are certified and recertified.

Training



- We also train the instructors who teach these classes and conduct classes for operational medical directors and emergency nurses.
- OEMS hosts one of the largest EMS training events in the nation:
 - The annual Virginia EMS Symposium attracts approximately 1,800 providers, faculty and staff, who attend the symposium to take advantage of nearly 250 workshops.

Medical Direction & Oversight

- EMS providers administer emergency care under the direction and guidance of an Operational Medical Director.
- EMS medical oversight is a cooperative effort requiring other physicians, nurses and EMS personnel working together for the EMS system to be effective.

EMS Medical Oversight is “the ultimate responsible authority for the medical actions taken by a pre-hospital provider or EMS system and the process of performing actions to ensure that care provided by EMS personnel is appropriate.”

Regulation and Compliance

- OEMS program representatives provide technical assistance and support to help EMS agencies and local governments enhance the level of emergency medical care in their communities.
- The program representatives use their expertise to help localities assess system needs and identify regional and OEMS resources to address areas that need improvement.
- To help Virginia's EMS agencies comply with established regulations, we inspect and license every EMS agency at least once every two years. EMS vehicles are inspected to assure they are properly staffed and equipped.

Regulation and Compliance

OEMS is also responsible for:

- Investigating complaints against EMS agencies
- Investigating issues with providers
- Overseeing administration of certification examinations



Trauma & Critical Care

Virginia Trauma System

- We oversee the statewide designation of Level I, II and III trauma centers.
- These Virginia hospitals reduce preventable death by 25 percent.
- They are staffed and equipped to provide a high level of trauma care.
- Each trauma center meets strict criteria including facilities, on-site physicians and other medical professionals.



Disaster & Emergency Operations

- We have health and medical emergency response teams (HMERT) throughout the state that will bring specialized emergency response members and equipment to your community.
- These highly trained individuals and teams help coordinate health and medical resources;
 - bring fully staffed and equipped ambulances; provide medical expertise;
 - respond to critical incident stress management needs; and provide on-site massage therapy to tired emergency response workers. We even have dog therapy teams that help responders relieve stress.



Disaster & Emergency Operations

- OEMS works with EMS agencies and helps to educate them and their providers on continuity of operations planning (COOP) and emergency preparedness
- OEMS also provides training on managing and coordinating mass casualty incidents
- Training, resources and curriculum are also provided for vehicle extrication, emergency vehicle operator course (EVOC) and more



Technical Assistance

- OEMS provides programs and resources to help enhance:
 - EMS Leadership
 - Agency Standards of Excellence
 - Recruitment & Retention
 - Locality resources and more

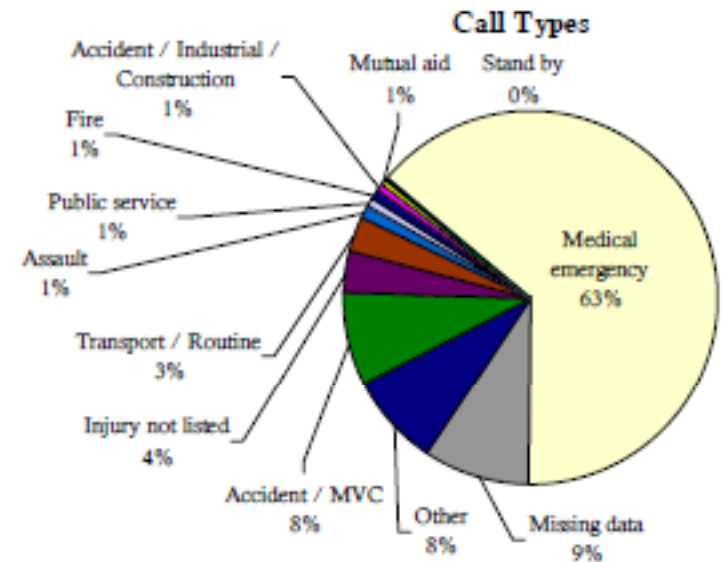


Patient Care and Trauma Data

The OEMS Patient Care Information System includes the Virginia Statewide Trauma Registry (VSTR) and the Virginia Pre-Hospital Information Bridge (VPHIB).

The VSTR and VPHIB are used for a variety of uses including:

- system planning
- system evaluation,
- grants management
- support legislative inquiries
- contribute to other state and national databases
- monitor triage programs and more



EMS Funding

- OEMS operations are funded by “Four for Life.” The fees are collected by the Virginia Department of Motor Vehicles.
- The Rescue Squad Assistance Fund (RSAF) Grant Program is a grant program for Virginia non-profit EMS agencies and organizations.
 - Items eligible for funding include:
 - EMS equipment and vehicles
 - Computers
 - EMS management programs, courses/classes and projects benefiting the recruitment and retention of EMS members.

EMS Funding

Return to Localities

- 26% of the “Four for Life” fees are distributed to every city and county in Virginia.
- These local funds are designated for training and EMS equipment and supplies.
- The amount returned to local government is based on the number of vehicles registered in each locality.

EMS Training Funds

- Provides financial assistance for Virginia certified EMS provider and OEMS approved training courses.
- It is dispersed into four broad categories
 - Tuition Reimbursement
 - Initial Courses
 - Auxiliary Programs
 - Continuing Education Programs

Other EMS Programs

EMS for Children

- Virginia's EMS for Children program ensures that quality emergency medical care is available for children and adolescents, and that pediatric education and services are integrated into the EMS system.



Virginia Poison Control Network

- We administer the Virginia Poison Control Network, which provides poison information and consultative services to all Virginians. They decrease morbidity, mortality and health care costs by reducing outpatient visits and hospital admissions, and improve the quality of care provided to patients with accidental or self-poisoning.



Other EMS Programs

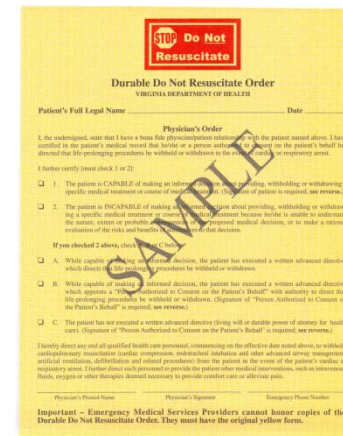
Medevac

- OEMS coordinates a statewide air medical evacuation (Medevac) system that provides helicopter and fixed wing air medical services. These private and public Medevac agencies transport our most critically ill and injured patients to specialty care and trauma centers.



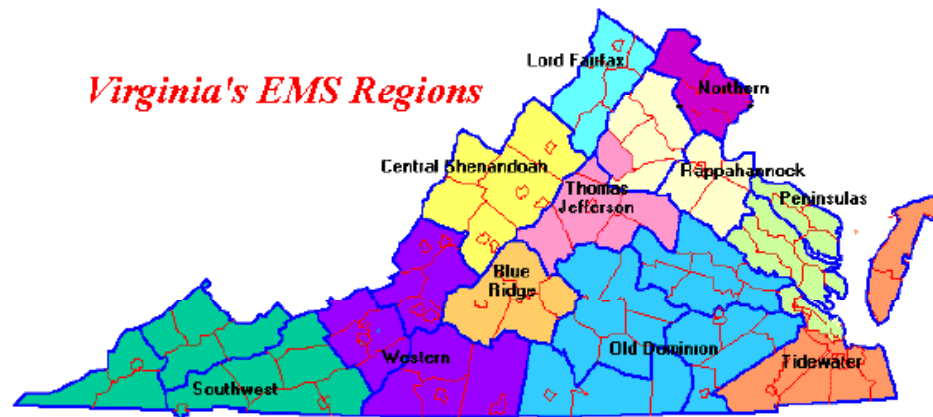
Durable Do Not Resuscitate

- OEMS oversees the DDNR program in Virginia. "Durable Do Not Resuscitate Order" means a written physician's order issued to withhold cardiopulmonary resuscitation from a particular patient in the event of cardiac or respiratory arrest.



Regional Coordination

- OEMS contracts with 11 Regional EMS Councils, which are non-profit organizations
- These councils provide and/or organize EMS training; assist in the administration of certification examinations; review grant requests and coordinate the writing of trauma triage plans and disaster management plans.
- Most of the councils also coordinate regional medical direction and the development and maintenance of regional EMS protocols, ambulance restocking agreements and medication kit exchange programs.



State EMS Advisory Board

- All of our programs and services receive close coordination and guidance from the State EMS Advisory Board. These 28 members are appointed by the Governor and are experts in their field of pre-hospital emergency medical care. They represent key stakeholder organizations involved in Virginia's EMS system.
- The Board and its 16 standing committees advise our office, the Commissioner and the State Board of Health on the planning and administration of programs designed to enhance and improve Virginia's EMS system.

EMS Partners

OEMS also partners with other state agencies and organizations to coordinate, plan and implement programs and services. These partnerships are critical to ensuring that Virginia EMS is a comprehensive system that meets the needs of all Virginian's.

- American Academy of Pediatrics
- American College of Emergency Physicians
- American College of Surgeons
- Association of Public Safety Communications Officials
- Medical Society of Virginia
- Virginia Ambulance Association
- Virginia Association of Governmental EMS Administrators
- Virginia Association of Volunteer Rescue Squads
- Virginia Emergency Nurses Association
- Virginia Fire Chiefs' Association
- Virginia Hospital and Healthcare Association
- Virginia Municipal League
- Virginia Nurses Association
- Virginia Professional Firefighters
- Virginia State Firefighters Assoc.
- Virginia's Regional EMS Councils

EMS In The Future



For Virginia

- New emphasis and programs related to provider health and safety
- Heart Attack & Stroke programs
- EMS Education Standards & Scope of Practice

On a National Level

- National Office of EMS



Questions?

Appendix B

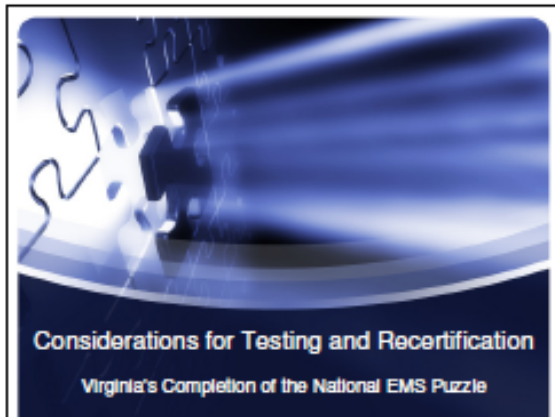
Training and Certification Committee Action Item
Motion for State EMS Advisory Board approval on August 12, 2011

The Training and Certification Committee moves that the Virginia EMS Advisory Board approve the Office of EMS Certification and Re-certification proposal as expressed in the “Considerations for Virginia EMS Certification Testing” document presented at the May 13, 2011 EMS Advisory Board meeting and included in the May Quarterly Report to the EMS Advisory Board.*

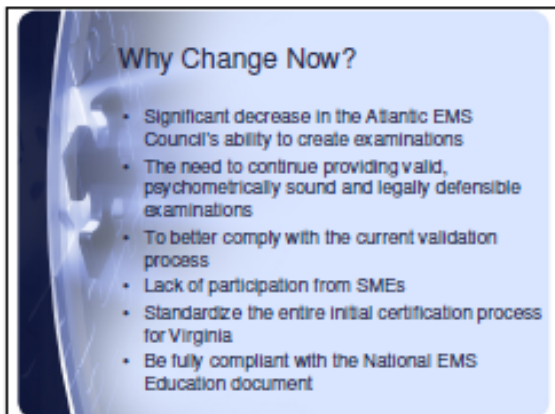
*A copy of this document is included as one of the attachments identified in the Education and Training component of this quarterly report.

Appendix C

Considerations for Virginia EMS Certification Testing

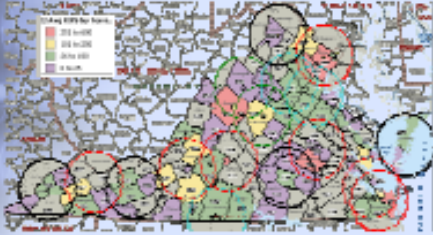






Considerations for Virginia EMS Certification Testing

Proposed Written Examination Locations – Pearson Vue



No Change to the Following

- Virginia Course Approval Request
 - Current process remains the same
- Course Enrollments
 - Current process remains the same
- Completion of the Course Student Disposition Report (CSDR)
 - Current process remains the same

Testing Process of EMR and EMT

- There are three components to the proposed EMR and EMT testing process:
 - Virginia Practical
 - NREMT Written
 - Reciprocity

Considerations for Virginia EMS Certification Testing

Virginia Practical – Proposed Process

- Course Coordinator marks the CSDR
 - Students are automatically issued Eligibility Letters in their EMS Portal
 - Student takes letter to CTS site
- Current Virginia Practical Examination process will be followed
- Practical scores will be recorded and processed using current methods
- Two Paths
 - Accredited Programs
 - Non-accredited programs

Accredited Programs – Practical Process

- Accredited programs with 15 or more students can arrange with the Office to have testing done on-site.
 - Less than 15 students -----> CTS Site
- Office will schedule test site in conjunction with accredited program and send a Test Representative
- Accredited Site required to adhere to CTS Guidelines for Virginia Practical
 - Students may retest (only 1 time) onsite based upon available resources

Non-accredited Programs – Practical Process

- Students are required to test the Virginia Practical at a CTS Site
 - Current Regional Council processes for CTS Sites will be followed
- Students may retest (only 1 time) onsite based upon available resources

Considerations for Virginia EMS Certification Testing

NREMT Written Examination – Access by Students

- Course Coordinator marks the CSDR
 - Students are issued Eligibility Letters
 - Student completes Virginia Practical at a CTS Site
- Student registers online with NREMT
- Upon successful completion of the Virginia Practical:
 - OEMS will authorize NREMT to issue an Authorization to Test (ATT) letter
 - The Office is aiming to automate this process with NREMT
- Examination follows NREMT policy

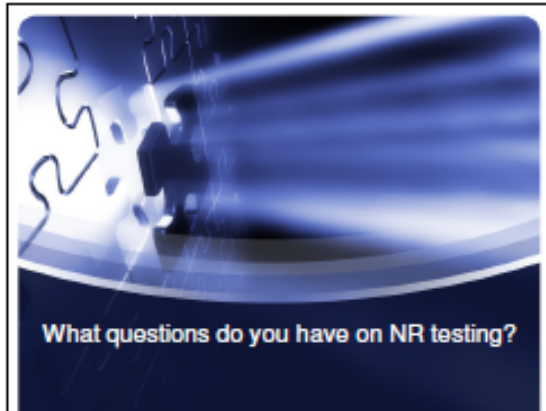
Instructor Requirements

- Education Coordinators will be required to register on the NREMT website as "Program Directors"
 - If instructor/coordinator currently hold NREMT certification, they can simply add a role to their NREMT account
 - Office will approve instructors in NREMT database
- Registration allows instructors to track their students and allows the Office to track outcome statistics per instructor.
- The Office will only approve/recognize Va. certified/endorsed "Instructors" eligible to conduct initial certification programs.

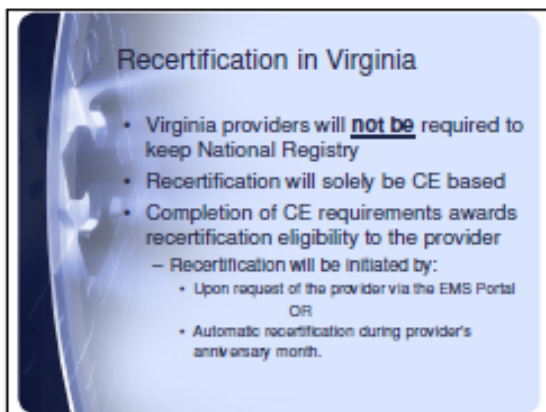
Examination Cost

- Virginia is considering covering the cost of the initial National Registry EMR and EMT written attempt:
 - EMR Exam runs \$65.00
 - EMT Exam runs \$70.00
- Virginia averages ~ 6000 tests per year
 - Estimated costs of \$420,000 / year

Considerations for Virginia EMS Certification Testing



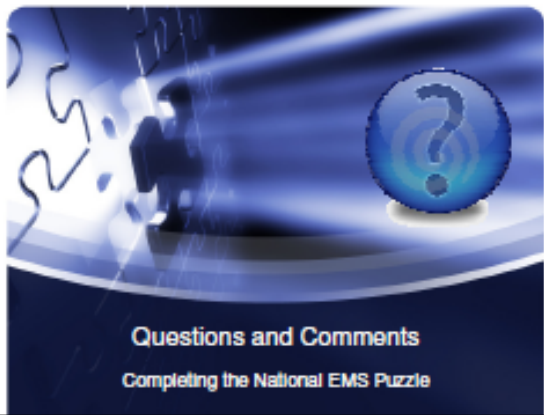




Considerations for Virginia EMS Certification Testing

Required Activities to Accomplish by 7-1-12

- OEMS must seek updates to the Code of Virginia
- OEMS must seek updates to certain regulations
- Develop electronic data exchanges with NREMT
- Conduct orientation for EMS Educators
 - Approve EMS Educators for NREMT
- Identify and publish Pearson Vue Testing Center locations



Appendix D

Considerations for Virginia EMS Certification Testing

Considerations for Virginia EMS Certification Testing

The Office presented to the EMS Advisory Board Executive Committee, Training and Certification Committee and the Medical Direction Committee a proposal to move toward a certification process that is congruent with the EMS Agenda for the Future and the EMS Education Agenda for the Future. These documents were produced back in the late 1990's as guidance for a maturing EMS System. The future is here and Virginia is very fortunate to have had the guidance and support of the various EMS system components that prepared the Commonwealth in a manner that over the years has placed us ahead of a majority of states and a leader in complying with the current EMS Systems' design as endorsed by the National Association of State EMS Officials (NASEMSO).

The National EMS Education Agenda developed five integrated primary components. Listed below are those components and where Virginia's compliance with each component stands.

- National EMS Core Content – Compliant
- National EMS Scope of Practice Model – Compliant
- National EMS Education Standards – Compliant – Will be activated July 1, 2012
- National EMS Education Program Accreditation – Compliant – Well ahead of a majority of states.
- National EMS Certification – partially compliant –(Compliant at Intermediate and Paramedic) Need to add EMR, EMT, and AEMT.

As demonstrated, Virginia is well positioned for compliance with all the educational components. The last component is that of National EMS Certification.

The proposal staff presented will initiate the process of moving Virginia toward full compliance with the National EMS Agenda. Although not all the details have been fully addressed, this document is submitted to provide you with an overview of the project. The Training and Certification Committee is the lead on this project in association with the Medical Direction Committee.

The timing of this proposal has become somewhat of an urgent matter. The Atlantic EMS Council (AEMSC) was formed in the 1970's and was comprised of seven member states (PA, NJ, WV, MD, DE, VA, and NC). One of the initial projects of the Council was to gather the training coordinators from each member state and develop a standardized, written certification examination. This process was designed to assure a valid, psychometrically sound and legally defensible written certification examination was developed and utilized in each member state. Those sound and guiding principles has been a guiding force for the member states ever since. Unfortunately, the process for developing certification examinations is no longer feasible. The ability to continue producing valid, psychometrically sound and legally defensible examinations will end January 2013 or possibly sooner. A discussion about the process of developing certification examinations by the AEMSC member states was held in December, 2010. The ability for Virginia and other member states to produce certification examinations that meet current item response development requirements has become severely compromised. It is essential high stakes, state EMS certification examinations be validated, psychometrically sound and legally defensible. As such an alternative must be sought. None of these alternatives are as cost efficient as the one we have utilized in Virginia over the past 30 plus years.

Considerations for Virginia EMS Certification Testing

Although there are several vendors capable of developing EMS certification examinations, , only one can achieve both Virginia EMS certification needs and has been endorsed by a national EMS organization as meeting the objectives of the National EMS education agenda. At the annual meeting of the National Association of State EMS Officials (NASEMSO) held in October 2010 in Norfolk went on record as recognizing the National Registry of EMTs (NREMTs) as the national testing service for EMS. The cost of testing, whether or not by the National Registry or other vendors is essentially the same, once you consider item response development, test production, test centers, all Virginia Certification levels (FR (EMR), EMT, Enhanced (AEMT), Intermediate (Intermediate 99) and Paramedic) and change in IT needs. After review of the various available options, the Division of Education Development submitted a proposal to OEMS executive management for review and consideration.

The proposal establishes use of the National Registry of EMTs certification examination process for all initial EMS certification levels recognized in Virginia. This would include EMR (our current First Responder), EMT, AEMT (our current Enhanced), Intermediate and Paramedic. The basic design mirrors the current practice for certification at the Intermediate and Paramedic level.

Several of the components we are investigating include the following:

1. Written test sites – The Office is currently in discussions with National Registry to determine locations and number of sites. We are using data from 2007, 2008, 2009, and 2010.
2. Cost of Exam – The Office is conducting discussions with National Registry to establish a billing process that allows the State to cover the cost of the initial written test attempt by EMRs and EMTs.
3. Automation of Reciprocity for Virginia programs – Discussions will involve National Registry and our Office of Information Technology to design and implement a process whereby we can automate reciprocity, thus removing the need for Virginia program graduates to apply for reciprocity.

Recertification would also take on a new process. Virginia would not require that providers maintain their National Registry although this option is available. This is the practice currently available for Intermediate and Paramedics. However, recertification in Virginia would require that providers at all levels comply with the Virginia continuing education program. Upon completion of the continuing education requirements, the provider would be eligible for recertification. The provider could recertify immediately or delay recertification until their anniversary month. The change being proposed is that recertification for eligible providers would be automatically processed during their certification anniversary month unless they requested electronically that it be done earlier. The proposal removes the requirement for an OMD waiver. Recertification for all providers, regardless of agency affiliation, will be by continuing education. Should a provider go into re-entry, the provider must pass the National Registry written test after they receive eligibility through Virginia continuing education. This test will be at the expense of the provider. Current re-entry regulations would apply.

In summary, the proposal being considered by the Training and Certification Committee in association with Medical Direction Committee will place all initial testing through the National Registry of EMTs. Initial certification test attempt costs will be covered by the Office for EMR and EMT. Recertification will continue to require compliance with the Virginia continuing education program but will remove the

Considerations for Virginia EMS Certification Testing

need for an exam waiver. Eligible providers who have completed the continuing education program will automatically be recertified during their anniversary month or at their discretion, upon their request if prior to this date. Implementing this component places Virginia as 100% compliant with national standards for EMS Education.

This process will be posted on our web page so that all Virginia EMS System stake holders (Agencies, OMD, Providers, Educators, and Regional Councils) can follow. This will surely raise many questions. You are encouraged to call the office and/or contact any member of the Training and Certification Committee.

Regards,
The Division of Education Development

Appendix E

EMS Officer Standard – Officer I Requirements

7/6/2011 Draft

EMS Officer I Standards	Suggested Combined Requirements	Education to Meet Requirement
General Prerequisites		
Current Virginia EMS certification	?? certification level	
Field Experience	Minimum of 2 years of experience	
Experience as a trainer	Complete a Field Training Officer program	
Job Performance Prerequisites		
	Basic computer understanding and skills	
	Knowledge of EMS agency structure, geographical area, policies and procedures of agency	
	Ability to communicate effectively (verbally and written), computer skills including spreadsheets	
	Incident Management	
	Write prose	
	Basic interpersonal communication skills	
	Business communications – written word	
	Understanding of basic math models	

EMS Officer I Standards	Suggested Combined Requirements	Education to Meet Requirement
Human Resources Management	<i>This duty involves leading the EMS unit team (2-3 persons) in the performance of daily duties, and the one-on-one training, development, and evaluation of new members of the EMS agency</i>	
Communications	Must be able to assign clear, concise tasks and responsibility, instructs and orients new members, verbal communications to enhance learning	
	Evaluates performance of new members and provide daily feedback on clinical and administrative performance matters, develops improvement plans for new members, including reading assignments, scenario based exercised and drills	
	Principles of supervision and basic human resource management; ability to set priorities, plan and observe plan in action	
	Understanding of basic psychology, personality and mental health	
	Understating of social groups	
	Basic understanding of human resources	
	Coaching, counseling and mentoring	
	Basic EMS supervisors – patient care, delegation and leadership	
	Discipline with due process	
	Concept of research	
Community and Government Relations	<i>This duty involves dealing with inquiries of the community and projecting the culture of the agency to the public and delivering safety, injury, and illness prevention education programs, according to the following job performance requirements</i>	
	Interpersonal communication skills, policies and procedures, familiarity with public relations and ability to respond to public inquiries	
EMS Officer I Standards	Suggested Combined Requirements	Education to Meet Requirement
Administration	<i>This duty involves performing routine administrative duties in connection with the operation of an EMS unit, the response to EMS dispatches of all types, and</i>	

	<i>the ability to manage unit level administrative work including documentation associated with the agency's field training program.</i>	
	Execute routine multi-unit administrative functions – forms, record management systems. Maintain administrative policies and procedures	
Emergency Service Delivery	<i>This duty involves responding to requests for service, managing smaller scope incidents completely, and managing the initial aspects of an incident of any size, while providing appropriate coordination and supervision to other members of the assigned unit.</i>	
	Functions as primary clinical responder normally assigned, knowledge of EMS system protocols and procedures; ability to perform all medical procedures appropriate for certification level	
	Knowledge of incident Command, functions within ICS at appropriate level	
	Serves a new member preceptor, coach, evaluator of new members	
	Intro EMS Sys	
	History and development of EMS	
	Knowledge of special operations	
EMS Officer I Standards	Suggested Combined Requirements	Education to Meet Requirement
Health and Safety	<i>This duty involves serving as a role model, teacher, and evaluator of safe work practices, and preparing new members to work unsupervised in a safe manner.</i>	
	Applies safety regulations, practices and procedures and unit level	
	Be familiar with most common causes of personal	

	injury, accidents and advocate an infectious disease control program.	
	Basic principles of health and wellness	
Quality Management	<i>This duty involves conducting, demonstrating, and teaching basic quality management practices at the unit level</i>	
	Perform a complete and accurate chart review	
	Provide feedback to unit personnel concerning a quality management issue.	
	Know agency policies and procedures including awards, recognition and corrective action.	
Benchmark:	Associates in EMS Management/Administration	

Appendix F

TITLE 12. HEALTH

STATE BOARD OF HEALTH

Final Regulation

Title of Regulation: **12VAC5-66. Regulations Governing Durable Do Not Resuscitate Orders (amending 12VAC5-66-10, 12VAC5-66-40, 12VAC5-66-50, 12VAC5-66-60, 12VAC5-66-70, 12VAC5-66-80).**

Statutory Authority: § 32.1-153 of the Code of Virginia.

Effective Date: July 20, 2011.

Summary:

These amendments to the regulations regarding DDNR orders add several definitions, specify that DDNR forms may be obtained from the Office of Emergency Medical Services' website, and allow legible electronic copies of DDNR orders to be used and recognized as valid by healthcare facilities. The changes made since publication of the proposed regulations amend and revise portions of the regulation to highlight corrections in terminology, clarify the honoring of the DDNR by all levels of healthcare providers, and allow utilization of current technology to obtain and implement the DDNR forms.

Summary of Public Comments and Agency's Response: A summary of comments made by the public and the agency's response may be obtained from the promulgating agency or viewed at the office of the Registrar of Regulations.

Part I

Definitions

12VAC5-66-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Agent" means an adult appointed by the declarant under an advance directive, executed or made in accordance with the provisions of § 54.1-2983 of the Code of Virginia to make health care decisions for him.

"Alternate Durable DNR [jewelry]" means a Durable DNR bracelet or necklace issued by a vendor approved by the Virginia Office of Emergency Medical Services. A Durable DNR Order [~~Form~~] must be obtained by the patient, from a physician, to obtain [Alternate] Durable DNR jewelry.

"Board" means the State Board of Health.

"Cardiac arrest" means the cessation of a functional heartbeat.

"Commissioner" means the State Health Commissioner.

"Durable Do Not Resuscitate Order [~~Form~~]" or "Durable DNR Order [~~Form~~]" means a written physician's order issued pursuant to § 54.1-2987.1 of the Code of Virginia in a form or forms authorized by the board to withhold cardiopulmonary resuscitation from an individual in the event of cardiac or respiratory arrest. For purposes of this chapter, cardiopulmonary resuscitation shall include cardiac compression, endotracheal intubation and other advanced airway management, artificial ventilation, ~~and~~ defibrillation, administration of cardiac resuscitative medications, and related procedures. As the terms "advance directive" and "Durable Do Not Resuscitate Order" are used in this article, a Durable Do Not Resuscitate Order [~~Form~~] or other DNR Order is not and shall not be construed as an advance directive. When used in these regulations, the term "Durable DNR Order [~~Form~~]" shall include any authorized ~~alternate form of identification~~ Alternate Durable DNR [Jewelry jewelry] issued in conjunction with an original Durable DNR Order ~~form~~ [~~Form~~].

"Emergency Medical Services" or "EMS" means the services rendered by an agency licensed by the Virginia Office of Emergency Medical Services, an equivalent agency licensed by another state or a similar agency of the federal government when operating within this Commonwealth.

"Emergency medical services agency" or "EMS agency" means any ~~person~~ agency, licensed to engage in the business, service, or regular activity, whether or not for profit, of transporting and/or rendering immediate medical care to such persons who are sick, injured, wounded or otherwise incapacitated or helpless.

"Incapable of making an informed decision" means the inability of an adult patient, because of mental illness, mental retardation, or any other mental or physical disorder that precludes communication or impairs judgment [~~and that has been diagnosed and certified in writing by his physician with whom he has a bona fide physician/patient relationship and a second physician or licensed clinical psychologist after personal examination of such patient~~], to make an informed decision about providing, withholding, or withdrawing

a specific medical treatment or course of treatment because he is unable to understand the nature, extent, or probable consequences of the proposed medical decision, or to make a rational evaluation of the risks and benefits of alternatives to that decision. For purposes of this article, persons who are deaf [; or] dysphasic or have other communication disorders [; but] who are otherwise mentally competent and able to communicate by means other than speech, shall not be considered incapable of making an informed decision. [The determination that the patient is "incapable of making an informed decision" shall be made in accordance with § 54.1-2983.2 of the Code of Virginia.]

"Office of EMS" or "OEMS" means the Virginia Office of Emergency Medical Services. The Virginia Office of Emergency Medical Services is a state office located within the Virginia Department of Health (VDH).

"Other Do Not Resuscitate Order" or "Other DNR Order" means a written physician's order [not to resuscitate a patient in the event of cardiac or respiratory arrest] on a form other than the authorized state standardized Durable DNR Form [under policies and procedures of the health care facility to which the individual who is the subject of the order has been admitted]. [~~An Other DNR form must contain all the information required in subdivision 1 of 12VAC5-66-40 to be covered by these regulations.~~]

"Person authorized to consent on the patient's behalf" means any person authorized by law to consent on behalf of the patient incapable of making an informed decision or, in the case of a minor child, the parent or parents having custody of the child or the child's legal guardian or as otherwise provided by law.

"Physician" means a person licensed to practice medicine in the Commonwealth of Virginia or in the jurisdiction where the treatment is to be rendered or withheld.

"Qualified emergency medical services personnel" means personnel certified to practice as defined by § 32.1-111.1 of the Code of Virginia when acting within the scope of their certification.

"Qualified health care facility" means a facility, program, or organization operated or licensed by the State Board of Health or by the Department of Behavioral Health and Developmental Services (DBHDS) or operated, licensed, or owned by another state agency.

"Qualified health care personnel" means any qualified emergency medical services personnel and any licensed healthcare provider or practitioner functioning in any facility, program or organization operated or licensed by the State Board of Health, or by ~~the Department of Mental Health, Mental Retardation and Substance Abuse Services~~ DBHDS or operated, licensed, or owned by another state agency.

"Respiratory arrest" means cessation of breathing.

Part III
Requirements and Provisions

12VAC5-66-40. The Durable Do Not Resuscitate Order Form.

The Durable DNR Order Form shall be a ~~unique~~ standardized document ~~printed on distinctive paper~~, as approved by the board and consistent with these regulations. The following requirements and provisions shall apply to the approved Durable DNR Order Form.

1. Content of the Form - A Durable DNR Order Form shall contain, from a physician with whom the patient has a bona fide physician/patient relationship, a do not resuscitate determination, signature and the date of issue, the signature of the patient or, if applicable, the person authorized to consent on the patient's behalf.
2. Effective Period for a Signed Durable DNR Order [~~Form~~] - A signed Durable DNR Order shall remain valid until revoked [in accordance with § 54.1-2987.1 of the Code of Virginia and 12VAC5-66-80 E or until rescinded, in accordance with accepted medical practice, by the provider who issued the Durable Do Not Resuscitate Order].
3. ~~Original~~ Durable DNR Order Form - ~~An original~~ A Durable DNR Order or [~~an~~] ~~alternate form~~ Alternate Durable DNR [jewelry jewelry] that complies with 12VAC5-66-50 shall be valid for the purposes of withholding or withdrawing cardiopulmonary resuscitation by qualified health care personnel in the event of cardiac or respiratory arrest.
4. Availability of the Durable DNR Order Form. The ~~original~~ Durable DNR Order ~~or an alternate form~~ Form that complies with [~~12VAC5-66-50 this section~~] or [~~an~~] Alternate Durable DNR [jewelry] that complies with [12VAC5-66-60 12VAC5-66-50] shall be maintained and ~~displayed~~ readily available [to qualified health care personnel] at the patient's current location or residence ~~in one of the places designated on the form, or should accompany the patient, if traveling. Photocopies of the Durable DNR Order may be given to other providers or persons for information, with the express consent of the patient or the patient's designated agent or the person authorized to consent on the patient's behalf. However, such photocopies of the Durable DNR Order are not valid for withholding cardiopulmonary resuscitation. [Within any facility, program or organization operated or licensed by the State Board of Health or by DBHDS or operated, licensed, or owned by another state agency, the Durable DNR Order Form, Alternate Durable DNR, or an Other Durable DNR Order should be readily available to the patient.]~~

5. Qualified health care personnel may honor a legible photocopy of a Durable DNR Form or Other Durable DNR Order [as if it were an original].
6. A patient who is traveling outside his home or between health care facilities should have an original or photocopied Durable DNR Order [~~Form or~~ ,] Other Durable DNR Order [, or Alternate Durable DNR jewelry] accompany him.
7. [4. 7. ~~Revocation of a Durable DNR Order Form~~—A Durable DNR Order may be revoked at any time by the patient (i)] by physical cancellation [physically destroying the Durable DNR Order Form or] destruction by the patient or [having another person in his presence and at his direction] of [destroy the Durable DNR Order Form and/or any alternate form of identification]; [or (ii) by oral expression of intent to revoke. The Durable DNR Order may also be revoked by the patient's designated agent or the person authorized to consent on the patient's behalf unless that person knows the patient would object to such revocation. If an Other Durable DNR Order exists and a patient or his authorized agent revokes the Durable DNR, health care personnel should assure the revocation is honored by updating or destroying the Other Durable DNR Order.]
8. 5. [8. 7.] Distribution of Durable DNR Order Forms - ~~Authorized~~ The authorized Virginia Durable DNR Forms, with instructions, Order Form shall be a standardized form available only to physicians for download via the Internet from the Office of Emergency Medical Services website. The downloadable form will contain directions for completing the form and three identical Durable DNR Order Forms: one [original] form to be kept by the patient, the second to be placed in the patient's permanent medical record, and the third to be used [by the patient] for requesting [an] Alternate Durable DNR [jewelry].
9. [9: 8.] Hard copies of the Durable DNR Order Form shall also be made available to physicians or licensed health care facilities by the Office of EMS. The Office of EMS may utilize a vendor to print and distribute the Durable DNR Order Form and a nominal fee [can may] be charged [in an amount necessary] to cover printing and shipping fees.

12VAC5-66-50. Authorized alternate forms of Durable DNR ~~Order identification~~ jewelry.

The board authorizes the ~~issuance~~ use of alternate forms of Alternate Durable DNR ~~Order identification~~ [Jewelry jewelry] in conjunction with the issuance of [a] Durable DNR ~~Orders~~ Order [Forms]. These ~~alternate forms~~ Alternate Durable DNR [Jewelry jewelry] items shall be uniquely-designed and uniquely-identifiable bracelets and necklaces that are available only from a vendor approved by the Virginia Department of Health, Office of EMS. ~~These alternate forms of identification~~ The Alternate Durable DNR [Jewelry jewelry] must be purchased from the approved vendor by the person to whom a Durable DNR Order Form applies, or that the person authorized to consent on the patient's behalf, and in conjunction with a. An original Durable DNR Order Form must be obtained from a physician and provided to the vendor in order to receive Alternate Durable DNR [Jewelry jewelry]. Such a necklace

or bracelet may be utilized either to validate the Durable DNR Order Form or in place of an original Durable DNR Order Form in the event that the original order is not readily available at the site where the person to whom the order applies is found. In order to be honored by qualified health care personnel in place of the ~~original standard~~ Durable DNR Order Form, ~~this alternate form of identification~~ the Alternate Durable DNR [~~Jewelry~~ jewelry] must contain the minimum information approved by the State Board of Health in 12VAC5-66-60.

12VAC5-66-60. Other DNR Orders.

[A. Nothing in these regulations shall be construed to preclude licensed health care practitioners from following any ~~other~~ Other] ~~written orders of a physician not to resuscitate a patient in the event of cardiac or respiratory arrest. [Do Not Resuscitate Order in accordance with the applicable policies and procedures of the health care facility in which they practice.]~~

~~B. Additionally, nothing in these regulations or in the definition of Durable DNR Orders provided in § 54.1-2982 of the Code of Virginia shall be construed to limit the authorization of qualified health care personnel to follow Do Not Resuscitate Orders other than Durable DNR Orders that are written by a physician. Such other DNR Orders issued in this manner, to be honored by EMS personnel, shall~~

[~~A. B.~~] Qualified health care personnel [can are authorized to] honor [do not resuscitate any Other Do Not Resuscitate] (DNR) [orders by a physician that are written in a format other than using the standardized Durable DNR Order Form to not resuscitate a patient in the event of a cardiac or respiratory arrest Order as if it were a Durable Do Not Resuscitate Order] when the patient is currently admitted to a hospital or other qualified health care facility [.If an Other Durable DNR Order is used, it must contain or is in transit from a qualified health care facility provided that such order includes] the same information as listed in subdivision 1 of 12VAC5-66-40 and the time of issuance by the physician in accordance with accepted medical practice, for patients who are currently admitted to a hospital or other health care facility [, except that an Other DNR Order shall not be required to include the signature of the patient or a person authorized to consent for the patient on the order itself].

[~~C. B.~~] Nothing in these regulations shall prohibit qualified health care personnel from following any direct verbal order issued by a licensed physician not to resuscitate a patient in cardiac or respiratory arrest when such physician is physically present ~~in attendance of such patient.~~

Part IV Implementation Procedures

12VAC5-66-70. Issuance of a Durable DNR Order [Form or Other DNR Order].

A. A Durable DNR Order [~~Form or Other DNR Order~~] may be issued to a patient by a physician, with whom the patient has established a bona fide physician/patient relationship, as defined by the Board of Medicine in their current guidelines, only with the consent of the patient or, if the patient is a minor or is otherwise incapable of making an informed decision regarding consent for such an order, upon the request of and with the consent of the person authorized to consent on the patient's behalf.

B. The use of the authorized Durable DNR Order Form is encouraged to provide uniformity throughout the health care continuum.

C. The authorized Durable DNR Order [~~Form~~] can be honored by qualified health care [~~providers personnel~~] in any setting.

D. [~~Patients who are not within a qualified health care facility must have an authorized Durable DNR Order Form to be honored by qualified health care providers~~ Qualified health care personnel are authorized to honor only a Durable DNR Order on an authorized form or Alternate DNR jewelry [, except] as provided in 12VAC5-66-60 of these regulations.]

[~~E. Other DNR Orders can be honored any time when a patient is within a qualified health care facility or during transfer between qualified health care facilities when the patient remains attended by qualified health care providers.~~]

~~B.~~ [~~F. The E.~~ Prior to issuing a Durable DNR Order, the] physician shall explain to the patient or the person authorized to consent on the patient's behalf, the alternatives available, including issuance of a Durable DNR Order [for response in the event of cardiac or respiratory arrest]. If the option of a Durable DNR Order is agreed upon, the physician shall have the following responsibilities:

1. Explain [~~when~~] the [circumstances under which qualified health care personnel may follow a] Durable DNR [~~Form is valid Order~~].
2. Explain how to and who may revoke the Durable DNR [~~Order~~].
3. Document the patient's full legal name.
4. Document the execution date of the Durable DNR [Order].

~~4.~~ 5. Obtain the signature of the patient or the person authorized to consent on the patient's behalf on all three forms [;] the [patients patient's] copy, medical record copy, and the copy used for obtaining [Alternate] DNR [Jewelry jewelry].

~~2. Execute and date the Physician Order on the Durable DNR Order Form.~~

6. Make sure that the [issuing] physician's name is clearly printed and the form is signed.

7. [~~Note~~ Record] the contact telephone number for the issuing physician.

~~3.~~ 8. Issue the original Durable DNR Order Form, [and the] patient and [Alternate] DNR [Jewelry jewelry] copies to the patient and maintain the medical record copy in the patient's medical file.

~~4. Explain how to and who may revoke the Durable DNR Order.~~

~~E.~~ [~~G.~~ F.] The person to whom a Durable DNR [~~order~~ Order] applies or the person authorized to consent on the patient's behalf must present the following information to the approved vendor in order to purchase and be issued an approved Alternate Durable DNR necklace or bracelet. The necklace or bracelet must contain the following information:

1. The following words: Do Not Resuscitate;

~~1.~~ 2. The patient's full legal name;

~~2. The Durable DNR number on the Virginia Durable DNR form or a number unique to the patient that is assigned by the vendor;~~

3. The physician's name and phone number; and

4. The Virginia Durable DNR issuance date.

12VAC5-66-80. Durable DNR Order [~~Form~~] implementation procedures.

A. Qualified health care personnel shall comply with the following general procedures and published Virginia Durable DNR Order Implementation Protocols when caring for a patient who is in cardiac or respiratory arrest and who is known or suspected to have a Durable DNR Order in effect.

B. Initial assessment and intervention. Perform routine patient assessment and resuscitation or intervention until ~~the~~ a valid Durable DNR Order [~~Form~~, Alternate DNR jewelry,] or ~~other~~ Other DNR Order ~~validity status is~~ can be confirmed, as follows:

1. Determine the presence of a Durable DNR Order [~~Form~~] ~~or~~, [an] approved ~~alternate form of~~ Alternate Durable DNR ~~identification~~ [~~Jewelry~~ jewelry], or Other DNR Order.

2. If the patient is within a qualified health care facility [or in transit between qualified health care facilities], any qualified health care personnel may honor [a written physician's order that contains the items noted in 12VAC5-66-40 (a do not resuscitate determination, signature and the date of issue, the signature of the patient or, if applicable, the person authorized to consent on the patient's behalf) an Other DNR Order as set forth in 12VAC5-66-60].

~~2.~~ 3. Determine that the Durable DNR [~~item~~ form or Alternate DNR jewelry] is not altered.

~~3.~~ 4. Verify, through driver's license or other identification with photograph and signature or by positive identification by a family member or other person who knows the patient, that the patient in question is the one for whom the Durable DNR Order [~~Form~~, Alternate DNR jewelry,] or ~~other~~ Other DNR Order was issued.

~~4. If no Durable DNR Order or approved alternate form of identification is found, ask a family member or other person to look for the original Durable DNR Order Form or other written DNR order.~~

~~[5. If a Durable DNR Order Form or Alternate Durable DNR is not immediately available, care should be provided until a valid Durable DNR Form, Alternate Durable DNR, or Other DNR Order can be produced.]~~

~~[5. 6.] If [the Durable any type of] DNR Order or approved alternate form of identification is not intact or has been altered or other [, Alternate DNR jewelry, or Other DNR Order is] produced, [intact, unaltered, and verified as issued for the patient,~~

~~] the qualified health care personnel [is presented to]~~ qualified health care personnel [, it shall ~~may consider]~~ the Durable DNR Order to [be] invalid [considered it] valid.

C. Resuscitative measures to be withheld or withdrawn. In the event of cardiac or respiratory arrest of a patient with a valid Durable DNR Order ~~[Form]~~, Alternate Durable DNR [Jewelry jewelry], or Other DNR Order under the criteria set forth ~~above~~ in subsection B of this section, ~~[the following procedures should be withheld or withdrawn by]~~ qualified health care personnel [shall withhold or withdraw cardiopulmonary resuscitation (CPR)] unless otherwise directed by a physician physically present at the patient location ~~[∴ CPR shall include:]~~

1. ~~[Cardiopulmonary Resuscitation (CPR) Cardiac compression]~~;

~~2. Endotracheal Intubation or other advanced airway management;~~

~~3.~~ 2. Artificial ventilation;

~~4.~~ 3. Defibrillation; ~~or~~

4. Endotracheal Intubation or other advanced airway management including supra-glottic devices such as the LMA, or other airway devices that pass beyond the oral pharynx, such as the Combi Tube, PTL etc.; or

5. ~~[Continuation~~ Administration ~~] of related procedures or cardiac resuscitation medications as prescribed by the patient's physician or medical protocols.~~

D. Procedures to provide comfort care or to alleviate pain. In order to provide comfort care or to alleviate pain for a patient with a valid Durable DNR Order ~~or other DNR Order of any type [or Other DNR Order]~~ the following interventions may be provided, depending on the needs of the particular patient:

1. Airway management ~~(excluding intubation or advanced, including positioning, nasal or pharyngeal airway management)~~ placement;

2. Suctioning;

3. Supplemental oxygen delivery devices;

4. Pain medications or intravenous fluids;
5. Bleeding control;
6. Patient positioning; or
7. Other therapies deemed necessary to provide comfort care or to alleviate pain.

E. Revocation.

1. ~~[These regulations shall not authorize any qualified health care personnel to follow a Durable DNR Order for any patient who is able to, and does, express to such qualified health care personnel the desire to be resuscitated in the event of cardiac or respiratory arrest.~~

~~If the patient is a minor or is otherwise incapable of making an informed decision, the expression of the desire that the patient be resuscitated by the person authorized to consent on the patient's behalf shall so revoke the qualified health care personnel's authority to follow a Durable DNR Order or other DNR Order~~ If a patient is able to, and does, express to a health care provider or practitioner the desire to be resuscitated in the event of cardiac or respiratory arrest, such expression shall revoke the provider's or practitioner's authority to follow a Durable DNR Order or Other DNR Order. In no case shall any person other than the patient have authority to revoke a Durable DNR Order or Other DNR Order executed upon the request of and with the consent of the patient himself.

If the patient is a minor or is otherwise incapable of making an informed decision and the Durable DNR Order or Other DNR Order was issued upon the request and with the consent of the person authorized to consent on the patient's behalf, then the expression by said person to a health care provider or practitioner of the desire that the patient be resuscitated shall so revoke the provider's or practitioner's authority to follow a Durable DNR Order or Other DNR Order].

2. The expression of such desire to be resuscitated prior to cardiac or respiratory arrest shall constitute revocation of the order; however, a new order may be issued upon consent of the patient or the person authorized to consent on the patient's behalf.
3. The provisions of this section shall not authorize any qualified emergency medical services personnel or licensed health care provider or practitioner who is attending the patient at the time of cardiac or respiratory arrest to provide, continue, withhold or

withdraw treatment if such provider or practitioner knows that taking such action is protested by the patient incapable of making an informed decision. No person shall authorize providing, continuing, withholding or withdrawing treatment pursuant to this section that such person knows, or upon reasonable inquiry ought to know, is contrary to the religious beliefs or basic values of a patient incapable of making an informed when the patient was capable of making an informed decision.

F. Documentation. When following a Durable DNR Order or [~~other~~ Other] DNR Order for a particular patient [admitted to a qualified health care facility], qualified health care personnel shall document [care rendered or withheld as required by facility policies and procedures. When following a Durable DNR Order or Other DNR Order for a particular patient who is not admitted to a qualified health care facility or who is in transit from a health care facility, qualified health care personnel shall document] in the patient's medical record the care rendered or withheld in the following manner:

1. Use standard patient care reporting documents (i.e. patient chart, pre-hospital patient care report).
2. Describe assessment of patient's [cardiac or respiratory arrest] status.
3. Document which identification (Durable DNR Order [~~Form~~], Alternate Durable DNR [jewelry], or ~~other~~ Other DNR Order or alternate form of identification) was used to confirm Durable DNR status and that it was intact, not altered, not canceled or not officially revoked.
4. Record the name of the patient's physician who issued the Durable DNR Order ~~Number and name of patient's physician~~ [~~Form~~], or Other DNR Order.
5. If the patient is being transported, keep the Durable DNR Order [~~Form~~], Alternate Durable DNR [jewelry], or Other DNR Order with the patient.

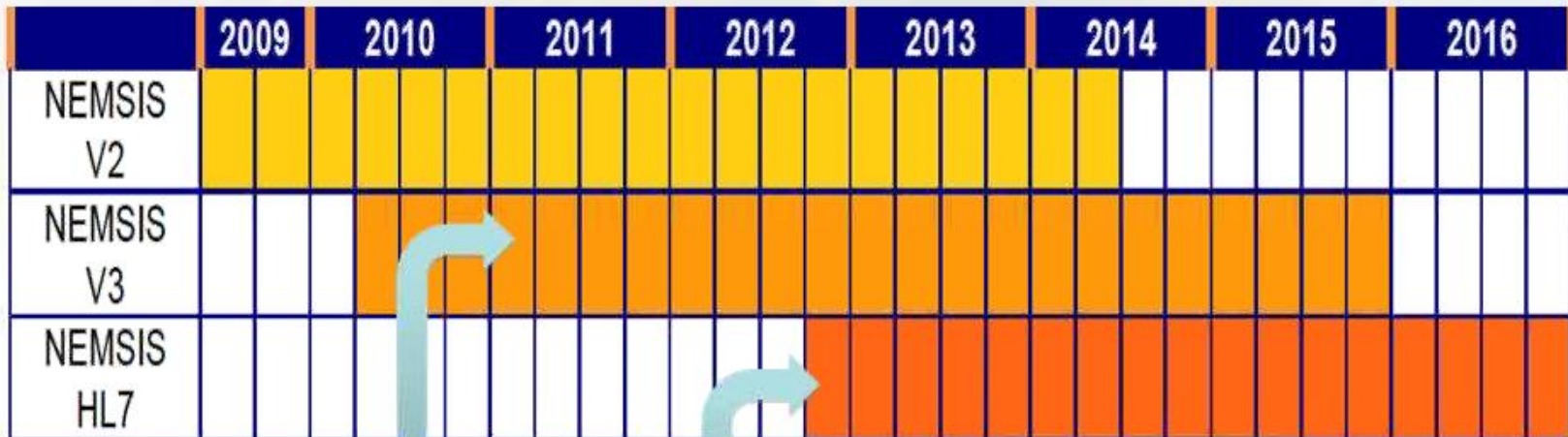
G. General considerations. The following general principles shall apply to implementation of [all] Durable DNR Orders.

1. If there is misunderstanding with family members or others present at the patient's location or if there are other concerns about following the Durable DNR Order or [~~other~~ Other] DNR Order, contact the patient's physician or EMS medical control for guidance.

2. If there is any question about the validity of a Durable DNR Order, resuscitative measures should be administered until the validity of the Durable DNR Order [or Other DNR Order] is established.

VA.R. Doc. No. R08-1132; Filed May 27, 2011, 4:26 p.m.

NEMSiS Transition Process



NEMSiS
Version 3
Products

NEMSiS
HL7
Products

Appendix G

Virginia Office of Emergency Medical Services
Virginia Statewide Trauma *and Burn* Center Designation ~~Program~~
~~Hospital Resource~~ Manual
Effective Date: January 1, 2012

Virginia Department of Health
Office of Emergency Medical Services
1041 Technology Park Drive
Glen Allen, Virginia 23059
(804)888-9100
www.vdh.virginia.gov/oems

TABLE OF CONTENTS

Preface.....	2
Trauma Center Designation.....	3
Trauma Center Verification.....	5
Trauma Center Criteria, Level I, II & III.....	8
Administrative Guidelines.....	24
Interpretive Guidelines.....	32
Questionnaire (Appendix A).....	45
Questionnaire – Hospital Capabilities (Appendix B).....	51
Level I Check List (Appendix C).....	54
Level II Check List (Appendix D).....	70
Level III Check List (Appendix E).....	86
Sample Two Tier Trauma Response Policy (Appendix F).....	101
Glossary.....	103

PREFACE

The purpose of the Trauma *and Burn* Center ~~Resource~~ Designation Manual is to provide information to hospital physicians, nurses, and administrators about Trauma *and Burn* Center designation in Virginia. The manual contains the criteria and standards effective MMMMMMM DD, YYYY for the ~~three~~ four levels of Trauma *and Burn* Center designation in Virginia. The process documents explain how trauma *and burn* center designation is acquired and maintained.

Virginia Trauma Center standards are based upon national standards put forth by the American College of Surgeons and the American College of Emergency Physicians. *Burn Center Criteria are based upon the American Burn Association's (ABA) standards. Neither set standards is wholly adopted. Instead stakeholder group input is utilized to adapt the standards to best fit the Virginia Trauma System.* ~~The Virginia standards are reviewed and updated based on changes in the national standards as well as the evolving needs of the Trauma System in Virginia.~~ The State Board of Health is the final approving body for these standards.

The Trauma System Oversight & Management Committee (TSO&MC) document explains the role of the TSO&MC in oversight of the trauma center designation program. The TSO&MC meets quarterly to discuss trauma system issues and to prepare action items for the State Emergency Medical Services Advisory Board. Hospital representatives are welcome to attend these meetings.

The purpose of the designation process is to assure consistent performance of Trauma and Burn Centers in Virginia and to promote continued improvement and development of experienced Centers thereby reducing morbidity and mortality of the traumatically and thermally injured patient.

Please direct questions or requests for further information or resources to the *Virginia Department of Health's (VDH), Office of Emergency Medical Services (OEMS) Trauma/Critical Care Coordinator, 1041 Technology Park Drive, Glen Allen, Virginia, 23059 or (804) 888-9100.*

VIRGINIA TRAUMA CENTER DESIGNATION

Resource Document: *Virginia Statewide Trauma Center Designation Manual*, available at: www.vdh.virginia.gov/oems. This is based on *Resources for Optimal Care of the Injured Patient: 2006*, Committee on Trauma, American College of Surgeons.

The TSO&MC of the State Emergency Medical Services Advisory Board has been asked by the State Health Commissioner to assist in the designation of Trauma *and Burn* centers in the Commonwealth of Virginia. The Commissioner shares the belief that designating Trauma *and Burn centers* will improve trauma care at all phases of the patient care system, from prehospital through rehabilitation.

The process of designation is entirely voluntary on the part of the hospitals in the Commonwealth. It is meant to identify those hospitals that will make a commitment to provide a given level of care for the multiple injured and/or burned patient and who welcome public acknowledgment of that capability. Knowledge of trauma *and burn* care capabilities, with improved field categorization and prehospital capabilities will help all those involved in the trauma *and burn* care delivery system make decisions that are in the best interest of the patient.

The designation process is as follows:

1. Any hospital that desires designation as a Trauma or Burn Center must submit a completed application to the VDH/OEMS, Trauma/Critical Care Coordinator. The application can be obtained from the VDH/OEMS, Trauma/Critical Care Coordinator and should include a statement of community need or justification for designation and the impact on its regional trauma system. This is not a certificate of need process.
2. Items that comprise a trauma center designation application can be found in the Trauma Center Verification section of this document
3. The Trauma/Critical Care Coordinator will review the application with the Chairman of the TSO&MC Committee, (and Committee member(s), if necessary), for compliance with the required standards. Additional clarifying documents or information may be requested
4. A designation site review will only be scheduled after a hospital can demonstrate: presence of essential trauma and/or burn criteria; compliance with the Virginia Statewide Trauma Registry (VSTR) data submission requirements, and participation in regional trauma triage plan.
5. The site review will be scheduled within six months of receiving a completed application. Once the site review date is scheduled, the hospital will receive an agenda, time schedule and a list of documents and personnel that need to be available at the time of the visit.
6. A site review will be scheduled for the purpose of awarding provisional status as a trauma center. Upon completion of one year as a provisional trauma center the hospital will be required to submit an interim report describing any changes since designation as a provisional center.

7. At the conclusion of the scheduled site visit, the Site Review Team members will submit their findings and recommendations in a summary report to the Commissioner. The Site Review Team may share draft copy of the summary report to the candidate hospital at the conclusion of the review.
8. At the end of the one year provisional period a modified site review team, consisting of a surgeon team leader, trauma/critical care RN, and VDH/OEMS staff will review the hospital and if there are no critical deficiencies identified at the time of this visit, the center will be recommended for designation as a Trauma and/or Burn Center by the State Health Commissioner. A verification visit will be required three years from the original full site review
9. An on-site verification visit will be required every three years from the original designation. Site review teams may recommend the verification cycle be any other time period as deemed necessary instead of the standard three year cycle.

Site Review Team Composition

LEVEL I and IB (IB is Level I Trauma and Burn Center Designation)

- Out of State Trauma Surgeon
- In State Trauma Surgeon/Team Leader
- A Trauma/Critical Care Nurse
- Emergency Department Physician
- Hospital Administrator

LEVEL II and III

- In State Trauma Surgeon/Team Leader
- Emergency Department Physician
- A Trauma/Critical Care Nurse
- Hospital Administrator

VIRGINIA TRAUMA CENTER VERIFICATION

Resource Document: *Virginia Statewide Trauma Center Designation Manual*, available at: www.vdh.virginia.gov/oems. This is based on *Resources for Optimal Care of the Injured Patient: 2006*, Committee on Trauma, American College of Surgeons.

The verification process is as follows:

1. Renewal notices sent approximately six months prior to site review due date
2. Hospital submits proposed site review dates within 30 days of receiving renewal notice
3. The hospital will receive a confirmation date once a team leader has been identified
4. The hospital will submit a complete designation application no later than 60 days prior to the confirmed site review date. The completed application will include, but not be limited to:
 - a. Signed Trauma Center Code of Conduct
 - b. Completed Trauma Center Capabilities Form
 - c. Current Organizational Chart describing the relationship of the trauma program within the hospital organizational structure
 - d. Impact Statement (see page 34 of designation manual for instructions)
 - e. Level I, *IB*, II or III Checklist for appropriate level requested (electronic form provided).
 - f. Completed Trauma Center Questionnaire
 - g. Current complete list of Emergency Physicians and mid-level providers
 - h. Current complete list of Trauma Surgeon's performing trauma call.
 - i. Current complete list of nursing staffs that serve as the primary trauma team nurse in the trauma bay/room. The list of trauma team nurses should include whether the nurse possesses active TNCC, ATCN, or CATN.
 - j. Copies of current TNCC, ATCN, and CATN should be made available to the site review team.
 - k. Trauma Team Activation/Alert Criteria for your hospital
 - l. Trauma Team Roles & Responsibilities Policy
 - m. Trauma Alert Policies
 - n. Trauma Medical Director Job Description
 - o. Evidence of Trauma Medical Director's: Copy of board certification, current ATLS, CME, and
 - p. national conference attendance (as applicable)
 - q. *TPD/TPM/TNC* job description (include Org. Chart)
 - r. Evidence of *TPD/TPM/TNC*'s trauma education hours (TEH) and national conference attendance (as applicable)
 - s. Trauma Registrar job description and evidence of TEH requirements (as applicable)
 - t. Emergency Medical Director's board certification, CME and current ATLS or the identified designee's current ATLS
 - u. Copy of the program's Performance Improvement (PI) plan
 - v. *PI* process flow diagram includes how issues get reported to its highest level
 - w. PI tracking sheets
 - x. Other documents as requested

5. The Site Review Team will be composed of a trauma surgeon/team leader, an emergency medicine representative, a trauma/critical care nurse, and a hospital administration representative. The State Trauma/Critical Care Coordinator will staff the site review and can cover any vacant position except the team leader role if needed
6. Verification of level I, IB, & II Centers shall have an out of state surgeon/consultant review the application package prior to the site visit. The out of state consultant will make recommendations, based on the application packet and submit these findings to the site review team and the hospital. These recommendations should be made available to the team and hospital no later than two weeks prior to the scheduled visit
7. Site Visit day will occur as follows:
 - a. Conference with the key trauma individuals of the institution and the Site Review Team. The key individuals are: the TMD, TPD/TPM/TNC, Burn Medical Director, Emergency Medicine Medical Director, the hospital administrator that is the immediate supervisor for the trauma program, Trauma Nurse Clinicians, Nurse Managers of ED, OR, ICU's, Pediatrics, and trauma floors, Trauma Registrar, PI Coordinator, Orthopedic surgery, Neurosurgery, Anesthesia, Rehabilitation Medicine, Radiological and lab/blood bank representatives, Local EMS Chief's and OMD's
 - b. The site review team will tour the hospital with the hospital staff person that is in an equivalent role to the team member. Appointments for individual meetings between the administrative team member and the hospital's Chief Executive Officer (CEO), Chief Nursing Officer (CNO), and the administrator over the TPD/TPM/TNC should be arranged.
 - c. The site review team will need to be provided with a work area to privately review hospital medical records by the *site* review team. The team may also use a tracer methodology and review charts of active patients. Medical records are chosen in advance by VDH/OEMS using the State Trauma and EMS registries. Additional records may be requested during the review
 - d. Review of PI documents
 - e. Exit interview with TMD, TPD/TPM/TNC, and Hospital Administrator with direct responsibility for the Trauma Program, CEO, and CNO if desired
 - f. The site review team may provide a draft copy of their final report to the trauma service leadership
8. The Site Review Team will document their findings in the form of strengths, weaknesses, non-critical deficiencies, and critical deficiencies. The team can develop this report as a group effort or any combination of individual and group reports. The team report will include a recommendation to the State Health Commissioner towards the designation/verification of the hospital as a designated Trauma and/or Burn Center
9. Acting upon the recommendation of the Site Review Team the State Health Commissioner may verify the designation of the Trauma and Burn Center for a three-year period from the date of the full site review. Designation is at the discretion of the State Health Commissioner and variations of designation cycles may be utilized, as well as special conditions

10. If a Trauma or Burn Center fails to meet essential criteria/receives a critical deficiency identified during a site visit or by other compelling evidence, the hospital will receive written notification by the VDH/OEMS
11. The hospital Trauma Center will submit a written plan of correction within 30 days after notification. The hospital Trauma Center has six months from the date of notification to correct all deficiencies and undergo a focused repeat verification visit performed by the Team Leader, VDH/OEMS staff and other team members as needed from the initial visit. The Team Leader may be replaced for extenuating circumstances. The Team Leader may also deem a repeat visit unnecessary with appropriate documentation that demonstrates the deficiency has been corrected
12. If the deficiencies are not corrected within the six month period, the Trauma and/or Burn Center designation will be withdrawn by the State Health Commissioner. If the hospital desires designation as a Trauma or Burn center, it must wait a minimum of six months and reapply.

VIRGINIA BURN CENTER VERIFICATION

The purpose of the Burn Center designation process is to assure consistent performance of Burn Centers in Virginia and to promote continued improvement and development of experienced Burn Centers thereby reducing morbidity and mortality of the thermally injured patient.

The intent of this document is to outline the criteria for the designation and verification of Burn Centers in Virginia. *This document* ~~It is divided into two sections;~~ (1) defining the essential components of Burn Centers in Virginia and (2) ~~outlining~~ administrative guidelines describing the procedures and steps required for the process and interpretive guidelines describing how Burn Center criteria should be evaluated during a site visit. The objective is to provide a consistent, objective and meaningful approach to the designation and verification process.

DRAFT

Definitions

Burn Center - is a hospital that has been designated by the State Health Commissioner as a Burn Center after meeting the Level I Trauma Center and Burn Center criteria contained within this document

Burn Patient – is the identification of patients that should be referred to a designated Burn Center in the Commonwealth of Virginia for assessment and care

Burn Program – is an organized approach (within the verified Trauma Center) to the care of burn patients with a focus on PI, education, and outreach. Burn Program administrative leadership addresses Burn Center standards under the direction of the Burn Medical Director.

Burn Service - the medical and surgical services that direct and coordinate the care of acute burn patients

Burn Unit - is the designated geographic area within a hospital that the majority of acute burn patients receive care

Critical Deficiency - the Trauma Center demonstrates an absence or inadequate mechanism to address a specific essential criterion or criteria. Critical deficiencies must be correct as directed in this document to receive an unconditional designation

Designated, Trauma Center - the process by which the Virginia Department of Health identifies hospitals that are prepared to consistently provide care to the traumatized patient.

Experienced/Mature Trauma Center – is a designated Trauma Center that has completed at least one successful three year verification cycle

Immediately available - implies the physical presence of the health professional in a stated location at the time of need by the trauma patient.

Level I - Level I trauma centers have an organized trauma response and are required to provide total care for every aspect of injury, from prevention through rehabilitation. These facilities must have adequate depth of resources and personnel with the capability of providing leadership, education, research and system planning.

Level IB – *meet all the requirements for Level I Trauma Center designation and the additional criteria specific to being designated as a Burn Center. Denoted as Level IB or Level I Trauma and Burn Center.*

Level II - Level II trauma centers have an organized trauma response and are also expected to provide initial definitive care, regardless of the severity of injury. The specialty requirements may be fulfilled by on call staffs, which are promptly available to the patient. Due to some limited resources, Level II centers may have to transfer more complex injuries to a Level I center. Level II centers should also take on responsibility for education and system leadership within their region.

Level III - Level III centers, through an organized trauma response, can provide prompt assessment, resuscitation, stabilization, emergency surgery, and also arrange for the transfer of the patient to a

hospital that can provide definitive trauma care. Level III centers should also take on responsibility for education and system leadership within their region.

Non-Critical Deficiency – the Trauma Center demonstrates an absence or inadequate mechanism to address a specific essential criterion or criteria. While there is not an immediate negative impact on patient care, continuation of the present status will result in erosion of the program and development of a critical deficiency (ies.) Non-critical deficiencies seen during two consecutive site reviews will be elevated to a critical deficiency

Trauma Center – is a hospital that has been designated by the State Health Commissioner as a Trauma Center after meeting to the criteria throughout this document

Team Leader – is a surgeon that serves as the head of a Trauma Center site review team. This is typically a surgeon actively involved in an active trauma service.

Trauma Patient – is the identification of patients that should be referred to a designated Trauma Center in the Commonwealth of Virginia for assessment and care. The Statewide Trauma Triage Plan sets the minimum standard for defining a trauma patient

Trauma Registrar - is the individual(s), responsible for entering, analyzing and evaluating the data maintained in the trauma registry. Frequently this person also oversees the performance improvement efforts of the trauma service.

Trauma Service - the medical and surgical services that direct and coordinate the care of acutely injured patients

Trauma Team - a multidisciplinary healthcare team that is predetermined to provide an organized approach to providing trauma care.

TSO&MC - Trauma System Oversight & Management Committee; a subcommittee of the EMS Advisory Board. This is the Commonwealth's trauma stakeholder committee that works to develop, maintain and improve Virginia's trauma system.

Virginia Statewide Trauma Registry (VSTR) - In Virginia all hospitals that provide emergency services and have inpatient facilities are required by the *Code of Virginia* §32.1-116.1 to report to the VSTR. The VSTR is used by Virginia's trauma system for performance improvement, research, injury prevention, resource utilization and the creation of state standards and benchmarks.

Abbreviations Used

ABLS – Advanced Burn Life Support
ACLS – Advanced Cardiac Life Support
ACS - American College of Surgeons
ACS/COT - American College of Surgeons, Committee on Trauma
ASTNA – Air and Surface Transport Nurses Association
ATCN – Advanced Trauma Care for Nurses sponsored by STN
ATLS – Advanced Trauma Life Support course
BOH – State Board of Health
CEN – Certified Emergency Nurse
CRNA – Certified Registered Nurse Anesthesiologist
CEO – Chief Executive Officer
CATN – Course in Advanced Trauma Nursing (ENA)
COT – Committee on Trauma
CT – Computed Tomography Scanning
CEU – Continuing Education Unit
DOA – Dead on arrival
E – Essential Criterion
ECG – Electrocardiogram
ED – Emergency Department
EMS – Emergency Medical Services
ENA – Emergency Nurses Association
ENPC – Emergency Nurses Pediatric Course
ETT – Endotracheal tube
GAB – EMS Advisory Board
ISS – Injury severity score
ICU – Intensive Care Unit
ICD9 - Ninth edition of International Classification of Disease, a standard coding system that includes injuries and diseases.
ICP – Intracranial pressure
IV - Intravenous
LPN/LVN – Licensed professional nurse/licensed vocational nurse
MRI – Magnetic resonance imaging
MD – Medical doctor
O – Optimal Criterion
OEMS – Office of Emergency Medical Services
OR – Operating room
PALS – Pediatric Advanced Life Support (course or certification)
PI – Performance improvement; used to describe quality assurance efforts (QA/QI/CQI)
PACU – Post Anesthesia Care Unit
PGY4/PGY5 - postgraduate year; classification system for residents in postgraduate training. The number indicates the year they are in during their post medical school residency program.
PHTLS – Prehospital Trauma Life Support
RN – Registered Nurse
RTTDC – Rural Trauma Team Development Course

STN – Society of Trauma Nurses

TEH - Trauma education hour(s) is the equivalent of 60 minutes of trauma education

TMD – Trauma Medical Director

TNCC – Trauma Nurse Core Curriculum sponsored by the ENA

TPD/TPM/TNC – Traditionally called the trauma nurse coordinator (TNC); this position varies by center and is typically a director or program manager.

TSO&MC – The Trauma System Oversight and Management Committee; this is the Commonwealth's

VDH – Virginia Department of Health

VDH/OEMS – Virginia Department of Health's Office of Emergency Medical Services

VSTR – Virginia Statewide Trauma Registry

DRAFT

Trauma Center Criteria

The items listed below as “E,” are essential items (required) in order maintain the respective level (I, IB, II, or III) trauma and/or burn center designation. Those items listed with an “O” are items that are considered Optimal and are recommended but not required. Mature centers typically achieve Optimal items above the essential criteria for Level I, IB, II or III designation.

Level:	I	IB	II	III
Article I. Institutional Organization				
Section 1.01 Trauma Program:				
(a) Mission statement emphasizing continuous PI in the management of the trauma patient.	E	E	E	E
(b) A recognizable program within the hospital which has a surgeon as its director/coordinator/physician in charge.	E	E	E	E
(c) Support of the facilities’ Board of Directors. (Board of Directors should be notified of applications for trauma designation, verification and approval of the Commissioner of Health after a site review).	E	E	E	E
(d) Administration supportive of Trauma Program.	E	E	E	E
(e) Evidence of an annual budget for Trauma Program.	E	E	E	E
Section 1.02 Burn Program:				
(a) <i>Must have medical and administrative commitment to the care of patients with burns. This is demonstrated by administrative leadership and financial support for personnel to maintain the elements as outlined below</i>	O	E	-	-
(b) <i>Must formally establish and maintain an organized Burn Program that is responsible for coordinating the care of burn patients</i>	O	E	-	-
(c) <i>The Burn Program must maintain an organizational chart relating personnel within the Burn Program and hospital</i>	O	E	-	-
(d) <i>Must be integrated into the Trauma Program at a state designated/verified Level I Trauma Center</i>	O	E	-	-
(e) <i>Must have all essential elements of the Burn Program, Burn Unit, and Burn Service</i>	O	E	-	-
(f) <i>The Burn Program must admit an average of 50 or more burn patients (as defined in Appendix C) annually with acute burn injuries averaged over three years</i>	O	E	-	-

Level:	I	IB	II	III
<p>(g) <i>The Burn Program must maintain a policy and procedural manual that is reviewed annually by the Burn Medical Director and Burn Program Manager/Coordinator. Policies and procedures will include the following:</i></p> <p>(i) <i>administration of the Burn Program;</i></p> <p>(ii) <i>staffing on the Burn Unit</i></p> <p>(iii) <i>criteria for admission to the Burn Unit by the Burn Service</i></p> <p>(iv) <i>use of Burn Unit beds by other medical and surgical services</i></p> <p>(v) <i>use of “tanking” and dressing facilities by non-Burn Service physicians</i></p> <p>(vi) <i>pediatric and adult conscious sedation procedures</i></p> <p>(vii) <i>criteria for admission, discharge and follow-up care</i></p> <p>(viii) <i>availability of beds and transfer of burn patients to other medical surgical units within the hospital</i></p> <p>(ix) <i>care of patients with burns in areas of the hospital other than the Burn Unit</i></p>	O	E	-	-
Section 1.03 <i>The Burn Center must avoid diverting burn patients except for rare instances such as loss of power etc. This includes patients arriving by EMS and from referral hospitals within the region.</i>	-	E	-	-
Section 1.04 Program Leadership				
(a) Trauma Medical Director				
(i) Board certified/eligible general surgeon. May have emergency medicine physician as Co-Director.	E	E	E	E
(ii) Minimum three years of experience on trauma service or trauma fellowship training.	E	E	O	O
(iii) Participates in regional and national trauma organizations.	E	E	O	O
(iv) Involved in trauma research and includes the publication of results and presentations.	E	E	O	O
(v) Actively involved in providing care to patients with life threatening or urgent injuries to discharge.	E	E	E	E
(vi) Oversees all aspects of multidisciplinary care from the time of injury to discharge.	E	E	E	E
(vii) Current ATLS provider or instructor.	E	E	E	E
(viii) Will have 30 hours of category I trauma/critical care CME every three years and attend one national meeting whose focus is trauma or critical care.	E	E	E	O
(ix) Will have 30 hours of category I trauma/critical care CME every three years and/or attend one national meeting whose focus is trauma or critical care.	-	-	-	E
(x) Attends more than one national meeting over three year period.	O	O	O	O

Level:	I	IB	II	III
<p>The Trauma Medical Director will provide an annual meeting and/or a self learning packet/web based learning program. All of the following shall receive this training:</p> <ul style="list-style-type: none"> • All full and part time surgeons taking trauma call. • The Trauma Program Manager/Trauma Coordinator. • Nurse practitioners and physicians assistants affiliated with the trauma program. • All full and part time emergency department physicians who may be caring for trauma alert patients in the Emergency Department. • All nurse practitioners and physicians assistants who may be caring for trauma alert patients in the emergency department. <p>The Trauma Medical Director will provide the following updates during this meeting:</p> <ol style="list-style-type: none"> 1. Highlights from national meetings and other continuing education to include a discussion of any changes applicable to the current guidelines and practice. 2. A review, including updated information from ATLS. <p>OR</p> <p>(xi) Each surgeon, emergency physician, nurse practitioner or physician's assistant participating/taking call in the service or could possibly be caring for trauma alert patients in the Emergency Department (ED) must complete 30 Category I CME's in trauma/critical care across the three year verification period or 20 across the two year designation period. Updating ATLS may be included in these CME's</p>	E	E	E	E
Section 1.05 Burn Medical Director				
(a) <i>The Burn Medical Director must be a licensed physician with board certification by the American Board of Surgery or the American Board of Plastic Surgery</i>	-	E	-	-
(b) <i>The Burn Medical Director must have completed a one-year fellowship in burn treatment or must have experience in the care of patients with acute burn injuries for two or more years during the previous five years at an ACS or VDH verified designated Level 1 Trauma Center</i>	-	E	-	-
(c) <i>The Burn Medical Director must be granted the necessary authority to direct and coordinate all care for patients admitted to the Burn Service</i>	-	E	-	-
(d) <i>The Burn Medical Director must be the physician of record or overseeing the outcomes of all surgeons within the program, 50 or more burn patients annually or one third of the burn patients admitted annually, averaged over a three year period</i>	-	E	-	-
(e) <i>The Burn Medical Director must participate in CME of burn related education at a minimum of 30 hours or more averaged over a three year period and attend one national/regional meeting</i>	-	E	-	-
(f) <i>Burn Medical Director must demonstrate ongoing involvement in burn related research and/or community education burn care and/or prevention</i>	-	O	-	-
Section 1.06 Trauma Program Director/Manager/Nurse Coordinator				
(a) Must have dedicated full time TPD/TPM/TNC	E	E	E	E
Must have a TNC/TPM, may be a part time position, though the trauma program shall be a major focus of their job description.	-	-	-	E

Level:	I	IB	II	III
(b) An identified TPD/TPM/TNC with overall management responsibilities for the Trauma Program.	E	E	E	<i>E</i> Θ
(c) Defined job description and organizational chart delineating the TPD/TPM/TNC role and responsibilities.	E	E	E	E
(d) Must be a Registered Nurse.	E	E	E	E
(e) The TPD/TPM/TNC, in addition to being a Registered Nurse, must possess experience in Emergency/Critical Care Nursing.	E	E	E	O
(f) 30 CEU's/contact trauma education hours (TEH) required per three year verification cycle, of which 50%, must be via an extramural source (see appendix B). <i>This may be prorated by the State Trauma Coordinator for new hires or shorter periods of time due to extenuating circumstances</i>	E	E	E	<i>E</i> Θ
(g) The TPD/TPM/TNC will attend one national or international meeting within the three year verification or two year initial designation period	E	E	E	E
Section 1.07 Burn Manager/Coordinator				
(a) <i>There must be one R.N. with a baccalaureate or higher degree, has two more years of experience in acute burn care and serves the function of the Burn Program Manager/Coordinator. This manager/coordinator will work closely with the Burn Medical Director to develop policies and procedures, PI program for the program. The nurse manager may have other administrative duties within the medical center, but should commit at least 25% of his or her FTE for every 150 inpatient admissions to the Burn Program</i>	-	E	-	-
(b) <i>The Burn Program Manager/Coordinator must participate in 8 or more hours of burn related education annually or 24 hours averaged over a three year period</i>	-	E	-	-
Section 1.08 <i>The primary burn therapist must have 8 hours or more of a burn related education annually or 24 hours averaged over a three year period</i>	-	E	-	-
Section 1.09 Trauma Registrar				
(a) Must be a minimum of one full FTE dedicated to the Trauma Registry.	E	E	E	Θ
(b) A minimum of a 0.5 FTE part-time must be fully dedicated to the trauma registrar position. <i>Note: See the "Trauma Registrar" description in the Administrative Guidelines for job description information.</i>	-	-	-	E
(c) Trauma registrars must attend 24 TEH required per three year verification cycle, of which 50 percent must be from an extramural source hours registry or trauma critical care contact hours/education hours over three years. (see appendix B)	E	E	E	<i>E</i> Θ
Section 1.10 Trauma Team/Trauma Team Response:				
(a) There must be a clearly delineated trauma team response to the arrival of the patient with suspected or known major trauma in the ED 24 hours per day.	E	E	E	E
(b) Trauma Surgeon:				
(i) A trauma surgeon must meet the patient in the ED upon arrival. A PGY4 or PGY5 general surgery resident capable of assessing emergent situations, providing control and leadership of the care of the trauma patient may meet this requirement. In the event that this requirement is provided by a resident, the trauma surgeon must be available in a timely manner	E	E	E	O

Level:	I	IB	II	III
(ii) The emergency physician is a designated member of the trauma team and may direct resuscitation and care of the patient until the arrival of the Trauma Team Leader. A senior level emergency medicine resident may fulfill this function provided there is an attending emergency medicine physician present in the ED	E	E	E	E
(iii) Trauma/general surgeons participating in the Trauma Program and taking active call must be dedicated to the hospital while on trauma call and show active participation in the Trauma Program	E	E	E	E
(iv) Trauma/general surgeons participating in the Trauma Program and taking active call must have completed ATLS, successfully, at least once in the past	E	E	E	E
(c) Minimum Physician Coverage:				
(i) A minimum of two attending level physicians must be present for the arrival of full trauma team alert patients. These physicians must be an anesthesiologist, EM physician, or general surgeon. A qualified general surgeon is expected to participate in major therapeutic decisions and be present in the ED for major resuscitations and at operative procedures on all seriously injured patients. Note: See administrative guidelines	E	E	E	O
(ii) A minimum of one attending level physician must be present for the arrival of trauma team alert patients. This physician must have the capability to manage the initial care of the majority of injured patients and have the ability to transfer patients that exceed their resources to an appropriate level Trauma Center. Note: See administrative guidelines	-	-	-	E
(d) Anesthesiology:				
(i) Anesthesiologist in hospital 24 hours a day. (refer to Section 2.04)	E	E	O	O
(ii) Anesthesiology must be on call and readily available 24 hours a day. (refer to Section 2.04)	-	-	E	E
(iii) Anesthesiologist must be present for all emergent operative procedures on major trauma patients. (refer to Section 2.04)	E	E	E	E
(e) Trauma Related Surgical Specialties (as listed in Section 2.05):				
(i) Promptly available as needed	E	E	E	E
Article II. Hospital Departments/Divisions/Sections				
Section 2.01 General Surgery:				
(a) Clinical capabilities in general surgery with two separate posted call schedules. One for trauma, one for general surgery. In those instances where a physician may simultaneously be listed on both schedules, there must be a defined back-up surgeon listed on the schedule to allow the trauma surgeon to provide care for the trauma patient. The Trauma Medical Director shall specify, in writing, the specific credentials that each back-up surgeon must have. These, at a minimum, must state that the back-up surgeon has surgical privileges at the Trauma Center and is boarded or eligible in general surgery (with board certification in general surgery within five years of completing residency). In house 24 hours per day. A PGY4 or PGY5 capable of assessing emergent situations in their respective specialties may fulfill this requirement. They must be capable of providing surgical treatment immediately and provide control and leadership of the care of the trauma patient.)	E	E	O	O

Level:	I	IB	II	III
(b) Clinical capabilities in general surgery with two separate posted call schedules. One for trauma, one for general surgery. In those instances where a physician may simultaneously be listed on both schedules, there must be a defined back-up surgeon listed on the schedule to allow the trauma surgeon to provide care for the trauma patient. The Trauma Medical Director shall specify, in writing, the specific credentials that each back-up surgeon must have. These, at a minimum, must state that the back-up surgeon has surgical privileges at the Trauma Center and is boarded or eligible in general surgery (with board certification in general surgery within five years of completing residency). On Call. Trauma surgeon or PGY4/PGY5 capable of assessing emergent situations in their respective specialties may fulfill this requirement. They must be capable of providing surgical treatment immediately and provide control and leadership of the care of the trauma patient.) Note: See administrative guidelines for possible exception	-	E	E	E*
(c) When the trauma surgeon is not in house, the trauma surgeon should be present in the ED at the time of arrival of the patient. When sufficient prior notification has not been possible, an ED physician will immediately initiate the evaluation and resuscitation. Definitive surgical care must be instituted by the trauma surgeon in a timely fashion.	-	E	E	E
(d) The hospital shall establish a policy detailing the expected amount of time for the trauma surgeon to arrive from first identification of a possible trauma patient to arrival at the bedside when Section 2.01 a, b, v cannot be met. This time shall not exceed 30 minutes. Selection of the interval will be based on patient outcome data.	E	E	E	E
Section 2.02 Neurological Surgery:				
(a) An attending neurosurgeon must be promptly available. The in-house requirement may be fulfilled by an in-house neurosurgery resident, or a surgeon/designee who has special competence, as judged by the Chief of Neurosurgery, in the care of patients with neural trauma, and who is capable of initiating diagnostic procedures.	E	E	O	O
(b) If a neurosurgeon is responsible for more than one hospital at the same time, they must have a backup schedule.	-	-	E	O
(c) If an attending neurosurgeon is not dedicated to the Level II Trauma Center, the center must have a backup call list OR the center must demonstrate no more than 24 emergency neurosurgical procedures per year AND the center must provide a neuro-trauma diversion plan.	-	-	E	-
Section 2.03 Emergency Medicine:				
(a) The ED physician must be a recognized member of the trauma team and be represented on the facilities trauma committee.	E	E	E	E
(b) The Emergency Medical Director or their designee will have 30 hrs of category I CME every three years and attend one national meeting with some content in trauma or critical care.	E	E	E	E
(c) The Emergency Medical Director or designee will maintain a current ATLS instructor or participant certification	E	E	E	E
Section 2.04 Anesthesiology:				

Level:	I	IB	II	III
(a) Anesthesiologist in hospital 24 hours a day. (Requirements may be filled by anesthesia residents; CRNA's capable of assessing emergent situations in trauma patients and providing any indicated treatment. Anesthesia personnel should be capable of providing anesthesia service for surgical trauma cases including major vascular, neurosurgical, pediatric, orthopedic, thoracic, ENT, and other in-house surgical cases. If residents or CRNA's are used, a staff anesthesiologist must be present in the OR suite during surgery. Training and experience in both invasive and non-invasive monitoring is essential).	E	E	O	O
(b) Anesthesiology. (Anesthesia personnel need not be in house 24 hours a day, but the trauma service should ensure that anesthesia personnel can be present in the emergency room at the time of arrival of the trauma alert patient. When sufficient prior notification has not been made possible, a designated member of the trauma team will immediately initiate the evaluation and resuscitation. Requirements must be filled by anesthesia personnel capable of assessing emergent situations in trauma patients and providing any indicated treatment. Anesthesia personnel should be capable of providing anesthesia. Service for surgical trauma cases including major vascular, neurosurgical, pediatric, orthopedic, thoracic, ENT, and other in-house surgical sub-specialties involved in trauma cases. If residents or CRNA's are used, a staff anesthesiologist must be present in the OR suite during surgery. Training and experience in both invasive and non-invasive monitoring are essential).	-	-	E	O
(c) Anesthesiology. On call and promptly available from in or out of hospital. (Requirements must be filled by anesthesia personnel capable of assessing emergent situations in trauma patients and providing any indicated treatment. Anesthesia personnel should be capable of providing anesthesia service for surgical trauma cases including; major vascular, neurosurgical, pediatric, orthopedic, thoracic, ENT, and other in-house surgical sub-specialties involved in trauma cases. If residents or CRNA's are used, a staff anesthesiologist must be present in the OR suite during surgery. Training and experience in both invasive and non-invasive monitoring is essential).	-	-	-	E
Section 2.05 Additional Clinical Capabilities: (On call and promptly available)				
(a) Surgical:				
(i) Cardiac Surgery	E	E	O	O
(ii) Thoracic Surgery	E	E	E	O
(iii) Orthopedic Surgery	E	E	E	E
(iv) Pediatric Surgery	E	E	O	O
(v) Hand Surgery	E	E	O	O
(vi) Microvascular/Replant Surgery	E	E	O	-
(vii) Plastic Surgery	E	E	E	O
(viii) Maxillofacial Surgery	E	E	E	O
(ix) Ear, Nose & Throat Surgery	E	E	E	O
(x) Oral Surgery	E	E	O	O
(xi) Ophthalmic Surgery	E	E	E	O
(xii) Gynecological Surgery/Obstetrical Surgery	E	E	E	O

Level:	I	IB	II	III
(xiii) Urology	-	E	-	-
(b) Non-surgical: (On call and promptly available)				
(i) Cardiology	E	E	E	O
(ii) Pulmonology	E	E	O	O
(iii) Gastroenterology	E	E	O	O
(iv) Hematology	E	E	O	O
(v) Infectious Disease	E	E	O	O
(vi) Internal Medicine	E	E	E	E
(vii) Nephrology	E	E	O	O
(viii) Neurology	O	E	O	O
(ix) Pathology	E	E	E	E
(x) Pediatrics	E	E	O	O
(xi) Psychiatry	O	E	O	O
(xii) Radiology	E	E	E	E
(xiii) Interventional Radiology	E	E	E	O
Section 2.06 Social Service consultation must be available to the Burn Service	-	E	-	-
Section 2.07 There must be access to rehabilitation services capable of managing burn patients	-	E	-	-
Article III. Clinical Qualifications				
Section 3.01 General/Trauma Surgeons:				
(a) Board certified/eligible in general surgery.	E	E	E	E
(b) Must meet the educational requirements in Section 1.03.xi	E	E	E	E
(c) Successful ATLS course completion at least once	E	E	E	E
Section 3.02 Burn Surgeons:				
(a) There must be at least 1FTE attending burn surgeon staff involved in the management of burn patients for each 200 patients annual acute inpatient admissions	-	E	-	-
(b) The Burn Medical Director may appoint a qualified attending burn surgeon to participate in the care of the patients on the Burn Service	-	E	-	-
(c) Attending staff burn surgeons must be board certified or eligible in general or plastic surgery	-	E	-	-
(d) Attending staff burn surgeons must have completed a one-year fellowship in burn treatment or must have experience in the care patients with acute burn injuries for two or more years during a previous five years at a designated Level I Trauma Center	-	E	-	-
(e) Attending staff burn surgeons must participate in CME of burn related education at a minimum of 30 hours or more averaged over a three year period	-	E	-	-
(f) Attending staff burn surgeons must direct the total care of at least 20% or more of acutely burned patients annually admitted to the Burn Service averaged over a three year period	-	O	-	-
(g) Privileges for physicians participating in the Burn Service must be determined by the medical staff credentialing process and approved by the Burn Medical Director.	-	E	-	-

Level:	I	IB	II	III
(h) <i>The Burn Service must maintain an on-call schedule for residents and attending staff burn surgeons available to the Burn Service. Residents and staff surgeons must be primarily available 24 hour basis</i>	-	E	-	-
(i) <i>If residents rotate on the Burn Service, the Burn Medical Director, or his or her designee, must be responsible for an orientation program for new residents</i>	-	E	-	-
Section 3.03 Emergency Medicine:				
(a) Board certified/eligible in emergency medicine (Exceptions may be made in rare instances based upon long term practice in emergency medicine)	E	E	E	E
(b) Must meet the educational requirements in Section 1.03.xi	E	E	E	E
(c) ED physicians must maintain current ATLS, if not boarded in emergency medicine	E	E	E	E
Section 3.04 Neurosurgery:				
(a) Board certified within five years of completing residency successfully	E	E	E	O
(b) 10 hours of CME per year in neuro-trauma	O	O	O	O
(c) Must have successfully completed an ATLS course once	O	O	O	O
Section 3.05 Orthopedic Surgery:				
(a) Board certified within five years of completing residency successfully	E	E	E	O
(b) 10 hours of CME per year in skeletal trauma	O	O	O	O
(c) Must have successfully completed an ATLS course once	O	O	O	O
Section 3.06 Trauma Nursing:				
<p>All ED, OR, ICU, PACU and acute care unit staff that consistently care for the severely injured patient will receive annual update information provided by the TNC/TPM. This education may be provided by the representative/designee from each area listed here. The annual update information must include:</p> <p>Highlights from national meetings.</p> <p>Updates to TNCC, ATCN, CATN, ENPC and other continuing education.</p> <p>OR</p> <p>All nursing staff who participates in the trauma team response, or who primarily care for the injured patient in the ICU, OR, PACU, ED or surgical trauma units shall have a minimum eight hours trauma/critical care CME annually. This requirement may be filled by successfully completing TNCC, ATCN, CATN, ENPC. *The hospital must choose between providing an annual update or CME tract to educate nursing staff.</p>	E	-	E	E
(a) <i>All nursing staffs who participate in the acute care of trauma patients, including those working on units regularly providing care to trauma patients such as General Surgery, Orthopedics, Neuroscience, Progressive Care, ICU, PACU, OR, ED, and Pediatrics shall have a minimum of four (4) hours of trauma specific education hours (TEH) annually</i>	E	E	E	E
(b) <i>All nursing staffs participating Trauma Team response caring for trauma patients must have documented knowledge and skill in trauma nursing (trauma specific orientation., skills checklist)</i>	E	E	E	E
(c) <i>There must be a Burn Program orientation program that documents nursing competencies specific to the care and treatment burn patients including critical care, wound care, and rehabilitation that is age appropriate</i>	-	E	-	-

Level:	I	IB	II	III
(d) Documentation of specific orientation and continuing education for pediatric and burn care if these patients are regularly admitted to the Trauma Center	E	E	E	E
(e) >50% of Level III all nursing staffs who directly participate as a member in the trauma team must have response must successfully complete a current TNCC, ATCN course, or CATN certification. participate in a resuscitation/assessment skill based educational program involving the Level I or II trauma program manager within one year of beginning trauma team responsibilities	E	E	E	E
Section 3.07 Burn Nursing:				
(a) <i>Burn Center nursing staff who participate in the resuscitation of the burn patient must be provided with a minimum of two burn related nursing education hours opportunities annually, either intramural or extramural</i>	-	E	-	-
(b) <i>Each Burn Unit must have a method to determine acuity levels of the patients in determining staffing needs. The system will be used to determine daily staffing needs</i>	-	E	-	-
(c) Qualifications for staff who are responsible for the care of burn patients must conform to criteria documenting appropriate training, patient experience CME's and commitment to teaching and research and care burn patients	-	E	-	-
Article IV. Facilities/Resources/Capabilities				
Section 4.01 Emergency Department:				
(a) Personnel:				
(i) Designated physician director/chairman (see clinical qualifications under Section 2.03)	E	E	E	E
(ii) 24 hour per day staffing by physicians physically present in the ED that meet the standard in Section 3.03	E	E	E	E
(iii) RN's, LPN/LVN's and nursing assistants/technicians in adequate numbers in the initial resuscitation area based on acuity and trauma team composition	E	E	E	E
(iv) A minimum of two RN's per shift functioning in the trauma resuscitation area that possess trauma nursing training	E	E	E	E
(v) A written provision/plan for the acquisition of additional staffing on a 24 hour basis to support units with increased patient acuity, multiple emergency procedures and admissions	E	E	E	E
(vi) Each nursing unit must have a copy of their staffing plan for review during the site visit	E	E	E	E
(vii) A written protocol for the expectations and responsibilities of the trauma nurse and other team members during trauma resuscitations	E	E	E	E
(viii) Nursing documentation for trauma patients is on a trauma flow sheet or electronic medical record equivalent	E	E	E	E
(b) Emergency Department Resuscitation Equipment:				
(i) For Trauma Centers caring for pediatric patients, there shall be equipment corresponding to the adult equipment, appropriate to age and size. There shall be information on pediatric medication dosing with this equipment	E	E	E	E
(ii) Broselow Tape	E	E	E	E
(iii) Airway control & ventilation equipment (laryngoscopes with a variety of straight and curved blades, endotracheal tubes of all sizes, bag valve masks and methods	E	E	E	E

Level:	I	IB	II	III
to continually provide supplemental Oxygen)				
(iv) Suction devices in adequate numbers to be able to care for the multi system trauma patient	E	E	E	E
(v) End Tidal CO2 detector to confirm tracheal placement of ETT	E	E	E	E
(vi) Bedside monitor with central monitoring capabilities to include: ECG, Pulse Oximetry, central venous pressure monitoring	E	E	E	E
(vii) Cardiac Monitor immediately available with capabilities to include: ECG, Pacing, external & internal defibrillation	E	E	E	E
(viii) Intravenous fluids and administration devices to include large bore access and intraosseous devices (adult & pediatric)	E	E	E	E
(ix) Thermal control equipment for warming blood & IV fluid	E	E	E	E
(x) Method of rapid IV fluid administration must be able to infuse warmed IV fluid and warmed blood	E	E	E	E
(xi) Arterial Catheters	E	E	E	O
(xii) Sterile surgical sets/trays to include: airway control/cricothyrotomy, thoracotomy, vascular access, chest tube insertion, peritoneal lavage and central line access	E	E	E	E
(xiii) Thermal control equipment for cooling/warming patients	E	E	E	E
(xiv) Gastric catheters	E	E	E	E
(xv) Skeletal traction devices	E	E	E	E
(xvi) Skeletal traction device for providing cervical traction	E	E	E	E
(xvii) 24 hour per day x-ray capability	E	E	E	E
(xviii) Sonography (FAST capability)	O	O	O	O
(xix) Doppler capability	E	E	E	E
(xx) Two way radio communication linked with EMS transport units	E	E	E	E
Section 4.02 Burn Unit:				
(a) The Burn Unit must maintain an identified nursing unit where staffs specialize in burn care	-	E	-	-
(b) The Burn Unit must have an identified area of the hospital that is a physical geographic location within the hospital for the treatment and coordination of burn care	-	E	-	-
(c) The Burn Unit must have effective means of isolation that is consistent with the principles of universal precautions and barrier technique to decrease the risk of cross infection and cross-contamination	-	E	-	-
Section 4.03 Burn Unit Treatment Area:				
(a) A specific area as designated by the Burn Medical Director for wound care assessment and treatment which would include the capability for minor wound debridement, escharotomy, wound cleansing, procedural techniques such as line placement, and overall assessment	-	E	-	-
Section 4.04 Burn Unit Equipment:				
(a) Weight measuring devices	-	E	-	-
(b) Thermal control equipment				
(i) For patients	-	E	-	-
(ii) For IV fluids and blood products	-	E	-	-

Level:	I	IB	II	III
(c) <i>Bedside monitor with central monitoring capabilities to include: ECG, Pulse Oximetry, pressure monitoring abilities (ICP, Venous & Arterial)</i>	-	E	-	-
(d) <i>Cardiac Monitor immediately available with capabilities to include: ECG, Pacing, external & internal defibrillation</i>	-	E	-	-
(e) <i>Cardiac emergency carts with age appropriate equipment</i>	-	E	-	-
(f) <i>Electrocautery</i>	-	E	-	-
Section 4.05 Operating Suite:				
(a) Immediately available 24 hours per day	E	E	E	O
(b) <i>Immediately available 24 hours per day with the Burn Service having timely access for urgent/emergent cases. This is defined as "within 6 hours of posting"</i>	-	E	-	-
(c) Personnel:				
(i) 24 hour per day immediate availability of in-house staffing	E	E	E	O
(ii) Personnel available 24 hours per day in-house or on-call and available in a timely manner	-	-	-	E
(iii) Operating room (OR) adequately staffed in-house 24 hours per day. There should be a second on-call team promptly available when the in-house team is participating in an operative case	E	E	E	O
(d) Operating Room Resuscitation Equipment:				
(i) For Trauma Centers caring for pediatric patients, there shall be equipment corresponding to the adult equipment, appropriate to age and size. There shall be information on pediatric medication dosing with this equipment	E	E	E	E
(ii) Cardiopulmonary bypass capability	E	E	O	-
(iii) Operating microscope	E	E	O	O
(iv) Thermal control equipment:				
1) For patients	E	E	E	E
2) For blood & IV fluids	E	E	E	E
(v) 24 hour per day x-ray capability, including C-Arm image intensifier	E	E	E	E
(vi) Endoscopes and bronchoscopes	E	E	E	E
(vii) Rapid infuser system	E	E	E	E
(viii) Craniotomy instruments	E	E	E	-
(ix) Capability of fixation of long bone and pelvic fractures	E	E	E	O
Section 4.06 Postanesthesia Recovery Room or Surgical Intensive Care:				
(a) Personnel:				
(i) 24 hour per day (in-house or on-call) staffing by RN's	E	E	E	E
(ii) Equipment for patients of all ages, to include: capability for resuscitation and continuous monitoring of temperature, hemodynamics & gas exchange	E	E	E	E
(iii) Thermal control equipment:				
1) for patients	E	E	E	E
2) for IV fluids, blood and blood products	E	E	E	E
(iv) In the event that patients are boarded in the PACU as ICU overflow patients, then the equipment listed in Section 4.07 must be available	E	E	E	E
Section 4.07 Intensive/Critical Care Unit:				
(a) Personnel:				
(i) Designated surgical director or co-director	E	E	O	O

Level:	I	IB	II	III
(ii) Designated medical director or co-director	E	E	E	E
(iii) RN educated in trauma care should have a patient ratio of not more than two patients per RN	E	E	E	E
(iv) Physician on duty in the ICU 24 hours per day or immediately available from within the hospital as long as this physician is not the sole on call MD for the ED	E	E	E	O
(v) Physician on duty in the ICU 24 hours per day or immediately available from within the hospital (which may be a physician who is the sole physician on call for the ED)	-	-	-	E
(b) Intensive/Critical Care Unit Equipment:				
(i) For Trauma Centers caring for pediatric patients, there shall be equipment corresponding to the adult equipment, appropriate to age and size. There shall be information on pediatric medication dosing with this equipment	E	E	E	E
(ii) Airway control & ventilation equipment (laryngoscopes with a variety of straight and curved blades, endotracheal tubes of all sizes, bag valve masks and methods to continually provide supplemental Oxygen)	E	E	E	E
(iii) Oxygen source with concentration controls	E	E	E	E
(iv) Cardiac emergency cart	E	E	E	E
(v) Temporary transvenous pacer	E	E	E	E
(vi) Bedside monitor with central monitoring capabilities to include: ECG, Pulse Oximetry, pressure monitoring abilities (ICP, Venous & Arterial)	E	E	E	E
(vii) Cardiac Monitor immediately available with capabilities to include: ECG, Pacing, external & internal defibrillation	E	E	E	E
(viii) Mechanical ventilator	E	E	E	E
(ix) Patient weighing devices	E	E	E	E
(x) Pulmonary function measuring device	E	E	E	E
(xi) Temperature control devices for patients	E	E	E	E
(xii) Rapid IV fluid infuser capability	E	E	E	E
(xiii) Intracranial pressure monitoring device	E	E	E	O
(xiv) Capability to perform blood gas measurements, hematocrit levels & chest x-ray studies.	E	E	E	E
Section 4.08 Radiological Services:				
(a) Available 24 hours per day	E	E	E	E
(b) 24 hour per day in-house radiology technician	E	E	E	E
(c) X-ray interpretation by radiologist available 24 hours per day	E	E	E	O
(d) Angiography	E	E	E	O
(e) Sonography	E	E	E	O
(f) Computed Tomography Scanning (CT)	E	E	E	E
(g) 24 hour per day in-house CT Technologist	E		E	O
(h) CT Technologist available within 30 minutes of notification or documentation that procedures are available within 30 minutes	-	-	-	E
(i) Magnetic Resonance Imaging (MRI)	E	E	O	O
(j) Resuscitation equipment to include airway management and IV therapy	E	E	E	E
Section 4.09 Clinical Laboratory Service: (to be available 24 hours/day)	E	E	E	E

Level:	I	IB	II	III
(a) Standard analysis of blood, urine, and other body fluids, including micro sampling when appropriate	E	E	E	E
(b) Blood typing & cross-matching	E	E	E	E
(c) Coagulation studies	E	E	E	E
(d) Comprehensive blood bank, or access to a community central blood bank with storage facilities	E	E	E	E
(e) Blood gas & ph determination abilities	E	E	E	E
(f) Microbiology abilities	E	E	E	E
Section 4.10 Renal dialysis, radiologic services including CT services ,and clinical laboratory services must be available 24 hours per day	-	E	-	-
Section 4.11 Allograft Tissues – The Burn Program’s hospital policies and procedures for the use of allograft tissues must be in compliance with all federal state and Joint Commission requirements, and when feasible and appropriate, with standards of the American Association of Tissue Banks	-	E	-	-
Article V. Performance Improvement Program				
Section 5.01 Trauma/Burn Performance Improvement:				
(a) An organized PI program to examine the care of the injured patient within the hospital that looks towards improving outcomes by decreasing complications and improving efficiency. The process should clearly document the PI process, action plans, and resolution of the issue (loop closure)	E	E	E	E
(i) Demonstrate relationship between PI outcomes and new or revised clinical protocols	E	E	O	O
(ii) Expansion of PI program to include regional trauma systems	O	O	O	O
(b) The PI program should follow state recommended audit filters at a minimum	E	E	E	E
(i) Participates in the creation of institutional/regional based audit filters as identified by the institution/regional PI committees	O	O	O	O
(c) Applying outcomes/benchmarking activity	E	E	E	E
(d) Participation in the Statewide Trauma Registry as mandated by the Code of Virginia. Data must be submitted to Trauma Registry within 30 days from the end of a quarter and includes: <ul style="list-style-type: none"> patients with ICD9-CM codes of 348.1, 800.0 – 959.9, 994.0 and 994.1, excluding 905-909 (late effect injuries), 910-924 (blisters, contusions, abrasions and insect bites), 930-939 (foreign bodies) Only those patients that were admitted to the hospital are required to be reported. Includes admissions for observation (not ER observation unless held in the ER due to no inpatient bed availability). Patients transferred from one hospital to another because of acute trauma (patient may be transferred directly from the ED or from an inpatient unit). Victims of acute trauma that die within the hospital, Including, the ED and DOA’s. Note: hospitals may over report within these ICD9 codes if desired for internal reporting.	E	E	E	E
(e) Compliance with Section 5.01.d above on a quarterly basis	E	E	E	E
(f) Utilization of State Registry/NTDB:				

Level:	I	IB	II	III
(i) For the purposes of institutional/Regional/State Research, Benchmarking for PI and or Injury Prevention Programs. For mature Trauma Centers (by the second verification visit), becomes a minimal standard	O	O	O	O
(ii) For the purposes of institutional/regional/state research, benchmarking for PI and or injury prevention programs. <u>For mature Trauma Centers (by the second verification visit), becomes a minimal standard</u>	E	E	E	E
(g) A forum, including the TMD, ED Director, TPD/TPM/TNC, designee from Trauma subspecialties (neurosurgery, orthopedics) as specific issues present for multidisciplinary review of care of the injured patient including policies, procedures, system issues, and outcomes may include pre-hospital, nursing, ancillary personnel, a hospital administrator and physicians involved in trauma care. (The forum in h, below, may be combined with this meeting)	E	E	E	E
(i) 50% attendance by committee members (or designee) at multi-disciplinary review of care meetings	E	E	E	E
(h) The hospital will have a structured peer review committee, which must have a method of evaluating trauma care. This committee must meet at least quarterly and include physicians representing pertinent specialties that include at least, trauma surgery, neurosurgery, orthopedics, emergency medicine, anesthesiology, and may include hospital management and other subspecialties as required. The TPD/TNC/TNC or designee may be a member. Outcomes of peer review will be incorporated into the educational and policy program of the trauma service. (The forum in F may be combined with this meeting)	E	E	E	E
Section 5.02 Trauma Research Program:				
(a) Trauma research program designed to produce new knowledge applicable to the care of injured patients to include: an identifiable institutional review board process	E	E	O	O
(b) A trauma research program designed to produce new knowledge applicable to the care of injured patients to include; three peer review publications over a three year period that could originate in any aspect of the Trauma Program	E	E	O	O
(c) A nursing specific trauma research program designed to produce new knowledge applicable to the care of the injured patients to include trauma nursing research. Should have one publication in a three year period	E	E	O	O
Section 5.03 Burn Performance Improvement:				
(a) A patient care conference must be held at least weekly to review and evaluate the status of each patient admitted to the Burn Unit. This should include, but not be limited to, a burn physician, critical care intensivist, burn nurse, respiratory therapist, social work, burn OT or PT, dietitian, and clinical psychologist	-	E	-	-
(b) Patient care conferences must be documented in the progress notes of each patient and in the minutes of the conference kept separately	-	E	-	-
(c) The Burn Program must have a multidisciplinary PI program	-	E	-	-
(d) The Burn PI program multidisciplinary committee, which oversees the PI program, must meet at least quarterly. Sufficient documentation must be maintained to verify problems, identify opportunities for improvement, and take corrective actions and resolved issues	-	E	-	-

Level:	I	IB	II	III
(e) <i>Morbidity and mortality conferences must be held every other month with physicians, other than the immediate burn care team to ensure objective review of the presentations. Attendees at this conference should include specialists and members other than those practicing in the burn center</i>	-	E	-	-
(f) <i>All significant complications and deaths must be discussed. There must be a candid and open discussion with high points documented, an assessment of the death or complications classified as; not preventable, potentially preventable, and preventable and actions recommend. There must also be documentation of loop closure in the potentially preventable and preventable cases. Records of this conference must be kept</i>	-	E	-	-
(g) <i>The Burn Program must conduct audits released annually that include but are not limited to the severity of burn mortality, incidence of complications and length of hospitalization</i>	-	E	-	-
(h) <i>The program must participate in the American Burn Association (ABA), national burn repository either through ABA tracks or by providing the minimum acceptable record information in a computer exported format compatible with ABA national burn repository this data must include all patients admitted to the hospital for acute burn care treatment</i>	-	O	-	-
(i) <i>The Burn Program must provide ongoing review and analysis of nosocomial infection data and risk factors that relate to infection prevention and control for burn patients, these data must be available to the burn team to assess infection risk factors that relate to infection prevention and control for burn patients</i>	-	E	-	-
Section 5.04 Burn Research Program				
(a) <i>The Burn Program should participate in basic clinical and health science research</i>	-	O	-	-
(b) <i>The Burn Medical Director should demonstrate ongoing involvement in burn related clinical research</i>	-	O	-	-
Article VI. Outreach Program				
Section 6.01 Annually partner with the top three referring/receiving facilities to assess, plan, implement and evaluate physician and nursing trauma educational needs of those facilities transferring severely injured patients	E	E	E	E
Section 6.02 Each Trauma Center will maintain a document that reflects the functional process for providing case specific complimentary and/or constructive feedback to the top three referring/receiving facilities for extraordinary situations	E	E	E	E
Section 6.03 Each Trauma Center will collaborate with the top three regional transferring/receiving facilities to design and provide an annual hospital specific registry report by using the hospitals PI infrastructure for transmission	E	E	E	E
Section 6.04 Each Trauma Center will have in place a method for showing their involvement with the EMS agencies and/or personnel in there region. The Trauma Centers should be involved in EMS education, PI and a method of providing complimentary and/or constructive feedback in general or case specific as needed	E	E	E	E
Section 6.05 Each Trauma Center will have in place a method for showing their involvement with the community in their region. The Trauma Center should be involved in community awareness of trauma and the trauma system	E	E	E	E

Level:	I	IB	II	III
Section 6.06 <i>The Burn Program must have an educational program for medical staff, including emergency medicine attending physicians and residents</i>	-	E	-	-
Section 6.07 <i>The Burn Program must offer education on current burn concepts of emergency and inpatient care treatment to pre-hospital and hospital care providers within its service area (refer to appendix what constitutes educational criteria)</i>	-	E	-	-
Section 6.08 <i>The Burn Program will document burn specific participation in public awareness programs</i>	-	E	-	-
Section 6.09 <i>The burn program should be actively engaged in promoting A.B.L.S. courses in the region. It is desirable for the Burn Medical Director to be an A.B.L.S instructor and essential that the burn medical director is current and A.B.L.S. The unit should have one or more employees who are A.B.L.S. instructors</i>	-	O	-	-
Article VII. Injury Prevention Program				
Section 7.01 Demonstration of injury prevention activities based upon regional needs	E	E	E	E
(a) Participation in a statewide Trauma Center collaborative injury prevention effort focused on a common need throughout the commonwealth	O	O	O	O
(b) Perform studies in injury control while monitoring the effects of prevention programs	O	O	O	O
Article VIII. Hospital Documents				
Section 8.01 Evidence of American Board of Surgery certification documented in credentials file or other documentation showing active pursuit of current certification or re-certification in General Surgery by Trauma Surgeons. Must be eligible for certification	E	E	E	E
Section 8.02 Evidence of recognized board certification documented in credentials file or other documentation showing active pursuit of current certification or recertification in Emergency Medicine or appropriate specialty by ED physicians	E	E	E	E
Section 8.03 Documentation of ATLS and continuing education as outlined throughout this document	E	E	E	E
Article IX. Institutional Commitment				
Section 9.01 Demonstrates knowledge, familiarity, and commitment of upper level administrative personnel to trauma service	E	E	E	E
Section 9.02 Upper level administration participation in multi-disciplinary trauma conferences/committees	E	E	E	E
Section 9.03 Evidence of yearly budget for the Trauma Program	E	E	E	E

APPENDIX A

ADMINISTRATIVE GUIDELINES

Purpose:

The purpose of the administrative and interpretive guidelines is to provide information pertaining to the process of designation and verification of Trauma *and Burn* Centers in Virginia. It is divided into two sections; administrative guidelines describing the procedures and steps required for the process and interpretive guidelines describing how Trauma and Burn Center criteria should be evaluated during a site visit. The document is designed to be used with Virginia Trauma and Burn Center Criteria.

The objective is to provide a consistent, objective and meaningful approach to the designation process.

Background:

In Virginia the lead EMS agency is the Office of EMS. The Office coordinates the development and administration of Trauma Center designation throughout the state. The earliest Level I Trauma Centers were designated in 1983 and 1984. *Burn specific designation was introduced to the designation manual in 2011.*

The trauma system in Virginia is inclusive. All hospitals with 24 hour emergency departments ~~rooms~~ provide some degree of trauma and burn care. The decision to become a designated Trauma Center or Trauma/Burn Center is voluntary. Designation carries a cost related to the fact that the trauma and burn services must be continuously available for patients who may or may not require their services. Triage guidelines act to direct severely injured patients to the nearest appropriate Trauma or Trauma/Burn Center.

Designation occurs at ~~three~~ four levels. Level I, *Level IB*, and II Trauma Centers should be capable of managing severely injured patients. Level I and *Level IB* centers must demonstrate a higher level of commitment to research, prevention and education. Level III centers demonstrate an increased commitment to trauma care, managing moderately injured patients and rapidly resuscitating and transferring more severely injured patients. Undesignated trauma centers must recognize, resuscitate and transfer most trauma patients.

All hospitals whether designated or not should make every effort possible to participate in and to improve the trauma system. Due to the unexpected nature of injury, trauma patients and their families cannot choose their location of care. It is incumbent upon the healthcare system to provide these patients with the most optimal care possible regardless of location and circumstances. The purpose of the designation process is to assure consistent performance of entry level Trauma *and Trauma/Burn* Centers and to promote continued improvement and development of experienced centers.

I. Record keeping

Overview: The trauma system in Virginia is dynamic. Centers change in response to pressure of the healthcare environment and criteria and processes for evaluation change as trauma and burn care evolves. Maintaining records consistently over a period of time achieves several purposes. It provides a series of system snapshots over time. It allows centers and OEMS to refer back to actions taken in the past. Finally; it allows a summation of Trauma and Trauma/Burn Center performance rather than a series of unrelated and disjointed episodic views.

In order to accomplish these goals, the records must be identifiable, consistent, accessible, and maintained in a predictable fashion.

- a. Documents and revisions of documents will be numbered and maintained by the Office of EMS. This process is put into place to avoid confusion with regard to which version of a document is in use during the site visit. When a Trauma or Trauma/Burn Center is scheduled for a visit, the Trauma/Critical Care Coordinator will provide the title and effective date of the documents to be used during the visit. These will include the Trauma and Trauma/Burn Center criteria and the administrative and interpretive guidelines, as well as any other documents considered to be pertinent.
- b. Each Trauma or Trauma/Burn Center will have a file maintained for a period of not less than ten years after the most recent trauma visit. The file will include:
 - i. Records of each site visit to the institution with the following information:
 - 1. Designation Items:**
 - a. Copy of written action by Commissioner (Designation)
 - b. Final report of the site visit team, including specific findings and remediation.
 - c. Written preliminary report and suggested remediation by site visit team.
 - d. Written documentation of remediation
 - e. Closure of remediation
 - 2. Site Review Documents:**
 - a. Site Review Agenda
 - b. Site Review Team Roster
 - c. Version of (by revision date) of trauma center criteria used for site review
 - 3. Written Application Including:**
 - a. Acknowledgement that the OEMS Trauma Designation File has been reviewed (signed).
 - b. Trauma Center Code of Conduct
 - c. Trauma Center Capabilities
 - d. Current Organizational Chart
 - e. Impact Statement
 - f. Checklist
 - g. Questionnaire
 - h. List of Physicians
 - i. Trauma Team Alert: Criteria (Roles, Responsibility, Policies)
 - j. Trauma Medical Director Job Description
 - k. Trauma Nurse Coordinator Job Description (include Org. Chart)
 - l. Trauma Registrar Job Description and evidence of CME requirements (as applicable)
 - m. Performance Improvement Plan
 - n. Performance Improvement Process Flow Diagram
 - o. Verification Renewal Letter
 - p. VSTR Audit
 - q. Written application, including impact statement

- r. Version of trauma center criteria in use
 - s. Version of administrative and interpretive guidelines in use
 - t. Written preliminary report and suggestions for remediation by site visit team
 - u. Final report of site visit team with specific findings and remediation
 - v. Written documentation of remediation
 - w. Closure of remediation by site team leader
 - x. Copy of written action by Health Commissioner
- ii. Records pertaining to any voluntary or involuntary withdrawal from the system
- iii. Any additional communication pertaining to designation status between the center and OEMS or the Health Commissioner
- iv. A summary of activity related to the Center (a list of dates, nature of actions and resulting status of center)
- c. A copy of the current Trauma Center file will be sent to the TPD/TPM/TNC and to the TMD at the time of request for verification or designation. These individuals will review the information contained for accuracy and provide written confirmation to the Office of EMS
- d. Management of records during visit:
 - i. Each member of the Site Review Team will receive a copy of the Trauma Center file in its entirety at least two weeks prior to the visit.
 - ii. Team members will receive electronic or written application material at least two weeks prior to the visit
- e. Preliminary report of findings may be made available to the center prior to the time of departure of the site visit team
 - i. The center may receive a written copy of preliminary report listing issues of concern, strengths and areas for improvement
 - ii. The team may also provide specific preliminary suggestions for remediation in writing at time of departure
- f. The team leader will provide written confirmation of preliminary findings and remediation or amended findings and remediation within one week of finishing the site visit
- g. After any conditions of remediation have been satisfied, the Site Review Team leader will provide OEMS with written notice of closure of remediation

II. Application for review

- a. Six months prior to the date a center is due for site review, the Trauma/Critical Care Coordinator for the OEMS will notify the TPD/TPM/TNC and provide the following
 - i. Application to be completed
 - ii. Copy of Trauma Center file on CDROM
 - iii. Copy and version number of Criteria and AIG to be used during review
- b. Application will include:
 - i. Signed Trauma Center Code of Conduct
 - ii. Completed Trauma Center Capabilities Form
 - iii. Current Organizational Chart describing the relationship of the trauma program within the hospital organizational structure
 - iv. Impact Statement; the impact statement describes the role of the Trauma Center or proposed center in the system it serves. The statement acts as an argument for the existence the center and its essential contributions to the community.
 - v. Level I, *IB*, II or III Checklist for appropriate level requested (electronic form provided)
 - vi. Completed Trauma Center Questionnaire
 - vii. Current complete list of Emergency Physicians and mid-level providers
 - viii. Current complete list of Trauma Surgeon's performing trauma call
 - ix. Current complete list of nursing staffs that serve as the primary trauma team nurse in the trauma bay/room. The list of trauma team nurses should include whether the nurse possesses active TNCC, ATCN, or CATN
 - x. Copies of current TNCC, ATCN, and CATN should be made available to the site review team
 - xi. Trauma Team Activation/Alert Criteria for your hospital
 - xii. Trauma Team Roles & Responsibilities Policy
 - xiii. Trauma Alert Policies
 - xiv. Trauma Medical Director Job Description
 - xv. Burn Medical Director Job Description (as applicable)
 - xvi. Evidence of Trauma Medical Director's: Copy of board certification, current ATLS, CME, and national conference attendance (as applicable)
 - xvii. TPD/TPM/TNC job description (include Org. Chart)
 - xviii. Burn manager/coordinator job description (as applicable)
 - xix. Evidence of TPD/TPM/TNC's trauma education hours (TEH) and national conference attendance (as applicable)
 - xx. Evidence of the burn manager/coordinator's burn education hours (if applicable)
 - xxi. Trauma Registrar job description and evidence of TEH requirements (as applicable)
 - xxii. Emergency Medical Director's board certification, CME and current ATLS or the identified designee's current ATLS
 - xxiii. Copy of the program's Performance Improvement (PI) plan
 - xxiv. PI process flow diagram includes how issues get reported to its highest level

- xxv. PI tracking sheets
- xxvi. Other documents as requested

III. Prior to visit, site team shall have:

- a. Complete copy of Trauma Center file
- b. Full copy of pre-visit application
- c. Current status of center with regard to statewide trauma registry provided by OEMS
- d. List of any trauma related issues requiring investigation by The Department of Health since last visit, along with resolution.

IV. Site review

Overview: Without trauma and burn patients, a trauma center cannot demonstrate the consistency and effectiveness of procedures and protocols put into place at the time of its inception. However in a well developed system with a strong trauma triage element, severely injured or burned patients will be directed toward existing designated Trauma or Trauma/Burn Centers. A paradoxical situation develops; the center should not be designated until it demonstrates effectiveness, yet cannot demonstrate effectiveness until receiving patients as a trauma center. To remedy this situation, first time institutional reviews will be to survey for a provisional status.

Although it is important for a center to demonstrate its level of performance, the public must not be put at risk for suboptimal care. Therefore; the second review following a short interval will be held for full designation. The interval will allow the center to put its documented plan for trauma care into action. In addition, the institution will have an opportunity to correct any deficiencies identified by the original site review team. At the time of the second site visit (the first designation visit) the center will either pass or not pass. Any identified critical deficiencies will result in a mandatory period during which the institution will re-evaluate the Trauma Program prior to beginning the designation process over again.

- a. Provisional center – 1 year period
 - i. At the provisional visit, the center must demonstrate that all required mechanisms to meet criteria are in place. The team will confirm that there is a resource, policy or procedure that addresses the criteria and that it represents a practical and effective approach.
 - ii. The team will identify the following:
 - 1. Critical deficiencies
 - 2. Non-critical deficiencies
 - 3. Potential areas for improvement

- iii. The presence of critical deficiencies will be cause to withhold provisional designation. The center must re-evaluate its program and if desired, begin the application process again after a period of not less than one year.
 - iv. When non-critical deficiencies exist or in the absence of deficiencies, the program will receive provisional status for a period of one year. During this time, it will function at the identified level and remedy any non critical deficiencies identified at the first site visit.
- b. **Designation** - A second site visit will occur at the end of the hospitals one year provisional status. The hospital does not have to submit a full application, but should submit an interim report describing any changes since designation as a provisional center, status of non critical deficiencies noted during the first site visit, as well as a trauma service summary from its trauma registry.

The modified Site Review Team will consist of a Surgeon Team Leader and a Trauma/Critical Care RN. The Surgeon Team Leader or Office of EMS may add additional members to this team as deemed necessary.

Any critical deficiencies identified at this time will result in the center not receiving designation as a Trauma Center. The hospital will not function as a Trauma Center if this occurs and will re-evaluate and revise its current program for at least two years prior to beginning the application process again.

- c. **Verification** - Following designation, a center will undergo verification visit every three years having become designated, an institution must continue its developmental process. A progressively sophisticated approach is expected of more experienced centers and is reflected in a number of the criteria. This is particularly apparent in the area of quality assurance. Continuous improvement means continuous change. An experienced program is expected to demonstrate ongoing evaluation of the trauma care system, presenting enhanced approaches to existing problems or efforts at solving newly identified problems. For this reason, it is unlikely that an experienced program will be successful if unable to present progress and changes over a period of two to three verification cycles. Verification visits follow a successful designation visit and should document ongoing development of the center and responsiveness trauma system issues.
- i. A full application will be submitted for each verification visit
 - ii. In the absence of critical deficiencies or persistent non-critical deficiencies the center will be confirmed at its current level of function
 - iii. If a non- critical deficiency has been identified for the first time it will be noted in the team leaders' summary. However, if a non-critical deficiency is identified in two out of three sequential visits, the center will be asked to submit a plan of correction to OEMS within three months. At the next site visit, the center will provide evidence of having implemented the plan and improvement in the area of deficiency identified.

V. Withdrawal

Overview – As an advocate for quality trauma and burn care, a Trauma or Trauma/Burn Center should be able to identify situations in which it no longer meets criteria required for its current level of designation. If this occurs, the center should notify OEMS requesting a temporary withdrawal, permanent withdrawal or request for re-designation (either upgrade or downgrade). Identification and self reporting of the problem is more advantageous than waiting for an adverse result of a verification visit or complaint resulting in involuntary withdrawal.

- a. **Temporary** - A hospital may request a temporary withdrawal from the system if unforeseen and uncontrollable circumstances prevent the center from functioning at its designated level and if the period of time is expected to be longer than one day and less than three months. Requests for temporary withdrawal greater than three months will require a Site Review Team visit.

Examples include death, disability, resignation, retirement, etc. of key individuals on the trauma service, or an internal disaster such as a fire or flood. A representative from the hospital will notify the Office of EMS regarding the request for temporary withdrawal by phone or e-mail as early as possible. Initial notification shall be followed by a written report outlining the circumstances, the plan to correct the circumstances, the anticipated length of temporary withdrawal and any arrangements to maintain trauma care within the system (e.g. MOU's with other hospitals, notification of EMS) within 14 days. Once the problem has been corrected the Trauma or Trauma/Burn Center will notify the Office of EMS. A site visit is not required for re-instatement. If the center is involved in remediation for critical deficiencies at the time of request for temporary withdrawal, the timeline for remediation is not altered and no extension is applied.

- b. **Permanent** - If a hospital wishes to discontinue its role as a Trauma or Trauma/Burn Center it may request a voluntary withdrawal. The institution is not required to provide a reason for this although the Office of EMS may request information to facilitate evaluation of the trauma system. The hospital should provide the request for voluntary withdrawal in writing. Included with the request should be a copy of the most recent impact statement and suggestions for changes in the system to allow for accommodation of gaps in trauma coverage. Following voluntary withdrawal, a center may apply for re-designation at any level desired after a period of not less than one year. The center will arrange for notification of the public and EMS agencies regarding the change in status. Only one voluntary withdrawal is permitted within a ten year period of time.
- c. **Re-designation (upgrade)** - The hospital requesting an upgrade in level of trauma center designation will be required to undergo a full site review at the level of re-designation being requested. The site review must occur prior to functioning at the requested level of re-designation. Since this is a new designation a verification visit will be required in two years.
- d. **Re-designation (downgrade)** – If a hospital requests a downgrade in level of designation, a modified site visit will be performed to assure the hospital is functioning at the level of designation being requested.

- e. **Involuntary-** An involuntary withdrawal occurs when a center fails to remediate critical deficiencies as outlined by the site visit team, or if a visit by a Site Review Team or Office of EMS representative determines that further function as a trauma center would be a risk to patient safety or extremely detrimental to the system. If this occurs, the center has the option of an appeals process outlined below. At the time of an involuntary withdrawal, the Office of EMS will provide notification to the public and to EMS providers in the area. Following the first involuntary withdrawal, an institution may request re-designation after a period of not less than three years. After any subsequent involuntary withdrawals the institution will not be permitted to apply for re-designation sooner than five years.

VI. Appeal

If a hospital, whether designated or attempting to be designated, has a grievance with findings relating to the enforcement of the Virginia Trauma Center Criteria by The Virginia Department of Health's Office of Emergency Medical Services, a Site Review Team leader, a Site Review Team member, the Trauma System Oversight and Management Committee or any subcommittee formed from the TSO&MC has the right to file an appeal the finding(s).

The appeals process will follow the Administrative Process Act (APA) of Virginia § 2.2-4000. Notice of intent to appeal should be documented and submitted to the Office of EMS as stipulated in § 2.2-4000. Failure to follow the APA guidelines can result in the appeal not being heard.

VII. Site Review Team Member Roles, Training and Recruitment

- a. Site Review Team Member Roles (refer also to site visit checklist for more details)
 - i. A Surgeon Team Leader officiates over the Site Review Team and provides a written summary and recommendation upon the application to the Health Commissioner. The Surgeon Team Leader will review the surgical capabilities of the hospital and whether they meet the essential criteria for the level of designation/verification being applied for.
 - ii. An Emergency Medicine Physician will review the EDs' response to trauma patients. This would include whether there is an appropriate team response to trauma patients, the care provided during that response and the availability of ancillary services during the initial phase of trauma care.
 - iii. A Trauma/Critical Care Registered Nurse will review all phases of nursing care provided by the applying center. This would include assuring there is adequate staffing and equipment available, as well as quality nursing care provided during the trauma team response, within the critical care department and inpatient areas.
 - iv. Trauma Nurse Coordinator's role within the Trauma Program will also be evaluated by the Trauma/Critical Care RN.
 - v. A Hospital Administrator role will also be utilized to evaluate the overall commitment that the hospitals administration has to the Trauma Program.

- b. Training - The Office of EMS and the Trauma System Oversight and Management Committee may provide a training program, suited for both classroom presentation and self learning which will assure the site reviewer's knowledge of the current criteria and their role as a site review team member.
- c. Recruitment – The Office of EMS and the Trauma System Oversight and Management Committee will assure that there are an adequate numbers of site reviewers. To qualify as a Site Review Team member, the individual will be required to observe a minimum of one site review, receive the site review training and be approved by vote of the TSO&MC.
- d. The Office of EMS will maintain records on individual site reviewer activities including dates, locations and outcomes of reviews.
- e. OEMS will solicit evaluations of site team leader performance

APPENDIX B

INTERPRETIVE GUIDELINES

Purpose: The purpose of the interpretive guidelines is to describe how the specific criteria should be interpreted by site visit teams.

Trauma and or Burn Program: (Section 1.01)

	Level:	I	IB	II	III
Article I. Institutional Organization					
Section 1.01 Trauma Program:					
(a) Mission statement emphasizing continuous PI in the management of the trauma patient.		E	E	E	E
(b) A recognizable program within the hospital which has a surgeon as its director/coordinator/physician in charge.		E	E	E	E
(c) Support of the facilities' Board of Directors. (Board of Directors should be notified of applications for trauma designation, verification and approval of the Commissioner of Health after a site review).		E	E	E	E
(d) Administration supportive of Trauma Program.		E	E	E	E
(e) Evidence of an annual budget for Trauma Program.		E	E	E	E

While all hospitals participate in trauma care, one of the cardinal differences between a designated trauma center and an undesignated hospital is the Trauma Program. The purpose of the program is to integrate, coordinate, develop and evaluate the components necessary for effective care of the seriously injured patient. While each of the components such as a trauma surgeon or emergency resuscitation equipment may be adequate on an isolated basis, it is the integration of the components that enhance trauma care. The program should address all levels of care from pre-hospital to post discharge. All trauma programs function within a trauma system. The function and participation of the program within the system will be evaluated during the visit.

Site reviewers will be evaluating the hospital for a robust and active Trauma Program. The mission statement and the impact statement describe the role of the program and its expected impact in regional trauma management respectively. The impact statement is an argument for the existence of the trauma center. This document should briefly identify the trauma resources available in the region and why the hospital thinks becoming a trauma center is necessary. Examples of benefits include, but are not restricted to; geographically underserved area, inadequate number of trauma beds or improvement in care of patients already received.

The purpose of the Burn Center designation process is to assure consistent performance of Burn Centers in Virginia and to promote continued improvement and development of experienced Burn Centers thereby reducing morbidity and mortality of the thermally injured patient.

Section 1.02 Burn Program:				
(f) <i>Must have medical and administrative commitment to the care of patients with burns. This is demonstrated by administrative leadership and financial support for personnel to maintain the elements as outlined below</i>	O	E	-	-
(g) <i>Must formally establish and maintain an organized Burn Program that is responsible for coordinating the care of burn patients</i>	O	E	-	-
(h) <i>The Burn Program must maintain an organizational chart relating personnel within the Burn Program and hospital</i>	O	E	-	-
(i) <i>Must be integrated into the Trauma Program at a state designated/verified Level I Trauma Center</i>	O	E	-	-
(j) <i>Must have all essential elements of the Burn Program, Burn Unit, and Burn Service</i>	O	E	-	-
(k) <i>The Burn Program must admit an average of 50 or more burn patients (as defined in Appendix C) annually with acute burn injuries averaged over three years</i>	O	E	-	-
(l) <i>The Burn Program must maintain a policy and procedural manual that is reviewed annually by the Burn Medical Director and Burn Program Manager/Coordinator. Policies and procedures will include the following:</i> (i) <i>administration of the Burn Program;</i> (ii) <i>staffing on the Burn Unit</i> (iii) <i>criteria for admission to the Burn Unit by the Burn Service</i> (iv) <i>use of Burn Unit beds by other medical and surgical services</i> (v) <i>use of "tanking" and dressing facilities by non-Burn Service physicians</i> (vi) <i>pediatric and adult conscious sedation procedures</i> (vii) <i>criteria for admission, discharge and follow-up care</i> (viii) <i>availability of beds and transfer of burn patients to other medical surgical units within the hospital</i> (ix) <i>care of patients with burns in areas of the hospital other than the Burn Unit</i>	O	E	-	-

Is there evidence of long term institutional commitment to the trauma or trauma/burn program?

Nursing staff, hospital administration and medical staff must be committed to maintaining the program. The presence of support from only one or two of these groups or significant resistance from any one of these groups is an area of concern and represents a non-critical deficiency. However, resistance from an isolated individual or small group of individuals must be evaluated on a case by case basis, taking the impact on the program into consideration. For example, objections to the trauma center effort by a CEO of a hospital represent a more insurmountable problem than objection by two or three sub-specialists in different clinical areas. While letters of support from key participants are not essential, these may serve to indicate institutional commitment. In addition, the administrative team member will interview administrative representatives to determine institutional commitment. At minimum, leadership in the areas of nursing, medical staff, and administration should be able to identify the presence of the program and general information regarding structure and function. The organizational chart submitted with the written application will be important in determining location of the program in the hospital structure and reporting relationships. Administrative responsibility for the program should be clearly defined and in the hands of an individual with a clear understanding of the needs of trauma patients and the process of designation as well as the authority to promote development of the program.

Are sufficient resources available to maintain the program(s)?

Institutions should have an allocated budget for the Trauma or Trauma/Burn Program(s), however; the institution can demonstrate compliance with the criteria by documenting that the expenses and revenues associated with the program are routinely evaluated. Development and maintenance of any level of trauma center requires non-clinical time, space, equipment and supplies. Allowances for these should be included in the budget. As the number of patients admitted to the service increases, it is reasonable to expect increasing demands in terms of non-clinical time and support. For example, according to ACS recommendations, a full time registrar is expected to manage information entry and retrieval on 1000 patients or less. The Site Review Team should identify sufficient resources to support non-clinical activities. They will be aware of the fact that multiple management responsibilities may prevent functioning at full time status.

There should also be demonstrated effort to identify costs related to the Trauma Program. It is important for the hospital leadership to be aware of this in order to avoid sudden discoveries of expenses and equally sudden withdrawals. Additionally, it is difficult to determine if resources are adequate if program expenses are unknown. In recent years, trauma centers have also been asked to provide information on the cost of trauma care in order to assess the overall impact of this on Virginia Healthcare; in this setting provision of general information on expenses and reimbursement is a means of participation in the trauma system. There is currently no standard reporting format for expenses, reimbursement and budgetary allocations. Financial information on the Trauma or Trauma/Burn Program should be collected and reported to the administration, TMD, and TPD/TPM/TNC in a manner which is meaningful and useful for planning.

Critical Deficiency:

- The site review teams finds evidence of the absence of overall financial commitment to the Trauma Program.
- The site review teams finds evidence of insufficient resources being allocated for trauma and burn care.
- Failure to budget adequately for non-clinical activities related to maintaining the Trauma or Trauma/Burn Program.

Non Critical Deficiency:

- Absence of attempt to review program costs (clinical and non-clinical)

Does the hospital leadership have reasonable expectations of the program(s)?

The process of becoming a center and maintaining designation is arduous. It is important to understand what the hospital administration hopes to gain from the designation. If expectations are unrealistic, a long term commitment will not be possible. This will be particularly true if the medical staff and administration have divergent goals. Interviews with the appropriate members of the hospital's leadership may be used to determine this.

Does the program(s) have a long term plan?

This version of the designation criteria continues to emphasize continuous development and improvement. Presence of a planning process for the program(s) (which may include a business or strategic plan) allows for anticipated response to changes in the trauma care environment as well as possible improvements in delivery of care. Programs are expected to show progress and capacity for change in response to environmental stresses. During the site visit opening conference the director will be asked to list strengths and weaknesses of the program.

Non Critical Deficiency:

- Absence of formal planning process for Trauma or Trauma/Burn Program.
- Failure to include representatives of different areas pertinent to trauma care.

Is there an identifiable trauma or trauma/burn service?

The Trauma or Trauma/Burn Service provides the clinical framework for the management of critically ill trauma and burn patients. The framework of the service varies with the institution and the number of patients admitted. It is not mandatory that patients be admitted to a single geographic unit within the hospital or to a single individual. The service should be identified in the organizational chart of the hospital. It must have a board certified surgeon as its TMD, a TPD/TPM/TNC, and a trauma registrar. Patients on the service must be evaluated by a trauma surgeon and in cases of multiple system injury, single system major injury, torso or vascular trauma the patient must be admitted to the surgeon. This should be the case even if a general surgical procedure is not anticipated. There should be a trauma or trauma/burn program manual with policies and protocols pertaining to the admission and care of trauma and burn patients. The trauma or trauma/burn program manual should clearly describe which patients are admitted to the service and which, if any, will be transferred to another hospital. Special groups of patients, such as pediatrics, should be addressed.

There must be a description of the automatic trauma response and roles and responsibilities of individual trauma team members.

A two tier response allows for the in-hospital triage of injured patients. The patient thought to be less severely injured can be evaluated with less mobilization of hospital resources and medical personnel. Full mobilization must be immediately available and demonstrable if the patient is proven to be more severely injured than expected.

Criteria for the construction of tiers of response may be developed by the institution's multidisciplinary committee. The composition of the response team should ensure adequate ability to evaluate and treat the injured patient. For example, for the less severely injured patient, the trauma surgeon need not be available in the trauma treatment area when the patient arrives, but must be notified, available and see the patient in a reasonable time period after admission. Likewise, anesthesia, certain additional nursing, radiology and laboratory personnel need not be present in the trauma treatment area, but must be immediately available.

An example of a successful application of triage criteria for a two tier system is noted in Appendix F. A "blue" alert signifies a severely injured patient and the "yellow" alert is the stepdown status. If an institution opts to use a two tier system, then a Site Review Team will expect to see criteria for the delineation of the tiers, the composition of the response teams for each tier and a PI process that shows the system is functioning properly.

All patients admitted to the service should be entered in the trauma registry and care reviewed with the trauma or trauma/burn PI plan(s), this is in addition to the State mandated trauma registry reporting requirements. In addition, cases which appear to have been under triaged and therefore not admitted to the service should be reviewed as well. Other indicators of the service include but are not restricted to case management, common clinical pathways and patient education.

Critical Deficiency:

- Absence of identifiable trauma or burn service as applicable.
- Absence of TMD or TPD/TPM/TNC.
- No trauma or trauma/burn program manual.
- No identifiable trauma response.
- Consistent failure to implement trauma response as described in the trauma program manual.
- Absence of trauma registrar.
- Trauma or trauma/burn program manual procedures and protocols do not reflect actual practice.

Non Critical Deficiency:

- Trauma or trauma/burn program manual is inadequate to provide necessary framework for service.
- Key hospital staff, trauma surgeons and specialty medical staff unaware of contents of trauma or trauma/burn program manual.
- Occasional failure in application of trauma response not addressed in PI process.
- Trauma team response cumbersome and/or poorly communicated to trauma team or delayed.

Trauma Medical Director (Section 1.03)

Section 1.03 Program Leadership				
(a) Trauma Medical Director				
(i) Board certified/eligible general surgeon. May have emergency medicine physician as Co-Director.	E	E	E	E
(ii) Minimum three years of experience on trauma service or trauma fellowship training.	E	E	O	O
(iii) Participates in regional and national trauma organizations.	E	E	O	O
(iv) Involved in trauma research and includes the publication of results and presentations.	E	E	O	O
(v) Actively involved in providing care to patients with life threatening or urgent injuries to discharge.	E	E	E	E
(vi) Oversees all aspects of multidisciplinary care from the time of injury to discharge.	E	E	E	E
(vii) Current ATLS provider or instructor.	E	E	E	E
(viii) Will have 30 hours of category I trauma/critical care CME every three years and attend one national meeting whose focus is trauma or critical care.	E	E	E	O

(ix) Will have 30 hours of category I trauma/critical care CME every three years and/or attend one national meeting whose focus is trauma or critical care.	-	-	-	E
(x) Attends more than one national meeting over three year period.	O	O	O	O
<p>The TMDirector will provide an annual meeting and/or a self learning packet/web based learning program. All of the following shall receive this training:</p> <ul style="list-style-type: none"> • All full and part time surgeons taking trauma call. • The Trauma Program Manager/Trauma Coordinator. • Nurse practitioners and physicians assistants affiliated with the trauma program. • All full and part time emergency department physicians who may be caring for trauma alert patients in the Emergency Department. • All nurse practitioners and physicians assistants who may be caring for trauma alert patients in the emergency department. <p>The TMDirector will provide the following updates during this meeting:</p> <ol style="list-style-type: none"> 3. Highlights from national meetings and other continuing education to include a discussion of any changes applicable to the current guidelines and practice. 4. A review, including updated information from ATLS. <p>OR</p> <p>(xi) Each surgeon, emergency physician, nurse practitioner or physician's assistant participating/taking call in the service or could possibly be caring for trauma alert patients in the Emergency Department (ED) must complete 30 Category I CME's in trauma/critical care across the three year verification period or 20 across the two year designation period. Updating ATLS may be included in these CME's</p>	E	E	E	E

The TMD of the Trauma Program must be a board certified general surgeon. In addition the TMD must have at least three years experience as a surgeon on a trauma service or in a setting with a high clinical volume of trauma patients. This may take place during residency or fellowship provided the residency or fellowship occurs in a designated Level I or Level II trauma center. If a TMD has not worked in a trauma center for three years he or she should provide an indication of volume and activity at a previous institution. This experience must have taken place within the last ten years.

The TMD must be currently active in delivering clinical care to trauma patients. The job description and interviews with hospital staff must confirm that the TMD has the authority and responsibility to oversee multidisciplinary aspect of trauma care. This does not mean that the TMD must be clinically involved with the care of each patient; rather he must have administrative responsibility pertaining to organization, coordination and evaluation of care.

The TMD must remain current in trauma care. For this reason he/she must maintain current certification in ATLS either as an instructor or as a provider. In addition the TMD is required to obtain a minimum of 30 hours continuing education in trauma care every three years. While a portion of this continuing education may be obtained on site, the TMD must attend at least one national meeting with a focus of trauma or critical care within the three year verification cycle.

It is essential that the TMD remain active in development and management of the trauma system on the state and regional level. This will be demonstrated by evidence of attendance and participation in regional, state or national level trauma system and trauma performance groups.

The institution may choose to add an emergency physician co-director to the program. The presence of a co-director does not change requirements for experience, education and participation of the surgeon in the program. Advantages of a co-director include assistance in performing administration, coordination, education and evaluation of care normally assigned to the surgeon director. Additionally; the emergency physician will provide a different emphasis on the management of trauma with a greater focus on acute resuscitation. No requirements are provided for the position of trauma co-director. However; if the institution chooses to include this position, it must provide a job description and qualifications.

Critical Deficiency:

- Current TMD does not meet qualifications- e.g. not surgeon, incomplete or remote prior experience.
- TMD education not up to date; not current in ATLS, no attendance at national meeting, less than 30 hrs continuing education in critical care and trauma over three years.

Non Critical Deficiency:

- No evidence or only sparse participation at local state or regional systems efforts.
- No publications or presentations.
- If a co-director is included, no job description or qualifications.
- Job description or performance of TMD does not indicate sufficient oversight of service.

Trauma Program Director/Manager/Nurse Coordinator) (Section 1.05)

(c) Trauma Program Director/Manager/Nurse Coordinator				
(i) Must have dedicated full time <i>TPD/TPM/TNC</i>	E	E	E	E
Must have a TNC/TPM, may be a part-time position, though the trauma program shall be a major focus of their job description.	-	-	-	E
(ii) An identified <i>TPD/TPM/TNC</i> with overall management responsibilities for the Trauma Program.	E	E	E	E Θ
(iii) Defined job description and organizational chart delineating the <i>TPD/TPM/TNC</i> role and responsibilities.	E	E	E	E
(iv) Must be a Registered Nurse.	E	E	E	E
(v) The <i>TPD/TPM/TNC</i> , in addition to being a Registered Nurse, must possess experience in Emergency/Critical Care Nursing.	E	E	E	O
(vi) 30 CEU's/contact <i>trauma education hours (TEH)</i> required per three year verification cycle, of which 50%, must be via an extramural source (see appendix b). <i>This may be prorated by the State Trauma Coordinator for new hires or shorter periods of time due to extenuating circumstances</i>	E	E	E	E Θ
(vii) The <i>TPD/TPM/TNC</i> will attend one national or international meeting within the three year verification or two-year initial designation period	E	E	E	E

The *TPD/TPM/TNC* is essential to the integration and smooth functioning of the trauma service. This individual acts as the liaison between the trauma service and the hospital services necessary to provide care for the multiply injured patient. The *TPD/TPM/TNC* also is the primary contact and resource for the nursing services required for trauma care from the time of admission to rehabilitation and follow up care. On most services the trauma nurse coordinator also provides the logistical support for implementing the Quality Improvement program.

While specific job descriptions vary based on Trauma Program organization and support, it is essential that a job description be present and accurately reflective of what is expected. An organizational tree should indicate reporting relationships. These two documents should outline sufficient levels of authority to perform PI, interact with nursing and ancillary services and to perform any other tasks outlined in the job description.

The broad range of tasks assigned to the *TPD/TPM/TNC* may quickly come to consume substantial amounts of time. For this reason *TPD/TPM/TNC*'s associated with *all Level I and II* programs must be dedicated full time positions without oversight of other programs or areas or significant clinical obligations. It is allowable for the *TPD/TPM/TNC* to perform occasional clinical trauma nursing activities if deemed necessary to maintain contact with clinical staff or in exceptional instances of demand. However, this should not interfere with other trauma service obligations. ~~In Level III centers a part time TNC/TPM is acceptable, however the job description and implementation of the position must allow adequate time to perform the duties as TNC.~~

In addition to being a registered nurse, Level I and II *TPD/TPM/TNC*'s must have a minimum of three years of nursing experience in emergency/critical care nursing and provide documentation of continuing education specific to trauma and critical care as described in the criteria. All *TPD/TPM/TNC*'s must attend a minimum of one national meeting every three years. This is to allow interaction with trauma staff outside of the hospital and to collect new information and updates on trauma management. For the same reason 50% of the continuing education hours (15 during a three year period must be off site). Attendance at a national meeting may be included in off site education hours.

Some programs include more than one nursing position. The titles for these positions may vary for example: trauma case manager, trauma nurse coordinator (in a program where there is a Trauma Program Manager) etc. The requirements above apply only to the individual identified as primarily responsible for the Trauma Program. However, if a nursing or other position is assigned to the Trauma Program, there must be a job description for the position, inclusion in the program organizational chart and plan for education commensurate with the position described.

Critical Deficiency:

- No *TPD/TPM/TNC*
- *TPD/TPM/TNC* Position not full time ~~(Level I or II)~~
- *TPD/TPM/TNC* not an RN.
- No job description for *TPD/TPM/TNC*

Non Critical Deficiency:

- Insufficient prior critical care/emergency experience (Level I or II).
- Job description for any level is too extensive for time allotted.
- Insufficient continuing education hours off site or no attendance at a national meeting.

- If other program nursing positions are described, absence of job description and/or educational program.

Trauma Registrar (Section 1.08)

(e) Trauma Registrar				
(i) Must be a minimum of one full FTE dedicated to the Trauma Registry.	E	E	E	$\frac{E}{\Theta}$
(ii) A minimum of a 0.5 FTE part time must be fully dedicated to the trauma registrar position. <i>Note: See the "Trauma Registrar" description in the Administrative Guidelines for job description information.</i>	-	-	-	E
(iii) Trauma registrars must attend 24 TEH required per three year verification cycle, of which 50 percent must be from an extramural source hours registry or trauma critical care contact hours/education hours over three years.	E	E	E	$\frac{E}{\Theta}$

The trauma registrar is responsible for extracting information from charts, maintaining the trauma registry and developing and delivering reports from the registry. This role is vital in the maintenance of a robust PI program and in delivery of required trauma registry data to the state. The minimum requirement for Level I and II centers is a full time registrar, however with larger services more registrars or assistants are necessary.

In order to extract information from patient charts, the registrar must be familiar with how the trauma service works, as well as, terminology, coding and the use of various scoring systems used to describe the severity of trauma. The educational program for a full time trauma registrar consists of 24 hrs in three years on trauma, critical care, registry or data collection. While 24 hours is optimal for a part time registrar, there must be an educational experience at least proportional to the portion of time spent in that position.

The job description for the trauma registrar should clearly define the need to access patient records and to extract data. Key elements of the position include data extraction from charts, registry maintenance and report delivery.

Some programs may opt to use additional assistants to facilitate the role of trauma registrar. Examples of assistant activities include but are not restricted to, computer entry of data extracted from charts or collection of charts from the chart room. The presence of an assistant does not replace the requirement for a full time registrar. Assistants to the registrar may be of any employment status including voluntary. For this reason it is important to assure that job training is adequate to cover the position, particularly with regard to confidentiality of patient information and quality improvement. Other areas of job training should be tailored to the position.

As a program expands to include more than one registrar, the educational requirements are the same as for the original position. This is due to the fact the each registrar will be performing the same task, with the same key elements.

Critical Deficiency:

- No trauma registrar.
- No job description for registrar position.

Non Critical Deficiency:

- There is a registrar, but time allotted to position is insufficient for tasks expected.
- Education insufficient or not up to date.

Non Critical Deficiency: (cont'd)

- Assistants are used to supplement registrar position but training insufficient for expectations.

Trauma Team Response: (Section 1.04)

Section 1.04 Trauma Team/Trauma Team Response:				
(a) There must be a clearly delineated trauma team response to the arrival of the patient with suspected or known major trauma in the ED 24 hours per day.	E		E	E
(b) Trauma Surgeon:				
(i) A trauma surgeon must meet the patient in the ED upon arrival. A PGY4 or PGY5 general surgery resident capable of assessing emergent situations, providing control and leadership of the care of the trauma patient may meet this requirement. In the event that this requirement is provided by a resident, the trauma surgeon must be available in a timely manner	E		E	O
(ii) The emergency physician is a designated member of the trauma team and may direct resuscitation and care of the patient until the arrival of the Trauma Team Leader. A senior level emergency medicine resident may fulfill this function provided there is an attending emergency medicine physician present in the ED	E		E	E
(iii) Trauma/general surgeons participating in the Trauma Program and taking active call must be dedicated to the hospital while on trauma call and show active participation in the Trauma Program	E		E	E
(iv) Trauma/general surgeons participating in the Trauma Program and taking active call must have completed ATLS, successfully, at least once in the past	E		E	E
(c) Minimum Physician Coverage:				
(i) A minimum of two attending level physicians must be present for the arrival of full trauma team alert patients. These physicians must be an anesthesiologist, EM physician, or general surgeon. A qualified general surgeon is expected to participate in major therapeutic decisions and be present in the ED for major resuscitations and at operative procedures on all seriously injured patients. Note: See administrative guidelines	E		E	O
(ii) A minimum of one attending level physician must be present for the arrival of trauma team alert patients. This physician must have the capability to manage the initial care of the majority of injured patients and have the ability to transfer patients that exceed their resources to an appropriate level Trauma Center. Note: See administrative guidelines	-		-	E
(d) Anesthesiology:				
(i) Anesthesiologist in hospital 24 hours a day. (refer to Section 2.04)	E	E	O	O

(ii) Anesthesiology must be on call and readily available 24 hours a day. (refer to Section 2.04)	-	-	E	E
(iii) Anesthesiologist must be present for all emergent operative procedures on major trauma patients. (refer to Section 2.04)	E	E	E	E
(e) Trauma Related Surgical Specialties (as listed in Section 2.05):				
(i) Promptly available as needed	E	E	E	E

The hallmark of a trauma service is the trauma team response. This must be described in the trauma program manual and demonstrated on chart review for any site visit type other than provisional. The goal to the trauma team response is to expedite the diagnosis and management of injuries for the trauma patient.

The description of the team response in the trauma program manual must include criteria for response, notification of impending patient arrival to team members, who respond, target criteria for timeliness, team member roles and any actions expected as a result of trauma notification (for example: hold an operating room open).

Every center must have a procedure for a full team response. This means that all team members including the surgeon are included and every effort is made to assure that the team is available at the bedside at the time of patient arrival. In addition, an operating suite must be available at short notice and arrangements include the rapid access to red blood cells for transfusion. The assumption is that the critically injured patient may require very rapid intervention for stabilization and surgical intervention for definitive care of injuries. In the single level response model, it is a criteria when calling the team, that the response must be broad in order to have the needed resources available to all patients requiring emergent interventions. For this reason, the single level response results in over triage and heavy utilization of resources.

While not required, many hospitals choose to use a tiered response to trauma. The tiered response includes the full team at the highest level and partial team response at one or more additional levels. When a tiered response is used, the trauma program manual must describe each level of response and criteria qualifying for the response level. While a tiered response addresses the needs of less severely injured patients and minimizes over utilization of resources, more oversight is necessary to assure that the effect is not diluted by a pattern of calling a lower level of response than necessary.

The Site Review Team will review the trauma program manual, patient records, and the quality improvement program to determine the following:

- Alerts occur as described in the trauma program manual.
- Criteria are appropriate.
- Criteria address the needs of severely injured patients.
- That the full team response is timely.
- Tiered response is used as indicated in the trauma program manual.

While deviation from the description of the alert system in the trauma program, manual may occur from time to time, the site team will be evaluating the program for patterns of deviation especially in instances where the pattern is not identified by the institution's PI plan and addressed through the plan. Examples of such patterns include, but are not restricted to:

- Delay in calling a full team response until after the patient is evaluated.
- Severely injured patients or patients requiring emergent surgery not receiving full team response.
- Frequent need for upgrades in tiered response.
- Delay in arrival of team members for full team response.
- Mortality or morbidity attributable due to delays in team arrival.
- PI plan does not identify and address issues in team response.

Critical Deficiency:

- Trauma team response not identified in the facilities trauma program manual or communicated to team members.
- Response is as described in the trauma program manual, but criteria result in morbidity and mortality attributable to under triage – not addressed by PI program.
- Severely injured patients or patients requiring emergent surgical intervention not included in full team response- not addressed by PI program.
- Written procedure for team response is appropriate, but implementation results in under triage of critically injured patients and is not addressed by PI program.

Non Critical Deficiency:

- Consistent deviation from trauma team response as described in trauma program manual.
- Patterns of delay in full team response and not resulting in critical deficiency.

Additional Clinical Capabilities: (Section 2.05)

Section 2.05 Additional Clinical Capabilities: (On call and promptly available)				
(a) Surgical:				
(i) Cardiac Surgery	E	E	O	O
(ii) Thoracic Surgery	E	E	E	O
(iii) Orthopedic Surgery	E	E	E	E
(iv) Pediatric Surgery	E	E	O	O
(v) Hand Surgery	E	E	O	O
(vi) Microvascular/Replant Surgery	E	E	O	-
(vii) Plastic Surgery	E	E	E	O
(viii) Maxillofacial Surgery	E	E	E	O
(ix) Ear, Nose & Throat Surgery	E	E	E	O
(x) Oral Surgery	E	E	O	O
(xi) Ophthalmic Surgery	E	E	E	O
(xii) Gynecological Surgery/Obstetrical Surgery	E	E	E	O
(xiii) Urology	O	E	-	-
(b) Non-surgical: (On call and promptly available)				
(i) Cardiology	E	E	E	O
(ii) Pulmonology	E	E	O	O
(iii) Gastroenterology	E	E	O	O
(iv) Hematology	E	E	O	O

(v) Infectious Disease	E	E	O	O
(vi) Internal Medicine	E	E	E	E
(vii) Nephrology	E	E	O	O
(viii) <i>Neurology</i>	<i>O</i>	<i>E</i>	<i>O</i>	<i>O</i>
(ix) Pathology	E	E	E	E
(x) Pediatrics	E	E	O	O
(xi) <i>Psychiatry</i>	<i>O</i>	<i>E</i>	<i>O</i>	<i>O</i>
(xii) Radiology	E	E	E	E
(xiii) Interventional Radiology	E	E	E	O
<i>Section 2.06 Social Service consultation must be available to the Burn Service</i>	<i>O</i>	<i>E</i>	-	-
<i>Section 2.07 There must be access to rehabilitation services capable of managing burn patients</i>	<i>O</i>	<i>E</i>	-	-

The purpose of the sections on clinical capabilities is to ensure that the trauma center is capable of providing the services required for its level of designation, as denoted by being marked as essential and being able to manage corresponding injury types on a full time basis.

The hospital must offer each of the relevant services, although dedicated call to the Trauma Center is not necessary and the specialist need not be immediately available. A 24 hour call schedule for the service is NOT necessary. The hospital has the flexibility of organizing a plan to manage corresponding injuries on site in a manner best suited to staff and resources. For example, in the absence of a 24 hour call schedule for ENT the center may have a plan for immediate coverage of maxillofacial trauma patients with a rotating call schedule. PI processes should be in place to oversee the plan and to identify any potential problems. The plan may NOT involve transfer of patients with the injury type of concern.

Continuing Medical Education Program (physicians/physician extenders): (Section 3.01)

Article III Clinical Qualifications				
Section 3.01 General/Trauma Surgeons:				
(a) Board certified/eligible in general surgery.	E		E	E
(b) Must meet the educational requirements in Section 1.03.xi	E		E	E
(c) Successful ATLS course completion at least once	E		E	E
Section 3.02 Burn Surgeons:				
(a) <i>There must be at least 1FTE attending burn surgeon staff involved in the management of burn patients for each 200 patients annual acute inpatient admissions</i>	-	<i>E</i>	-	-
(b) <i>The Burn Medical Director may appoint a qualified attending burn surgeon urged to participate in the care of the patients on the Burn Service</i>	-	<i>E</i>	-	-
(c) <i>Attending staff burn surgeons must be board certified or eligible in general or plastic surgery</i>	-	<i>E</i>	-	-
(d) <i>Attending staff burn surgeons must have completed a one-year fellowship in burn treatment or must have experience in the care patients with acute burn injuries for two or more years during a previous five years at a designated Level I Trauma Center</i>	-	<i>E</i>	-	-

(e) <i>Attending staff burn surgeons must participate in CME of burn related education at a minimum of 30 hours or more averaged over a three year period</i>	-	E	-	-
(f) <i>Attending staff burn surgeons must direct the total care of at least 20% or more of acutely burned patients annually admitted to the Burn Service averaged over a three year period</i>	-	O	-	-
(g) <i>Privileges for physicians participating in the Burn Service must be determined by the medical staff credentialing process and approved by the Burn Medical Director.</i>	-	E	-	-
(h) <i>The Burn Service must maintain an on-call schedule for residents and attending staff burn surgeons available to the Burn Service. Residents and staff surgeons must be primarily available 24 hour basis</i>	-	E	-	-
(i) <i>If residents rotate on the Burn Service, the Burn Medical Director, or his or her designee, must be responsible for an orientation program for new residents</i>	-	E	-	-
Section 1.02 Emergency Medicine:				
(a) Board certified/eligible in emergency medicine (Exceptions may be made in rare instances based upon long term practice in emergency medicine)	E	E	E	E
(b) Must meet the educational requirements in Section 1.03.xi	E	E	E	E
(c) ED physicians must maintain current ATLS, if not boarded in emergency medicine	E	E	E	E
Section 1.03 Neurosurgery:				
(a) Board certified within five years of completing residency successfully	E	E	E	O
(b) 10 hours of CME per year in neuro-trauma	O	O	O	O
(c) Must have successfully completed an ATLS course once	O	O	O	O
Section 1.04 Orthopedic Surgery:				
(a) Board certified within five years of completing residency successfully	E	E	E	O
(b) 10 hours of CME per year in skeletal trauma	O	O	O	O
(c) Must have successfully completed an ATLS course once	O	O	O	O

<p>The Trauma Medical Director will provide an annual meeting and/or a self learning packet/web based learning program. All of the following shall receive this training:</p> <ul style="list-style-type: none"> • All full and part time surgeons taking trauma call. • The Trauma Program Manager/Trauma Coordinator. • Nurse practitioners and physicians assistants affiliated with the trauma program. • All full and part time emergency department physicians who may be caring for trauma alert patients in the Emergency Department. • All nurse practitioners and physicians assistants who may be caring for trauma alert patients in the emergency department. <p>The Trauma Medical Director will provide the following updates during this meeting:</p> <ol style="list-style-type: none"> 5. Highlights from national meetings and other continuing education to include a discussion of any changes applicable to the current guidelines and practice. 6. A review, including updated information from ATLS. <p>OR</p> <p>xi Each surgeon, emergency physician, nurse practitioner or physician's assistant participating/taking call in the service or could possibly be caring for trauma alert patients in the Emergency Department (ED) must complete 30 Category I CME's in trauma/critical care across the three year verification period or 20 across the two year designation period. Updating ATLS may be included in these CME's</p>	E	E	E	E
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---	---	---	---

The TMD of the trauma service is responsible for developing a program to address continuing education needs for those individuals responsible for the initial evaluation and ongoing medical care of trauma patients. With this version of criteria the list has been expanded and includes: trauma surgeons, emergency physicians, trauma program manager/nurse coordinator(s), residents (surgery and emergency medicine), nurse practitioners and physician assistants. All full and part time individuals are included in the program. Individuals not assigned to areas where potentially serious trauma patients are seen, need not be included. An example of this would be a physician's assistant who works only on the non-acute or "fast track" side of the ED. Documentation of participation in continuing education will be in the form of certificates or signed rosters. These should be available for the site team if requested at the time. Prior to the site visit, the institution will provide a roster of clinicians required to participate in the continuing education program.

The TMD may choose one of two tracks for continuing education in trauma care at the institution. All participants must participate in the same track (although content may vary according to category of participant). The selection of the continuing education tract must be indicated in the application. If the track is changed, notification of the change, including pertinent dates, should be provided to all participants in writing and included in trauma committee minutes.

Track 1: The TMD with institutional technical assistance may choose to provide a program outlining highlights from recent national meetings, consensus documents, journals or textbooks outlining recent advances in critical care and trauma AND a brief overview of selected topics including recent changes in ATLS. This must be updated annually and may be in the form of a self-study packet, web or computer based program, an annual meeting or a prescribed combination. It is recommended but not essential that participants receive-continuing

education credits for this. It is essential that there be documentation of participation in the program by each individual. A written outline of this program must be provided at the time of the site review.

Track 2: Each of the participants must provide evidence of participation in 30 hours of continuing education in trauma or critical care over the three year period (or in the case of two year designation 20 hours). This may occur inside or outside of the hospital. ATLS may be included in the required number of hours, but does not replace them. In the event that a conference is only partially dedicated to these topics, the Trauma Medical Director must determine which portion of the conference was qualified, and apply only that amount of time to the total. For example:

Examples:

A surgeon attends a conference titled “Current concepts in general surgery” for a total of eight hours continuing education. While most of the conference is on ambulatory surgery and breast cancer, one hour is spent on ultrasound examination of the trauma patient and one hour on ventilation of the critically ill patient. The surgeon can count two hours of continuing education on trauma and critical care.

A physician assistant has attended 12 mortality and morbidity conferences. Review of all M and M minutes for the hospital indicates that a quarter of the patients presented are trauma patients. The physician assistant can count three hours towards trauma and critical care.

When using track 2, it is the responsibility of the institution to calculate and tabulate the continuing education hours for each individual involved.

Any surgeon, emergency physician, nurse practitioner or physician’s assistant participating/taking call in the Trauma Program or could possibly be caring for trauma alert patients in the ED who has been with the Trauma Program for greater than six months, but less than the interval between site reviews is expected to complete a portion of the educational program commensurate with the time they have been with the Trauma Program.

Any participant who withdraws from the roster for a period of not more than 12 months may have their CME requirements waived, commensurate with the length of their sabbatical. This may only occur once in a ten year period.

Critical Deficiency:

- Absent continuing education program.

Non Critical Deficiency:

- No more than one individual or 10% of the roster are not in compliance with continuing education requirements.
- Failure to clearly document participation in either track by the institution.
- Track 1; program superficial content or not up to date.
- Track 2; program fails to break out appropriate trauma care related hours from multidisciplinary patient care conferences.

Trauma Nursing Education: (Section 3.06)

***Nursing Trauma Education Hours (TEH)** – may encompass care of the trauma patient in any aspect of the continuum; from point of injury, to rehabilitation, and injury prevention. Acceptable means of education may include but are not limited to: use of equipment, processes and protocols, PI, conferences, workshops, symposiums, scientific assemblies, inservices, refresher courses, participation in a simulation lab, online education, classes, skills labs, case studies, journal article reviews and providing course instruction and lectures.**

- *Course instruction - hours will be awarded only for the trauma specific content presented and may be used toward credit only once in a twelve (12) month period.*
- *Registrars – in addition to the education options listed above, approved areas include: developing spreadsheets and other custom reports, injury identification, scoring and any database functions primarily associated with trauma; statistics and data analysis.*

***External Source** –national and international conferences, online or self study courses or professional journal articles with appropriate documentation, seminars and webinars, mission, goodwill or training activities/events/ excursions with appropriate documentation*

The appropriateness of course content must be approved by the TPD/TPM/TNC. This does not apply to fully recognized national certification courses. Documentation of content such as a course outline, bibliography, competency validation checklist, or manual may be considered in evaluating a trauma specific focus.

Recognized national certification courses include:

- *ENPC – Emergency Nurses Pediatric Course*
- *TNCC – Trauma Nurse Core Curriculum (ENA)*
- *ATCN – Advanced Trauma Care for Nurses (STN)*
- *PHTLS – Prehospital Trauma Life Support*
- *RTTDC – Rural Trauma Team Development Course*
- *ABLS – Advanced Burn Life Support*
- *National Disaster Management Courses*
- *CATN – Course in Advanced Trauma Nursing (ENA)*

Excluded national certification courses:

- *ACLS – Advanced Cardiac Life Support*
- *PALS – Pediatric Advanced Life Support*
- *NALS – Neonatal Advanced Life Support*

Or any education or training with a non-trauma specific content.

Performance Improvement (QA/QI): (Section 5.01)

Article V Performance Improvement Program				
Section 5.01 Trauma/Burn Performance Improvement:				
(a) An organized PI program to examine the care of the injured patient within the hospital that looks towards improving outcomes by decreasing complications and improving efficiency. The process should clearly document the PI process, action plans, and resolution of the issue (loop closure)	E	E	E	E
(i) Demonstrate relationship between PI outcomes and new or revised clinical protocols	E	E	O	O
(ii) Expansion of PI program to include regional trauma systems	O	O	O	O
(b) The PI program should follow state recommended audit filters at a minimum	E	E	E	E
(i) Participates in the creation of institutional/regional based audit filters as identified by the institution/regional PI committees	O	O	O	O
(c) Applying outcomes/benchmarking activity	E		E	E
(d) Participation in the Statewide Trauma Registry as mandated by the Code of Virginia. Data must be submitted to Trauma Registry within 30 days from the end of a quarter and includes: <ul style="list-style-type: none"> patients with ICD9-CM codes of 348.1, 800.0 – 959.9, 994.0 and 994.1, excluding 905-909 (late effect injuries), 910-924 (blisters, contusions, abrasions and insect bites), 930-939 (foreign bodies) Only those patients that were admitted to the hospital are required to be reported. Includes admissions for observation (not ER observation unless held in the ER due to no inpatient bed availability). Patients transferred from one hospital to another because of acute trauma (patient may be transferred directly from the ED or from an inpatient unit). Victims of acute trauma that die within the hospital, Including, the ED and DOA's. Note: hospitals may over report within these ICD9 codes if desired for internal reporting.	E	E	E	E
(e) Compliance with d above on a quarterly basis	E	E	E	E
(f) Utilization of State Registry/NTDB:				
(i) For the purposes of institutional/Regional/State Research, Benchmarking for PI and or Injury Prevention Programs. For mature Trauma Centers (by the second verification visit), becomes a minimal standard	O	O	O	O
(ii) For the purposes of institutional/regional/state research, benchmarking for PI and or injury prevention programs. For mature Trauma Centers (by the second verification visit), becomes a minimal standard	E	E	E	E
(g) A forum, including the TMD, ED Director, TPD/TPM/TNC, designee from Trauma subspecialties (neurosurgery, orthopedics) as specific issues present for multidisciplinary review of care of the injured patient including policies, procedures, system issues, and outcomes may include pre-hospital, nursing, ancillary personnel, a hospital administrator and physicians involved in trauma care. (The forum in h, below, may be combined with this meeting)	E	E	E	E
(i) 50% attendance by committee members (or designee) at multi-disciplinary review of care meetings	E	E	E	E

(h) The hospital will have a structured peer review committee, which must have a method of evaluating trauma care. This committee must meet at least quarterly and include physicians representing pertinent specialties that include at least, trauma surgery, neurosurgery, orthopedics, emergency medicine, anesthesiology, and may include hospital management and other subspecialties as required. The TPD/TNC/TNC or designee may be a member. Outcomes of peer review will be incorporated into the educational and policy program of the trauma service. (The forum in F may be combined with this meeting)	E	E	E	E
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---	---	---	---

The presence of a PI program is critical to the existence of the trauma or trauma/burn center. While every hospital participates in PI, not every PI program addresses the needs of a trauma or trauma/burn service. Site reviewers will be looking for a program specifically oriented to trauma and burn patients; one that covers multidisciplinary issues as well as all phases of trauma and burn care from pre-hospital care to rehabilitation. The TMD, BMD, TPD/TPM/TNC, and/or Burn Manager Coordinator must have oversight for the program. A written PI plan should be provided and should describe the following:

- Who has the authority and responsibility to implement the plan.
- Selection of audit filters.
- Management of unique events or reports.
- Review of information and reports received.
- Routing of pre-hospital care, nursing, and medical staff issues.
- Means of implementing change.
- Documentation with regard to implementing change.
- Maintenance and review of PI plan.

Every center must audit its trauma (including burn) deaths. In addition, the center should include audit filters based on its previous experience, those filters requested by the TSO&MC and filters designed to identify potential problems. Because each center is different, a list of audit filters for a center will be unique for that center. Process filters which evaluate whether or not a process is observed are valuable when developing a new trauma service or setting up a procedure for a currently existing service. Outcome filters describe the results of trauma and burn care. While death is certainly the ultimate outcome filter, a PI plan should address other outcomes such as disability at discharge or time to definitive procedures. Experienced trauma and trauma/burn centers are expected to place increasing emphasis on outcome oriented audit filters; their PI plan and program and are judged accordingly.

APPENDIX C

Burn Patient Criteria

Burn injuries that should be referred to a Burn Center for assessment:

The American Burn Association has identified the following injuries that usually require referral to a burn center.

- Partial thickness and full thickness burns greater than 10 percent of the total body surface area (BSA) in patients under 10 or over 50 years of age.
- Partial thickness burns and full thickness burns greater than 20 percent BSA in other age groups.
- Partial thickness and full-thickness burns involving the face, eyes, ears, hands, feet, genitalia or perineum of those that involve skin overlying major joints.
- Full-thickness burns greater than five percent BSA in any age group.
- Electrical burns, including lightning injuries; (significant volumes of tissue beneath the surface may be injured and result in acute renal failure and other complications).
- Significant chemical burns.
- Inhalation injuries.
- Burn injury in patients with pre-existing illness that could complicate management, prolong recovery, or affect mortality.
- Any burn patient in whom concomitant trauma poses an increased risk of morbidity or mortality may be treated initially in a trauma center until stable before transfer to a burn center.
- Children with burns seen in hospitals without qualified personnel or equipment for their care should be transferred to a burn center with these capabilities.
- Burn injury in patients who will require special social and emotional or long term rehabilitative support, including cases involving child abuse and neglect.