Virginia Department of Health Office of Emergency Medical Services



Quarterly Report to the

State EMS Advisory Board

August 3, 2018

Executive Management, Administration & Finance

Office of Emergency Medical Services Report to The State EMS Advisory Board

August 3, 2018

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) Action Items before the State EMS Advisory for August 3, 2018

At the time of finishing this report there is one action item from a Standing Committee:

1. The Trauma System Oversight and Management Committee (TSOMC) moves to accept the Commonwealth of Virginia Trauma System Plan, last modified by the Trauma System Plan Task Force on June 7, 2018. The Trauma System Plan and motion are included in **Appendix A**.

B) <u>Financial Assistance for Emergency Medical Services (FAEMS) Grant Program, known as the Rescue Squad Assistance Fund (RSAF)</u>

The RSAF grant deadline for the spring grant cycle was March 15, 2018. OEMS received 112 grant applications requesting \$9,045,968.00 in funding. OEMS awarded 80 agencies funding for \$3,969,417.00, 44% of RSAF requests were awarded.

Funding was awarded in the following agency categories:

- 72 EMS Agencies awarded \$3,863,341.00
- 8 Non EMS Agency awarded \$106,076.00

\$4,000,000.00
\$3,500,000.00
\$3,000,000.00
\$2,500,000.00
\$1,500,000.00
\$500,000.00
\$0.00

Requested

Awarded

Figure 1: Agency Category by Amount

NOTE: The graph only represents items requested up to \$4,000,000.00 to visually display other items requested. EMS agencies had amounts requested of \$8,613,362.79.

Funding amounts were awarded in the following regional areas:

- Blue Ridge Awarded funding of \$261,981.00
- Central Shenandoah Awarded funding of \$153,497.00
- Lord Fairfax Awarded funding of \$360,190.00
- Northern Virginia Awarded funding of \$8,033.00
- Old Dominion Awarded funding of \$486,134.00
- Peninsulas Awarded funding of \$281,267.00
- Rappahannock Awarded funding of \$220,448.00
- Southwestern Virginia Awarded funding of \$919,178.00
- Thomas Jefferson Awarded funding of \$332,753.00
- Tidewater Awarded funding of \$309,943.00
- Western Virginia Awarded funding of \$635,993.00

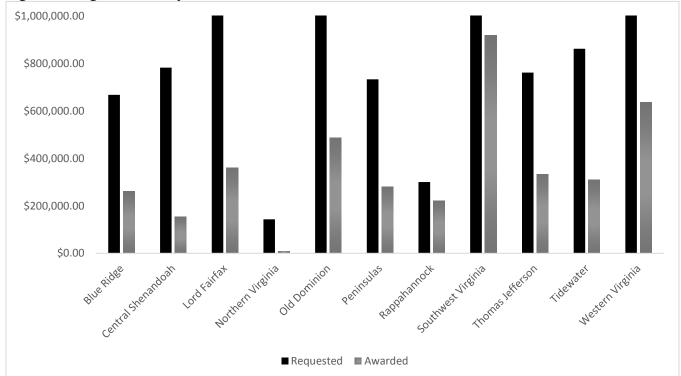


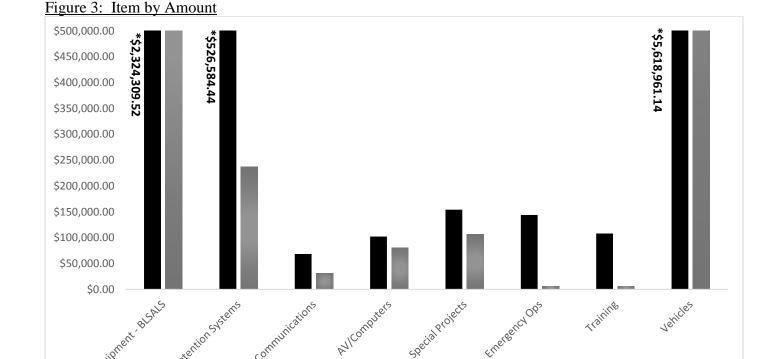
Figure 2: Regional Area by Amount

NOTE: The graph only represents items requested up to \$1,000,000.00 to visually display other items requested. The Lord Fairfax region had amounts requested of \$1,029,033.86, the Old Dominion region had amounts requested of \$1,036,193.45, the Southwest region had amounts requested of \$1,304,844.68 and the Western Virginia region had amounts requested of \$1,424,685.83.

Funding amounts were awarded for the following items:

- Audio Visual/Computer Hardware \$80,508.79
 - Includes projectors, computer hardware/software, Toughbook's, and other audiovisual equipment.
- Communications \$31,358.03
 - Includes items for mobile/portable radios, pagers, towers, repeaters and other communications system technology.
- Cot Retention Systems \$236,751.03
 - o Includes all cot retention systems, cot conversion systems and equipment needed to install the systems, not including power cots.
- Emergency Operations \$6,151.25
 - Includes items such as Mass Casualty Incident (MCI), extrication equipment, rescue boat and personal protection equipment (PPE). The Emergency Operations category also includes any other equipment or items needed in order to rapidly mobilize and dispatch help in emergencies.

- Equipment Basic and Advanced Life Support Equipment \$1,167,555.88
 - o Includes any medical care equipment for sustaining life, airway management, and supplies, including 12-Lead Defibrillators.
- Special Projects \$107,023.12
 - Includes projects such as Emergency Medical Dispatch (EMD), Virginia Pre-Hospital Information Bridge (VPHIB) projects, Recruitment and Retention, special events and other innovative programs.
- Training \$5,743.70
 - 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.
- Vehicles \$2,334,325.60
 - This category includes all vehicles such as ambulances, re-chassis, re-mounts and quick response vehicles.



*NOTE: The graph only represents items requested up to \$500,000.00 to visually display other items requested. The following categories have higher request amounts, which have been noted on the graph: Equipment-BLS/ALS, Retention Systems and Vehicles. The awarded amounts for these categories are noted in the Item by Amount information above.

■ Requested ■ Awarded

The RSAF Awards Meeting was held on June 7, 2018 and the Financial Assistance and Review Committee (FARC) made recommendations to the Commissioner of Health. The grant awards were announced on July 1, 2018, the next RSAF grant cycle will open on August 1, 2018 and the deadline will be September 17, 2018.

C) Recognition of EMS Personnel Licensure Interstate Compact (REPLICA)

REPLICA has been enacted in sixteen (16) states. The states that have enacted REPLICA are CO, TX, VA, ID, KS, TN, UT, WY, MS, GA, AL, DE, NE, SC, MO, NH.

REPLICA allows EMS personnel to do their jobs during their day-to-day movement across state lines. The public is protected through the proper screening of EMS personnel crossing state lines. Assurances are created that EMS personnel meet a uniform, national "fitness to practice" standard.

Key components of the REPLICA framework include 1) increasing public access to EMS personnel, 2) enhancing states 'ability to protect the public's health and safety, especially patient safety, 3) creating a privilege to practice in other compact states, 4) establishment of a national coordinated EMS licensure database to facilitate the exchange of information between member states regarding EMS personnel licensure, adverse action and significant investigatory information, 5) expedited processing of veteran and spouse applications for EMS certification, and 6) the creation of a Commission that conducts the business of managing cross border movement of EMS personnel.

Requirements for individuals to be eligible to participate in the interstate compact include: 1) licensed in a Home State as an EMT, AEMT (or other level between EMS and Paramedic) or Paramedic; 2) practicing in good standing in their home state; 3) operate under the supervision of an EMS Medical Director; and must be at least 18 years of age.

The Home State has exclusive ability to take disciplinary action against the license/certification issued by that state in accordance with their own state law. If the Home State acts, the privilege to practice in every other state is immediately suspended. A Remote State may take adverse action on an individual's privilege to practice within that state. If a privilege to practice in any Remote State is restricted, suspended or revoke it is effective in all member states until resolved.

The inaugural meeting of the Interstate Commission for EMS Personnel Practice or "Commission" was held in Oklahoma City on October 7 and 8. During this meeting the Commission elected officers, adopted By-Laws and established committees, and approved rules on rulemaking. Each state that has enacted REPLICA has one delegate that is a member of the Commission

The Executive Committee of the Commission is Joe Schmider, Director – TX, Chair; Jeanne-Marie Bakehouse, Branch Chief – CO, Vice Chair; Andy Gienapp, Director – WY, Secretary; Stephen Wilson, Director – AL, Treasurer; and Donna Tidwell, Director – TN, Member-at-Large.

For additional information about REPLICA, please visit <u>www.emsreplica.org</u> or contact Gary Brown or Scott Winston.

D) E.V.E.N.T. – EMS Voluntary Event Notification Tool



E.V.E.N.T. is a program of the Center for Leadership, Innovation, and Research in EMS (CLIR) with sponsorship provided by the North Central EMS Institute (NCEMSI), the National EMS Management Association (NEMSMA), the Paramedic Chiefs of Canada (PCC), the National Association of Emergency Medical Technicians (NAEMT) and the National Association of State EMS Officials (NASEMSO).

E.V.E.N.T. is a tool designed to improve the safety, quality and consistent delivery of Emergency Medical Services (EMS). It collects data submitted anonymously by EMS Practitioners. The data collected is used to develop policies, procedures and training programs to improve the safe delivery of EMS. A similar system used by airline pilots has led to important airline system improvements based upon pilot reported "near miss" situations and errors.

Any individual who encounters or recognizes a situation, in which an EMS safety event occurred, or could have occurred, is strongly encouraged to submit a report by completing the appropriate E.V.E.N.T. Notification Tool (Patient Safety Event, Practitioner Near Miss Event, EMS Provider Violence Event). The confidentiality and anonymity of this reporting tool is designed to encourage EMS practitioners to readily report EMS safety events without fear of repercussion.

All reported patient safety events and aggregate reports are posted to the EVENT Google Group. If you would like to be added to the Google Group, send an email to clirems@gmail.com with your name and EMS agency or affiliation. You will be added to the group within 2 business days.

The **calendar year 2017** anonymously reported summary Patient Safety, Paramedic Near Miss and Violence Against Paramedics reports from the EMS Voluntary Event Notification Tool (E.V.E.N.T.) are available online at www.emseventreport.com Links to the reports are below. (E.V.E.N.T. uses the international naming convention whereby all EMS workers are identified under three levels using the common title of paramedic. For our US audience, EMTs are primary

care paramedics, AEMTs are intermediate care paramedics, and paramedics are advanced care paramedics.)

1Q & 2Q 2018 anonymously reported summary Patient Safety and Provider Violence reports are available on the EVENT web site. Links to the reports are below.

You can access reports online at any time by going to the EVENT website, http://www.emseventreport.com, choosing the category of EVENT and then use the report links on the left side of the reporting page. Or, you can simply use these links:

Calendar Year 2017 Summary Reports

CY2017 Patient Safety

CY2017 Paramedic Near Miss

CY2017 Violence Against Paramedics

1Q & 2Q 2018 Patient Safety Event Summary Report

http://event.clirems.org/LinkClick.aspx?fileticket=3UoODaKzCF8%3d&tabid=1597&portalid=2 &mid=3244

2Q2018 EMS Patient Safety Summary Report

1Q & 2Q 2018 Provider Violence Event Summary Report

http://event.clirems.org/LinkClick.aspx?fileticket=wsl58aEzvuk%3d&tabid=1598&portalid=2&mid=3245

2Q2018 Paramedic Violence Summary Report

1H2018 Provider Near Miss Event Summary Report

1H2018 Paramedic Near Miss Summary Report

Please take the time to anonymously report your own Patient Safety, Practitioner Near Miss, and EMS Practitioner Violence reports so that others can learn and we can reduce medical errors by knowing what trips us up and how we can stay clear of a bad situation.

If you know of an event that could be reported anonymously, please take a couple minutes to report a:

Patient safety event: http://event.clirems.org/Patient-Safety-Event

Practitioner near miss event: http://event.clirems.org/Near-Miss-Event or a

EMS Provider Violence Event: http://event.clirems.org/Provider-Violence-Event and encourage others to do so as well.

There is also a tool for anonymously reporting a <u>Paramedic Suicide Attempt</u> whether the attempt was your own or someone you know. The anonymous suicide reporting tool is for use in the United States, Canada, the UK, and Australasia. For more information about the Paramedic Suicide Attempt Reporting Tool or to report a suicide attempt visit the EVENT web site at http://event.clirems.org/Suicide-Event.

NEW IN 2018: No more waiting to get back to the station to report your event! E.V.E.N.T. has a new form that is mobile enabled. You can now easily anonymously report events using your smart phone or tablet immediately following the event, while the details are still fresh.

EMS on the National Scene

II. EMS On the National Scene

National Association of State EMS Officials (NASEMSO)

Note: The Virginia Office of EMS is an active participant in the NASEMSO and has leadership roles on the Board of Directors and 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.

Update on NASEMSO Projects and National EMS Activities

A) States Achieve Major Milestone on Treatment of Suspected Opioid Overdose by EMS

Since 2015, the National Association of State EMS Officials (NASEMSO) has provided technical assistance to its members to improve state policy efforts on the use of opioid antagonists for suspected opioid overdose in out-of-hospital settings. A campaign of awareness and education as well as a partnership with the National Highway Traffic Safety Administration (NHTSA) to revise the National EMS Scope of Practice Model to include the administration of opioid antagonists by EMS providers at the basic life support level has resulted in 100%compliance among states to authorize the practice at all EMS licensure levels, including EMR and EMT. Congratulations to all involved in this important accomplishment! The NHTSA memorandum can be accessed at:

https://www.ems.gov/pdf/2007-National-EMS-Scope-of-Practice-Mode-Cover-Letter-and-Change-Notices.pdf

In related news, the memo includes support for all EMS personnel in the use of tourniquets and wound packing for hemorrhage control via an immediate change notice to the National EMS Scope of Practice Model. All EMS personnel are encouraged to undertake such practices only if they possess the necessary educational preparation, experience and knowledge to properly administer tourniquets and wound packing and manage potential complications from the procedures. Persons with questions can contact NASEMSO Program Manager, Kathy Robinson.

B) Kevin McGinnis Named EMS Innovator of the Year

NASEMSO congratulates Kevin McGinnis, MPS, NASEMSO staff and FirstNet Board member, for receiving the EMS10: Innovators in EMS Award at EMS Today 2018. Kevin McGinnis is recognized for spearheading the development of a broadband network devoted solely to public

safety, the first of its kind in the US. A panel of professional EMS colleagues and peers selected the distinguished winners, who each displayed initiative, creative thinking, action-orientation and a desire to positively impact EMS, patients and their communities.

C) To Err Is Human: The Documentary

Medical mistakes lead to as many as 440,000 preventable deaths every year. To Err Is Human is an in-depth documentary about this silent epidemic and those working quietly behind the scenes to create a new age of patient safety? Directed by the son of late patient safety pioneer, Dr. John M. Eisenberg, To Err Is Human is an in-depth documentary about this silent epidemic and those working behind the scenes to create a new age of patient safety. Through interviews with leaders in healthcare, footage of real-world efforts leading to safer care, and one family's compelling journey from victim to empowerment, the film provides a unique look at our healthcare system's ongoing fight against preventable harm. View the official trailer and learn how to schedule a screening at: https://www.toerrishumanfilm.com/

D) White Paper Speculates on Increased Naloxone Access

SSRN, a free open access research network hosted by Elsevier, has posted a new white paper on access to naloxone, speculating that expanding naloxone access might not reduce mortality. Researchers suggest:

Naloxone access may unintentionally increase opioid abuse through two channels: (1) saving the lives of active drug users, who survive to continue abusing opioids, and (2) reducing the risk of death peruse, thereby making riskier opioid use more appealing. By increasing the number of opioid abusers who need to fund their drug purchases, Naloxone access laws may also increase theft.

Readers are cautioned that conclusions outlined by the authors have not been subjected to a peer review process. The Substance Abuse and Mental Health Services Administration (SAMHSA) argues it is a common misconception that harm reduction measures, such as the provision of naloxone, encourage drug use. Despite arguments that mandatory seatbelt laws might encourage reckless driving, deaths from car crashes have decreased substantially since their implementation.

According to the World Health Organization, increased availability of naloxone can be expected to reduce the proportion of witnessed opioid overdoses which result in death. Further, the Harm Reduction Coalition and SAMHSA advocate that drug use should be understood as a complex phenomenon that encompasses a continuum of behaviors, not simply a binary of abstinence and abuse.

View more prevention resources from SAMHSA at: https://www.youtube.com/playlist?list=PLBXgZMI_zqfSx1TQTzbWjoFqJitZ1CBgK

The full white paper, *The Moral Hazard of Lifesaving Innovations: Naloxone Access, Opioid Abuse, and Crime,* is available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3135264

E) HHS Issues Update on SamSam Ransomware Campaigns

The Department of Health and Human Services' Healthcare Cybersecurity Integration and Communications Center recently released an update on ongoing cyberattacks on health care and government organizations using a form of ransomware known as SamSam. According to the report, at least eight separate attacks using the SamSam ransomware have occurred this year, including two on Indiana-based hospitals, one on a cloud-based electronic health record provider and another on the city of Atlanta. The report includes recommendations for preventing and handling incidents and ensuring business and health care continuity in the face of potential disruptions. The SamSam malware has been active since at least 2016, largely in hospitals and the health care and public health sector. Read more at:

https://content.govdelivery.com/attachments/USDHSCIKR/2018/04/06/file_attachments/986231/HCCIC-2018-002W-SamSam%2BRansomware%2BCampaign.pdf

F) NASEM Releases Assessment of Occupational Safety and Health Surveillance

A Smarter National Surveillance System for Occupational Safety and Health in the 21st Century provides a comprehensive assessment of the state of OSH surveillance. This report is intended to be useful to federal and state agencies that have an interest in occupational safety and health, but may also be of interest broadly to employers, labor unions and other worker advocacy organizations, the workers' compensation insurance industry, as well as state epidemiologists, academic researchers, and the broader public health community.

According to the National Academies of Sciences, Engineering, and Medicine (NASEM), occupational safety and health (OSH) surveillance provides the data and analyses needed to understand the relationships between work and injuries and illnesses to improve worker safety and health and prevent work-related injuries and illnesses. Information about the circumstances in which workers are injured or made ill on the job and how these patterns change over time is essential to develop effective prevention programs and target future research. The nation needs a robust OSH surveillance system to provide this critical information to inform policy development, guide educational and regulatory activities, develop safer technologies, and enable research and prevention strategies that serve and protect all workers. Read more at: https://www.nap.edu/catalog/24835/a-smarter-national-surveillance-system-for-occupational-safety-and-health-in-the-21st-century

G) FAA Proposes New Rule on IFR Operations

Proposed rulemaking would amend 14 CFR 135.611(b) to allow helicopter air ambulance (HAA) operators using aircraft without functioning severe weather detection equipment (airborne radar or lightning strike detection equipment), to conduct IFR departure and approach procedures at airports and heliports that do not have an approved weather reporting source. In conducting these operations, the pilot in command must not reasonably expect to encounter severe weather at the destination, the alternate, or along the route of flight. This action would encourage utilization of the IFR infrastructure to the fullest extent possible, thus increasing the overall safety of HAA Operations.

This rule would also update certain provisions in Sec. 135.611(a)(1) to address the discontinuance of area forecasts, currently used as flight planning and pilot weather briefing aids, and the transition to digital and graphical alternatives already being produced by the U.S. National Weather Service (NWS). Additionally, this rule would update requirements in Sec. 135.611(a) (3) regarding HAA departure procedures to include additional types of departure procedures that are currently acceptable for use. Comments were due to the FAA by May 10, 2018.

H) Online Sex Trafficking Act Signed into Law

Following amendments to resolve differences between companion bills in the US House of Representatives and Senate, President Trump has signed the Bill, known as "Allow States and Victims to Fight Online Sex Trafficking Act of 2017," into law. The law allows government prosecution of or user lawsuits against websites that knowingly help or promote sex trafficking. Supporters argued that the legislation removes a loophole that has unintentionally allowed such crimes to go unprosecuted when facilitated online. While opponents didn't support sex trafficking, they worry that this would be the first-ever federal legal precedent for going after and prosecuting websites for content that users post.

The landmark Senate report that serves as the basis for the proposed legislation is available at: https://www.portman.senate.gov/public/index.cfm/files/serve?File_id=5D0C71AE-A090-4F30-A5F5-7CFFC08AFD48

A link to the Bill is available at: https://www.congress.gov/bill/115th-congress/house-bill/1865

I) NTAC Releases Report on Mass Attacks in Public Spaces

The U.S. Secret Service National Threat Assessment Center (NTAC) released a comprehensive study on mass attacks in public spaces. This study focused on 28 incidents in 2017 carried out in public places within the United States in which three or more persons were harmed. The report looks in-depth for commonalities in the attackers' location of attack, weapons, gender, age, substance abuse, criminal history, mental health, motives, targeting, stressors, and communications. The findings of the report support existing Secret Service best practices for threat assessment and highlight the importance of a comprehensive investigation into an individual's background to assess potential risk. Regardless of whether these attacks were acts of workplace violence, domestic violence, school-based violence, or terrorism, perpetrators were similar in that:

Nearly half were motivated by a personal grievance related to a workplace, domestic, or other issue.

Over half had histories of criminal charges, mental health symptoms, and/or illicit substance use or abuse

All had at least one significant stressor within the last five years, and over half had indications of

Financial instability in that period.

Over three-quarters made concerning communications and/or elicited concern from others prior to carrying out their attacks. On average, those who did elicit concern caused more harm than those who did not.

You can download the report at:

https://www.secretservice.gov/data/protection/ntac/USSS_NTAC-Mass_Attacks_in_Public_Spaces-2017.pdf

J) ASPR TRACIE Evaluates Medical Surge Roles for UCCs

Urgent care centers (UCC) are a rapidly growing segment of the healthcare marketplace. According to data from the most recent benchmarking survey by the Urgent Care Association of America (UCAOA), the number of centers increased nearly 10 percent in one year, from 6,701 centers in 2015 to 7,357 in 2016. The survey also found that in2015, 96% of urgent care centers reported an increase in the number of patient visits and 73% acquired or built a new facility; 90% anticipated additional growth in 2016. A new white paper from the US Department of Health and Human Services outlines opportunities for UCCs to provide medical surge that supports community preparedness efforts. Read the report at:

https://asprtracie.s3.amazonaws.com/documents/aspr-tracie-medical-surge-and-the-role-of-urgent-care-centers.pdf

ASPR-TRACIE Webinar Recording on Las Vegas Incident Now Available

An ASPR TRACIE webinar on Healthcare Response to a No-Notice Incident: Las Vegas, held on March 28, 2018 is available online as a:

Webinar recording at: https://register.gotowebinar.com/recording/3579578141668518147 and

PowerPoint presentation at:

https://asprtracie.s3.amazonaws.com/documents/aspr-tracie-no-notice-incident-las-vegas-webinar-ppt-508.pdf

You will be asked to enter your name and email address prior to accessing the recording.

TRACIE has also posted a series of tip sheets on "no-notice incidents" for hospitals and other healthcare facilities planning for no-notice incident response, based on healthcare system lessons learned from recent no-notice incidents.

Community Response and Media Management Expanding Traditional Roles to Address Patient Surge Family Assistance Fatality Management Hospital Triage, Intake, and Throughput Non-Trauma Hospital Considerations Trauma Surgery Adaptations and Lessons Trauma System Considerations

K) APA TX Offers Rural Planning Toolkit for Emergency Preparedness and Recovery

This 89-page toolkit from the American Planning Association and TX Public Health Association is a reference Guide to help small towns and rural communities prepare for potential disaster situations. It offers advice on disaster planning, immediate response, and long-term recovery, with chapters and special considerations for economic impact and funding, infrastructure, mobilizing supplies, insurance, healthcare and emergency medical services, volunteer management, emotional/spiritual and social services, animals and pets, communications, resource planning, and team development.

Download the toolkit at:

https://docs.wixstatic.com/ugd/c536a4_dd72ece254fb4217aa13e40361dd970d.pdf

L) Countering False Information on Social Media in Disasters and Emergencies

Rumors, misinformation and false information on social media proliferate before, during and after disasters and emergencies. While this information cannot be completely eliminated, first responder agencies can use various tactics and strategies to offset bad information. This white paper examines motivations people may have for sharing false information, discusses underlying issues that cause false information, and offers case studies from recent disasters to illustrate the problem. People may post false information on social media to seek a particular result, such as closing schools for the day, to get attention with a dramatic post, to push a money-making scam or political agenda, or to innocently repeat bad or outdated information. A new white paper from the Department of Homeland Security encourages first responder agencies to:

Establish partnerships with local traditional media outlets before disasters, so means exist to disseminate accurate information

Use the Joint Information System to coordinate public information efforts of multiple jurisdictions and agencies Set up a central website to debunk bad information

Read more at:

 $https://www.dhs.gov/sites/default/files/publications/SMWG_Countering-False-Info-Social-Media-Disasters-Emergencies_Mar 2018-508.pdf$

M) Traffic Safety Facts Annual Report Tables

The National Highway Traffic Safety Administration (NHTSA) has deployed a dynamic and interactive online portal for its annual traffic safety report, Traffic Safety Facts: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System. The portal can be accessed at: https://cdan.nhtsa.gov/TSFTables/TSFAR.htm

This portal gives users the ability to generate descriptive statistics about traffic crashes of all severities, from those that result in property damage to those that result in the loss of human life. This portal fulfils a long-standing need to provide the tables in a timely and easily accessible way. Users can export the tables in various popular formats (Excel, pdf, etc.), request versions of the tables both at the national and state levels, where applicable, and generate historic versions of the tables.

N) AAP to Fund Research on Firearm Injuries

The American Academy of Pediatrics (AAP) is launching a bold new research initiative to protect children from firearm injuries. Gunfire kills about 1,300 U.S. children and teenagers each year and injures nearly 5,800 more, according to a 2017 study from Centers for Disease Control and Prevention (CDC) researchers. While the CDC collects these data, an amendment to a 1996 bill prohibited the CDC from using public health money to advocate for or promote gun control. The amendment was not intended to end research into gun violence, but it effectively impeded it.

Unencumbered by those restrictions, AAP has been advocating for gun control measures for more than three decades. Approaching these injuries as a public health epidemic, the Gun Safety and Injury Prevention Research Initiative will bring together experts from around the country to study and implement evidence-based interventions.

The AAP Board of Directors has approved initial funding of \$500,000 from the Friends of Children and Tomorrow's Children Endowment funds. The Academy also will be fundraising and forming partnerships to support its efforts.

O) HR 880 Mission Zero Act Passes US House of Representatives

The House has passed HR 880, which "...amends the Public Health Service Act to require the Department of Health and Human Services to award grants to certain trauma centers to enable military trauma care providers and trauma teams to provide trauma care and related acute care at those trauma centers. Funds may be used to train and incorporate military trauma care providers into the trauma center, including expenditures for malpractice insurance, office space, information technology, specialty education and supervision, trauma programs, and state license fees. Grantees must allow the military trauma care providers to be deployed for military operations, training, or response to a mass casualty incident." The Secretary shall award grants to not more than 20 eligible high-acuity trauma centers to enable military trauma teams to provide, on a full-time basis, trauma care and related acute care at such trauma centers. A companion bill, S. 1022, was introduced in the Senate on May 3, 2017.

P) DEA Working to Avoid U.S. Drug Shortages

The Drug Enforcement Administration (DEA) has released the following statement in response to concerns about potential shortages and drug production capabilities:

In recent months, the largest U.S. manufacturer of these injectable products has slowed production a tone of their manufacturing facilities in order to perform necessary and required upgrades. As a result, this company voluntarily surrendered a portion of their quota allotment and DEA reallocated these

amounts to three DEA-registered manufacturers of FDA approved injectable products in accordance with DEA regulations. It is important to note that an increase in DEA procurement quotas to various manufacturers cannot alone prevent future shortages as DEA does not control the quantity or the speed by which manufacturers produce these or any of their products.

DEA is communicating actively and directly with all entities impacted and is committed to making further adjustments to individual procurement quotas as necessary and will also consider other\ measures that may be necessary to address potential shortages for these products.

Q) NREMT Appoints Bill Seifarth as New Executive Director

(06/12/18) The National Registry of Emergency Medical Technicians on June 12 announced the appointment of Bill Seifarth as its new executive director. An industry veteran, Seifarth brings more than 20 years of experience to the position, including Emergency Medical Services (EMS) leadership at both the state and federal levels, along with a background of managing several comprehensive certification programs. Download NREMT press release.

Community Health And Technical Resources

III. Community Health and Technical Resources

Planning and Regional Coordination

Regional EMS Councils

Regional EMS Councils

The OEMS continues to maintain a Memorandum of Understanding (MOU) with the Regional EMS Councils for the 2019 Fiscal Year. The Regional Councils submitted their Fourth Quarter reports through the month of July, and are under review. OEMS has transitioned to a web based reporting application to replace Lotus Notes for the Regional EMS Councils to submit quarterly deliverables.

The Regional EMS Councils will be applying to be redesignated. The deadline for applications is Monday, October 1, 2018.

The CHaTR Division Manager attended the regional EMS awards programs for the Lord Fairfax, Rappahannock, and Southwest Virginia EMS Councils in the quarter.

Medevac Program

The Medevac Committee is scheduled to meet on August 2, 2018. The minutes of the May 3, 2018 meeting are available on the OEMS website linked below: http://www.vdh.virginia.gov/emergency-medical-services/advisory-board-committees/medevac-committee/

The Medevac Helicopter EMS application (formerly known as WeatherSafe) continues to see an increase in the amount of data submitted. In terms of weather turndowns, there were 717 entries into the Helicopter EMS system in the second quarter of the 2018 calendar year. 66% of those entries (471 entries) were for interfacility transports, which is consistent with information from previous quarters. The total number of turndowns is an increase from 580 entries in the first quarter of 2017. For the year to date, there have been 1,406 entries, with 930 being interfacility, an increase from 1,170 and 770, respectively, in the same timeframe for 2017. This data continues to show dedication to the program itself, but also to maintaining safety of medevac personnel and equipment.

The Virginia State Medevac Committee continues to evaluate whether or not there is an opportunity for the ST Segment Elevation Myocardial Infarction (STEMI) patient to have been transported from the scene by air to a specialty facility, versus being transported by ground

to/treated at a rural hospital first, then transported by air to a specialty facility for interventional treatment.

The aim of this retrospective chart review of ground and air transported STEMI patients in is to:

- Determine if there is a greater opportunity to air transport the STEMI patient from the scene to a PCI center.
- Determine if air transport of the STEMI patient directly from the scene to a PCI center affects the patient's length of stay.

The Committee is also evaluating the increased use of unmanned aircraft (drones), and the increased presence in the airspace of Virginia. A workgroup continues work to raise awareness among landing zone (LZ) commanders and helipad security personnel.

House Bill 777 (2018)

House Bill 777 was introduced into the 2018 General Assembly session on January 9, 2018. The original language of the Bill is as follows:

"1. That the Code of Virginia is amended by adding a section numbered 32.1-111.4:9 as follows:

§ 32.1-111.4:9. Notice requirements for emergency air medical transportation.

- A. Before emergency medical services personnel initiate contact with an emergency air medical transportation provider for air transport of a patient, the emergency medical services personnel shall obtain written consent from the patient to receive emergency air medical transportation services after providing the patient with the following information for the purpose of allowing the patient to make an informed decision on choosing a form of transportation:
 - 1. The patient will be responsible for any payments due for the emergency air medical transportation services;
 - 2. The emergency air medical transportation provider might not have contracts with the patient's health care insurer and, therefore, services provided to the patient by such emergency air medical transportation provider may be considered out-of-network services and not covered under the patient's insurance plan; and
 - 3. A description of the range of charges that the patient may incur for such emergency air medical transportation services.
- B. Emergency medical services personnel shall be exempt from complying with the provisions of subsection A if the emergency medical services personnel determine and document that, due to emergency circumstances, compliance might jeopardize the health or safety of the patient or that the patient is unable to provide consent."

An identical bill, Senate Bill 663, was introduced as well. The House Health, Welfare, and Institutions (HWI) subcommittee #3 met on January 18, 2018, and the amended language (underlined) below was passed by the HWI subcommittee:

- "1. That the Code of Virginia is amended by adding a section numbered 32.1-111.4:9 as follows:
 - § 32.1-111.4:9. Notice requirements for emergency air medical transportation.
 - A. Before emergency medical services personnel initiate <u>air transportation of a patient</u> by an emergency medical <u>services air transportation</u> provider, the emergency medical services personnel shall obtain written consent <u>to such air transportation</u> from the patient.
 - B. Emergency medical services personnel shall be exempt from complying with the provisions of subsection A if the emergency medical services personnel determine and document that, due to emergency circumstances, compliance might jeopardize the health or safety of the patient or that the patient is unable to provide consent.
- 2. That the provisions of the first enactment of this act shall become effective on July 1, 2019.
- 3. That the Office of Emergency Medical Services shall develop (i) a process by which emergency medical services personnel shall obtain consent of a patient prior to initiating air transportation by an emergency medical services air transportation provider and (ii) a form on which such consent shall be executed. The Office of Emergency Medical Services shall report on the development of such process and form to the Chairmen of the House Committee on Education, the House Committee on Health, Welfare and Institutions, and the Senate Committee on Education and Health on the development of the protocol by December 1, 2018."

House Bill 777 was continued to the 2019 General Assembly session.

More information on House Bill 777 can be found at the link below: https://lis.virginia.gov/cgi-bin/legp604.exe?ses=181&typ=bil&val=HB777

In addition, House Bill 778 was introduced into the 2018 General Assembly session on January 9, 2018. The original language of the Bill is as follows:

- "1. That the Code of Virginia is amended by adding in Article 2.1 of Chapter 4 of Title 32.1 a section numbered <u>32.1-111.15:1</u> as follows:
 - § 32.1-111.15:1. Duties of health care provider arranging for air ambulance services.
 - A. As used in this section:

"Air ambulance provider" means a publicly or privately owned organization that is licensed or applies for licensure by the Department of Health to provide transportation and care of patients by air ambulance.

"Carrier" means an entity subject to the insurance laws and regulations of the Commonwealth and subject to the jurisdiction of the Commission that contracts or offers to contract to provide, deliver, arrange for, pay for, or reimburse any of the costs of health care services, including an insurer licensed to sell accident and sickness insurance, a health maintenance organization, a health services plan, or any other entity providing a health benefit plan.

"Covered person" means a policyholder, subscriber, enrollee, participant, or other individual who is entitled to health care services provided, arranged for, paid for, or reimbursed pursuant to a health benefit plan.

"Health benefit plan" means an arrangement for the delivery of health care, on an individual or group basis, in which a carrier undertakes to provide, arrange for, pay for, or reimburse any of the costs of health care services for a covered person that is offered in accordance with the laws of any state. "Health benefit plan" does not include short-term travel, accident only, limited or specified disease, or individual conversion policies or contracts, nor policies or contracts designed for issuance to persons eligible for coverage under Title XVIII of the Social Security Act, known as Medicare, or any other similar coverage under state or federal governmental plans.

"Health care provider" means a facility, physician, or other type of health care practitioner licensed, accredited, certified, or authorized by statute to deliver or furnish health care services.

"Out-of-network provider" means a health care provider or air ambulance provider that is not a participating provider under a covered person's health benefit plan.

"Participating provider" means a health care provider or air ambulance provider that has agreed to provide health care services or air ambulance services, as applicable, to covered persons and to hold those covered persons harmless from payment with an expectation of receiving payment, other than copayments or deductibles, directly or indirectly from the carrier.

- B. Before a health care provider arranges for air ambulance services for an individual whom the provider knows to be a covered person, the health care provider shall:
- 1. Provide the covered person or the covered person's authorized representative a written disclosure that states:
- a. Certain air ambulance providers may be called upon to render air ambulance services to the covered person during the course of treatment;
- b. The air ambulance provider may not have contracted with the covered person's carrier to provide under his health benefit plan air ambulance services to covered persons and, if not, is an out-of-network provider;
- c. If the air ambulance provider has not contracted with the covered person's carrier to provide air ambulance services to covered persons, (i) the air ambulance services will be provided as an out-of-network provider and (ii) the air ambulance provider

- has not agreed to hold covered persons harmless from payment of any balance due after receiving any payment from the carrier under the covered person's health benefit plan;
- d. The range of the typical charges for out-of-network air ambulance services for which the covered person may be responsible;
- e. The covered person or the covered person's authorized representative may (i) agree to accept and pay the charges of the air ambulance provider as an out-of-network provider, (ii) contact the covered person's carrier for additional assistance, or (iii) rely on other rights and remedies that may be available under state or federal law; and
- f. The covered person or the covered person's authorized representative may (i) obtain a list of air ambulance providers from the covered person's carrier that are participating providers and (ii) request that the health care provider arrange for air ambulance providers that are participating providers; and
- 2. Obtain the covered person's or the covered person's authorized representative's signature on the disclosure document required pursuant to subdivision 1, by which signature the covered person or the covered person's authorized representative acknowledges receipt of the disclosure document before the air ambulance services were arranged.
- C. If the health care provider is unable to provide the written disclosure or obtain the signature of the covered person or the covered person's authorized representative as required under subsection B, the health care provider shall document the reason, which may include the health and safety of the patient. The health care provider's documentation of the reason for his inability to provide the written disclosure or obtain the signature of the covered person or the covered person's authorized representative satisfies the requirements imposed on the health care provider under subsection B."

The House Health, Welfare, and Institutions (HWI) subcommittee #3 met on January 18, 2018, and the amended language (underlined) below was passed by the HWI subcommittee:

"1. That § 32.1-127 of the Code of Virginia is amended and reenacted as follows:

§ 32.1-127. Regulations.

21. Shall require that each hospital establish a protocol requiring that, before a health care provider arranges for air medical transportation services for a patient who does not have an emergency medical condition as defined in 42 U.S.C. § 1395dd(e)(1), the hospital shall provide the patient or his authorized representative with written or electronic notice that the patient (i) may have a choice of transportation by an air medical transportation provider or

medically appropriate ground transportation by an emergency medical services provider and (ii) will be responsible for charges incurred for such transportation in the event that the provider is not a contracted network provider of the patient's health insurance carrier or such charges are not otherwise covered in full or in part by the patient's health insurance plan."

On February 19, the following amendment was added during deliberations in the Senate:

"3. That the Office of Emergency Medical Services shall, as soon as possible and no later than January 1, 2019, develop a mechanism by which to disclose to the patient, prior to services provided by an out of network air transport provider, a good faith estimate of the range of typical charges for out of network air transport services provided in that geographic area."

House Bill 778/Senate Bill 663 passed both the House of Delegates and Senate, and approved by the Governor on March 9, 2018.

More information on House Bill 778 can be found at: https://lis.virginia.gov/cgi-bin/legp604.exe?ses=181&typ=bil&val=HB778

Work continues on the creation of the documents as directed by the General Assembly.

The CHaTR Division Manager also participates on the NASEMSO Air Medical Committee. OEMS and Medevac stakeholders continue to monitor many developments regarding federal legislation and other documents related to Medevac safety and regulation.

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 final draft of the most recent version of the State EMS Plan was approved by the state EMS Advisory Board, at the November 9, 2016 meeting. The Plan was presented to the Board of Health, and unanimously approved at their March 16, 2017 meeting. Review and revision of the State EMS Plan will begin in early 2019.

The current version of the State EMS Plan is available for download via the OEMS website at the link below:

http://www.vdh.virginia.gov/emergency-medical-services/state-strategic-and-operational-ems-plan/

Technical Assistance

EMS Workforce Development Committee

The EMS Workforce Development Committee will meet on August 2, 2018. The minutes of the May 3, 2018 meeting are available on the OEMS website, at the link below: http://www.vdh.virginia.gov/emergency-medical-services/advisory-board-committees/workforce-development-committee/

The committee's primary goal is to complete the EMS Officer and Standards of Excellence (SoE) programs.

EMS Officer Sub-Committee

The EMS Officer I program was offered as a session at the 2018 VAVRS Rescue College in Blacksburg on June 9-10. 16 people completed the course. The workgroup continues to adjust the program. The next offering will be held as a preconference session at the 2018 Virginia EMS Symposium.

Standards of Excellence (SoE) Sub-Committee

The SoE Assessment program is a voluntary self-evaluation process for use by EMS agencies in Virginia based on eight Areas of Excellence – or areas of critical importance to successfully manage and sustain an EMS agency.

Each Area of the Excellence is reviewed using an assessment document that details optimal tasks, procedures, guidelines and best practices necessary to maintain the business of managing an EMS agency.

All documents related to the SoE program can be found on the OEMS website at the link below:

 $\underline{\text{http://www.vdh.virginia.gov/emergency-medical-services/virginia-standards-of-excellence-program/}$

The Virginia Recruitment and Retention Network

The Virginia Recruitment and Retention Network met on May 18, 2018 at the Ashland Volunteer Fire Company.

The mission of the Virginia Recruitment and Retention Network is "to foster an open and unselfish exchange of information and ideas aimed at improving staffing" for volunteer and career fire and EMS agencies and organizations.

Several changes have been made to the Recruitment and Retention page on the OEMS website to give it a more streamlined appearance. Links to pertinent reference documents are expected to be added to the page in the coming months.

System Assessments

CHaTR staff assisted the Virginia Department of Fire Programs (VDFP) with an evaluation of the Fire/EMS system in Cumberland County, and the Town of Farmville, Virginia. The final report has not been released.

ChaTR staff will be working with the VDH Office of Health Equity to perform assessment of EMS systems that have Critical Access Hospitals (CAH) in their service area over the remainder of 2018.

Rural EMS and Mobile Integrated Healthcare/Community Paramedicine (MIH/CP)

The CHaTR division manager attended the National Rural EMS and Care Conference in late April 2018 in Tucson. Stakeholders and State EMS office staff from around the country made several presentations regarding MIH/CP.

The MIH/CP workgroup created in 2015 is reconvening, with Dr. Allen Yee again serving as chair. The workgroup is scheduled to meet on August 15 at the OEMS offices.

The CHaTR division manager participates on conference calls of the NASEMSO CP-MIH committee, as well as the Joint Committee on Rural Emergency Care (JCREC).

Educational Development

IV. Educational Development

Committees

A. The Training and Certification Committee (TCC): The Training and Certification Committee met on July 11, 2018. There are no action items.

Copies of past minutes are available on the Office of EMS Web page at: http://www.vdh.virginia.gov/emergency-medical-services/standing-and-ad-hoc-committees-oems-workgroups/

B. The Medical Direction Committee (MDC): The Medical Direction Committee was scheduled to meet on July 12, 2018. The meeting was cancelled due to lack of a quorum.

Copies of past minutes are available from the Office of EMS web page at: http://www.vdh.virginia.gov/emergency-medical-services/education-certification/medical-direction-committee-standing/Advanced Life Support

ALS Program

- A. On January 5, 2018, the Office received an email from the National Registry of EMTs providing a summary of their Board Meeting held November 14-15, 2017. One of the items included the following: ...3. The NREMT will no longer offer the I-99 examination after December 31, 2019. Candidates will not be able to take the I99 exam after December 31, 2019, including retesting.... The office will be working with those programs that conduct I99 programs to identify actions needed to provide the optimal opportunity to access I99 certification testing.
- B. Virginia I-99 students who have maintained their National Registry certification have until March 31, 2019 to gain National Registry certification through the transition process. This requires the student to complete a Paramedic course and take the National Registry cognitive examination prior to their NR I-99 expiration. Should they not complete this process, they can still obtain their Paramedic certification; however, it will require the completion of the psychomotor examination in addition to the cognitive examination.
- C. All National Registry I-99 certified providers with an expiration date of March 31, 2019 are being transitioned to AEMT to allow them to recertify with National Registry if they choose to do so. This did NOT affect their Virginia certification level, which will remain Intermediate 99.

- D. ALS Coordinator re-endorsement requires an update every two years and the submission of a re-endorsement application. An EMS Physician must sign the application. Additionally, it must contain the signature of the regional EMS council director if courses are being conducted in their region.
- E. As of January 1, 2017, all ALS testing candidates are required to have a Psychomotor Authorization to Test Letter (PATT) from National Registry to participate at an ALS Test site. To enable this new requirement, the Office of EMS has authorized early access which allows Virginia Program Directors, in coordination with the program Medical Director to allow students access to the psychomotor examination at the point in their program they feel the students have reached competency. Information has been provided to all program directors.
- F. All providers recertifying with National Registry starting with the 2019 recertification cycle will be required to complete the CE hour requirements based on the 2016 National Continued Competency Program (NCCP). To align with the 2016 NCCP it is critical that providers recertify with Virginia when recertifying with National Registry to keep their CE report aligned with the hours requirements.

Basic Life Support Program

A. Education Coordinators (EC)

- 1. The New Education Coordinator process continues to be successful. As of July 17th, 2018, we have 25 Applicants and 127 Candidates.
- 2. An EC Institute was held in June at the VAVRS Rescue College with 10 attendees. The next EC Institute is scheduled for September 25th September 27th, 2018 and graciously hosted by Virginia Beach EMS.
- 3. EMS Providers interested in becoming an Education Coordinator can access reference documents on the website at http://www.vdh.virginia.gov/emergency-medical-services/ems-education-coordinator-requirements/. Additionally, providers can contact Billy Fritz at billy.fritz@vdh.virginia.gov or call the office at 804-888-9120.

B. EMS Educator Updates:

The office has held five updates since January, one in the PEMS Region in March, BREMS Region in April, two in Northern Virginia in May, and one in WVEMS Region in June. The next update is scheduled for the TEMS Region in September. The schedule of future updates can be found on the OEMS web at: http://www.vdh.virginia.gov/emergency-medical-services/ems-educator-update-schedule/.

C. High School EMS Educator Professional Development Training

The Office participated in a professional development seminar in partnership with the Virginia Department of Education (DoE) for high school EMS educators. The meeting was engaging and discussed issues specific to high school education programs. During the meeting, the EMS curriculums were reviewed and discussed as part of their five-year revision.

EMS Training Funds

Table. EMS Certification and Training Funding (Year-to-Date)		
Certification Level	No. Awarded	Amount Awarded
EMT	74	\$3,6630.00
AEMT	5	\$2,971.00
Intermediate	0	\$0.00
Paramedic	68	\$147,288.00
I-to-P Special Award	73	\$395,368.00
EMSSP Total	220	\$549,290.00
CE-Auxiliary MOU Program Total	11	\$287,486.50
Grand Total (All Programs)		\$836,776.50

A. EMS Scholarship Program

- 1) Due to several unresolved program deliverables, the Office discontinued collaboration with VDH, Office of Health Equity (OHE) to manage the Scholarship program on May 31, 2018. Those who submitted an OHE application, depending on eligibility, will continue working with OHE.
- 2) The office is revamping the scholarship program. The new program is portal based and scheduled to launch late summer. There will be two pathways for funding, a scholarship component for individuals and a grant component for EMS agencies. The following is a synopsis of the planned program. Until the program design is complete, these are subject to change. An individual can apply for a scholarship. An EMS agency can apply for a grant based upon identified members affiliated with their agency. Only one award per individual is permitted. The program automatically determines eligibility criteria. Awards amounts are based upon the following criteria:
 - a) Base amount is a percentage of the cost derived from the number of credit hours assigned by the Virginia EMS Community College System (VCCS) for each level multiplied by the cost of a VCCS credit hour.
 - b) Additional funding added to the base amount will utilize eGift's stressors:
 - i. Health Professional Shortage Area
 - ii. Medically Underserved Area/Population

- iii. Fiscal Stress Index
- iv. Return to Localities fund balances
- 3) The awards are for initial EMS certification programs and will only be awarded to an individual once per level per five years.
- 4) The awardee is expected to receive EMS certification at the level of the course within 2 years of the course end date.
- 5) The contract signed by the awardee reflects the understanding that VDH has the ability to retrieve awards for failure to meet the requirements of the contract.
- B. Continuing Education (CE) and Auxiliary Programs MOU
 - The CE and Auxiliary Programs partnership with the Regional EMS Councils continues unchanged.

EMS Education Program Accreditation

- A. EMS accreditation program.
 - 1. Emergency Medical Technician (EMT)
 - a) Northern Virginia Community College has submitted documentation to add EMT accreditation.
 - b) Isle of Wight Volunteer Rescue has submitted an EMT accreditation application to the office. The Division of Education Development met with the interested parties and Isle of Wight has requested a postponement of consideration until summer, 2018.
 - c) Arlington County Fire Department received a Letter of Review to allow them to conduct their initial cohort course. The Office of EMS visited the program in April to review their progress.
 - 2. EMT Psychomotor Competency Verification Approval
 - a) Central Virginia Community College received approval for internal psychomotor competency verification effective August 17, 2017.
 - b) Prince William County Fire & Rescue received approval for internal psychomotor competency verification effective August 12, 2017.
 - c) Henrico County Fire Division of Fire received approval for internal psychomotor competency verification effective August 18, 2017.

- d) Frederick County Fire and Rescue received approval for internal psychomotor competency verification effective August 11, 2017.
- e) Tidewater Community College received approval for internal psychomotor competency verification effective August 18, 2017.
- f) Southwest Virginia Community College received approval for internal psychomotor competency verification effective September 8, 2017.
- g) Associates in Emergency Care received approval for internal psychomotor competency verification effective October 16, 2017.
- h) Chesterfield Fire received approval for internal psychomotor competency verification effective December 11, 2017.
- i) ECPI received approval for internal psychomotor competency verification effective January 17, 2018.
- j) Thomas Nelson Community College received approval for internal psychomotor competency verification effective February 1, 2018.
- k) Virginia Beach Training Center received approval for internal psychomotor competency verification effective February 1, 2018.
- 1) Southwest Virginia EMS Council received approval for internal psychomotor competency verification effective February 1, 2018.
- 3. Advanced Emergency Medical Technician (AEMT)
 - a) Newport News Fire Training has submitted their self-study for AEMT level accreditation. Their application has been reviewed and they have been issued a Letter of Review to allow their first cohort class to take place. The accreditation self-study packet will be assigned a site team who will visit the program upon completion of their first cohort class.
 - b) Blue Ridge Community College has submitted their self-study for AEMT level accreditation. Their application has been reviewed and they have been issued a Letter of Review to allow their first cohort class to take place. The accreditation self-study packet will be assigned a site team who will visit the program upon completion of their first cohort class.
 - c) Fauquier County has submitted their self-study for AEMT an EMT level accreditation. Their self-study is under final review for the issuance of a Letter of Review to allow their first cohort class to take place.

4. Intermediate – Reaccreditation

a) All Intermediate programs were granted an extension until December 31, 2019 based on the sunset date announced by National Registry. If they choose to maintain accreditation at the Advanced EMT level, they will submit a reaccreditation packet for that level.

5. Intermediate – Initial

a) No new accreditation packets have been received.

6. Paramedic – Initial

- a) John Tyler Community College's CoAEMSP accreditation visit was conducted on April 26 & 27. The program received a report with no deficiencies and has been promoted to recognition by CAAHEP.
- b) Rappahannock Community College has received their award of accreditation from CoAEMSP.
- c) ECPI has been granted a Letter of Review from CoAEMSP.

7. Paramedic – Reaccreditation

- a) Southside Virginia Community College had their 5-year CoAEMSP reaccreditation visit on October 6 & 7. Report will be forwarded upon completion. Results being forwarded to CAAHEP.
- b) Tidewater Community College has received their reaccreditation from CoAEMSP.
- c) Northern VA Community College had their 5-year CoAEMSP reaccreditation visit in February 2018. They are awaiting their findings report.
- d) Loudoun County Fire & Rescue had their CoAEMSP reaccreditation visit on February 26 & 27, 2018. They are awaiting their findings report.
- e) Stafford County and Associates in Emergency Care Consortium has their 5-year CoAEMSP reaccreditation visit scheduled for Aug. 6-8.
- f) Lord Fairfax Community College has their 5-year CoAEMSP reaccreditation visit scheduled for September 2018.
- g) Patrick Henry Community College has their 5-year CoAEMSP reaccreditation visit scheduled for November 2018.

- B. All students must enroll in a nationally accredited paramedic program to qualify for National Registry certification. National accreditation occurs through the *Committee on Accreditation of Educational Programs for the EMS Professions* (CoAEMSP www.coaemsp.org).
- C. For more detailed information, please view the Accredited Site Directory found on the OEMS web site at:

https://vdhems.vdh.virginia.gov/emsapps/f?p=200:1

National Registry

The National Registry of EMTs (National Registry) and its Board of Directors announced Bill Seifarth as the organization's new executive director. An industry veteran, Seifarth brings more than 20 years of experience to the position, including Emergency Medical Services (EMS) leadership at both the State and Federal levels, along with a background of managing several comprehensive certification programs.

Online EMS Continuing Education

Distributive Continuing Education

EMSAT programs are available FREE on the Internet. Certified Virginia EMS providers can receive free EMSAT continuing education courses on your home or station PCs. There are 60-70 category one EMSAT programs available on TargetSolutions/CentreLearn at no cost to Virginia EMS providers. For specifics, please view the instructions listed under Education & Certification, EMSAT Online Training. For more information on EMSAT, including schedule and designated receive sites, visit the OEMS Web page at:

 $\underline{http://www.vdh.virginia.gov/emergency-medical-services/emsat/}$

EMSAT		
Aug. 15, 2018	Scenario-Based Application of Pulse Oximetry and End Tidal CO ₂ Cat. 1 ALS, Area 16, Cat. 1 BLS, Area 11	
Sept. 19, 2018	"Unite the Right Rally": Preparation, Response and Lessons Learned in Charlottesville Cat. 1 ALS, Area 20, Cat. 1 BLS, Area 15	
Oct. 17, 2018	Dealing with Dementia, Delirium and Depression Cat. 1 ALS, Area 19, Cat. 1 BLS, Area 14	

Psychomotor Test Site Activity

- A. Between April 8, 2018 and July 7, 2018 there were 48- Consolidated Test Sites (CTS), no EMT accredited course and 21- ALS psychomotor test sites conducted.
- B. Interviews are scheduled in July for open examiner positions in Northern, Western/Southwestern, Central and ODEMSA regions. Interviews are scheduled in July for the open supervisor position in the central regions.
- C. Virginia BLS Psychomotor Examination scenarios are in the final review process. The revised scenarios will be in place by September 1, 2018. All interested parties will receive information prior to the rollout.

Other Activities

- Billy Fritz and Debbie Akers facilitated a professional development workshop in collaboration with the Virginia Department of Education (DoE) for High School EMT educators in July.
- Billy Fritz attended ICS-300 course in June.
- DED continues to work with OIM on changing EMT test order.
- DED has collaborated with the VCCS to update and standardize their EMS curriculum.
- DED participated in an item-writing program conducted by Fisdap.

Emergency Operations

V. Emergency Operations

Operations

• Emergency Operations Staff Changes

After 14 years with the Virginia Office of EMS, Winnie Pennington, Emergency Planner, retired from the state. During her time with OEMS Winnie assisted in developing, reviewing and exercising the Continuity of Operations Plan (COOP) for the Office of EMS and worked to educate and train EMS providers on the importance of emergency preparedness and emergency planning.

• Virginia-1 DMAT

Frank Cheatham, HMERT Coordinator, continued to attend meetings for the Virginia-1 DMAT during this quarter.

Committees/Meetings

Complex Coordinated Attack Conference

Karen Owens, Emergency Operations Manager, represented the Office of EMS at a three-day meeting focused on the state's ability to respond to complex coordinated terrorist attacks (CCTA). The meeting, June 26-28, 2018 brought together local, state, and federal officials to review the capabilities and deficiencies in response to these types of incidents.

Virginia NENA/APCO Combined Annual Spring Conference

Sam Burnette, Emergency Services Coordinator, and Ken Crumpler, Communications Coordinator, attended the 2018 Virginia Chapters of the National Emergency Number Association (NENA) and the Association of Public-Safety Communications Officers (APCO) Combined Annual Spring Conference in Virginia Beach on May 10-11, 2018. Topics included Virginia's Next Generation 9-1-1 (NG911) transition plans, new technologies designed to improve location identification associated with cellular based 911 calls; disaster preparedness, and emergency medical dispatch (EMD) outreach and training in the Commonwealth. Mr. Crumpler participated in the APCO Professional Communications Human Resources Committee (ProCHRT) meeting in an advisory role from the OEMS.

• DMV Highway Safety Partners

Frank Cheatham represented the Office of EMS at the regular meeting of the DMV Highway Safety Partners held at DMV.

• National Association of State EMS Officials (NASEMSO) HITS Committee

Frank Cheatham, HMERT Coordinator, continues to participate in the conference calls with the NASEMSO HITS Committee.

• Virginia Emergency Support Team (VEST) Training

Karen Owens, Emergency Operations Manager, participated in the Virginia Department of Emergency Management (VDEM) VEST training program on June 22, 2018. The program provided an opportunity for each Emergency Support Function to present on the capabilities they offer during statewide emergency response.

• Strategic Highway Safety Plan (SHSP)

HMERT Coordinator, Frank Cheatham, continues to serve on the SHSP Steering Committee and maintains update information regarding the monitoring the implementation and tracking of the plan.

• Center for Disease Control Meeting

On June 18, 2018, Karen Owens, Emergency Operations Manager, represented the Office of EMS at the CDC grants meeting hosted by the Office of Emergency Preparedness. During the meeting, Mrs. Owens gave a brief presentation on the capabilities of the Office of EMS during statement emergency events.

• EMS Provider Health and Safety Committee

The EMS Provider Health and Safety Committee held their quarterly meeting in conjunction with the May Advisory Board meeting. Karen Owens attended as OEMS staff representative. The committee discussed the work of the addiction subcommittee as well as the topics for upcoming health and safety bulletins.

• Traffic Incident Management Committees

Frank Cheatham, HMERT Coordinator, represented OEMS at the Statewide TIM Committee meeting. He shared data from the program since its inception. He also participated in the Training Oversight Committee. Frank is also a member of the Richmond area Executive TIM Committee and attends the meetings of that group.

Training

Virginia Emergency Support Team Exercise (VESTEX) 2018

Karen Owens, Emergency Operations Manager and Sam Burnette, Emergency Services Coordinator participated in the 2018 VESTEX on June 7, 2018. Mrs. Owens participated from the Department of Health's Emergency Coordination Center (ECC) in the City of Richmond while Mr. Burnette participated from the Virginia Department of Emergency Management (VDEM) Region 1 Regional Coordination Center (RCC) located in Chesterfield County. The exercise provided feedback on how VDEM's regional response model will interact with VDH and the OEMS.

• National Information Sharing Consortium (NISC) Webinar – RapidSOS

On June 21, 2018, Emergency Services Coordinator Sam Burnette participated in a webinar hosted by the NISC on a new technology called RapidSOS. This technology will support next generation 911 centers safeguard first responders and improve service to the community by providing precise device-based smartphone location to 9-1-1 centers.

National Incident Management System (NIMS)/Incident Command System (ICS) ICS 300 Training Conducted at OEMS

On June 25-27, 2018, the Office of Emergency Medical Services (OEMS) hosted an Federal Emergency Management Agency (FEMA) National Incident Management System (NIMS) Incident Command System (ICS) *ICS 300 – Intermediate ICS For Expanding Incidents* training course at its headquarters in Glen Allen, Virginia. The class was hosted in cooperation with the VDH Office of Emergency Preparedness (OEP) and was taught jointly by OEP Public Health Preparedness Coordinator James Sclater and OEMS Emergency Services Coordinator Sam Burnette.

• Virginia Department of Health – Leadership Essentials

The Division of Emergency Operations Emergency Services Coordinator Sam Burnette completed the Virginia Department of Health Leadership Essentials training program on May 22-24, 2018 in Lynchburg, Virginia. The program, begun in June 2017, aims to provide leaders at all levels with the same foundational understanding of what it means to be a leader at VDH.

• Department of Motor Vehicles (DMV) Safety Summit

Frank Cheatham, HMERT Coordinator and Ken Crumpler, Communications Coordinator attended the DMV Safety Summit held in Virginia Beach on May 21-24, 2018. Mr. Crumpler provided information on the Rider Alert motorcycle safety program. Mr. Cheatham collaborated with Stafford County Fire/EMS Deputy Chief Steve Weissman and Stafford County Sheriff's Office Deputy Jason Forman to deliver an *Anatomy of the Roadway* program and a session on unified command.

• Traffic Incident Management Train-the-Trainer

Frank Cheatham, HMERT Coordinator, travelled to Virginia Beach on May 16, 2018 to conduct a Traffic Incident Management Train-the-Trainer. The course provides an opportunity for public safety personnel to become trained as an instructor in Traffic Incident Management (TIM).

• Traffic Incident Management

During this quarter Frank Cheatham, HMERT Coordinator, conducted numerous Traffic Incident Management (TIM) programs throughout the Commonwealth. The program, which he taught at Colonial Forge High School for the EMT students and at Hanover Fire and EMS for the fire recruits, helps train first responders recognize the dangers associated with highway incidents as well as the steps they can take to maintain their safety during response.

Communications

• 2018 Command, Control, & Communications Vehicle Rally

Sam Burnette, Emergency Services Coordinator attended the *Command, Control, & Communications Rally* held on June 1, 2018 at the Fairfax County Police Department Driving Training Facility in Chantilly, Virginia. Mr. Burnette witnessed a variety of new communications equipment and vehicles that demonstrated some of the latest technology and techniques for improving interoperability during planned and unplanned events.

CISM

During this reporting quarter Regional Council CISM teams reported 7 events, including education sessions, training classes, meetings, and debriefings (both group and one-on-one).

Public Information and Education

VI. Public Information and Education

Public Relations

Public Outreach via Marketing Mediums

Via EMS Newsletter

The PR Coordinator finished coordinating articles, editing content and laying out the summer edition of the EMS Bulletin. This electronic newsletter was posted online and shared via social media and listserv email on June 29, 2018. This will be the last edition of this electronic newsletter as we work toward a communication style that is more readily available and concise.

Via Social Media Outlets

We continue to keep OEMS' Twitter and Facebook pages active, educational and relevant by posting daily and/or weekly updates that provide important announcements and health-related topics to increase awareness and promote the mission of OEMS and VDH. Some of the subjects that were featured from April – June are as follows:

- April New OEMS staff announcement, Regional EMS Awards program, National Public Health Week, National Public Safety Telecommunicators Week, a message from State Health Commissioner and the state adopts next generation 911-deployment plan.
- May Free admission during the month of May to Busch Gardens for first responders, Jim Chandler's passing, National Nurses Week, EMS databases down for maintenance, EMS Week and EMS Week info and proclamation, Challenge Coin Contest, floodwater safety tips, holiday office closure, food safety grilling tips, OEMS career opportunities and the 2018 Fallen Fire and EMS Memorial Service.
- **June** Hurricane season safety tips, 21st Annual Virginia Fallen Firefighters and EMS Memorial Service, Fire and EMS Memorial Week proclamation, ICS-300 Intermedia ICS for Expanding Incidents training, iPhones rolling out new feature in next software update that will share exact location with 911, New app teaches citizens to "Stop the Bleed," Save a Life and EMS Bulletin -Summer Edition.

Via Community Outreach

• **April 6** – The PR Coordinator staffed a table at the National Public Health Week event hosted at the VDH downtown office. Shared information about hands-only CPR, where to get more information about CPR training/locations and brought the AED trainer for participants to learn more about how they work in the event of an emergency.

• May 11 – The PR Assistant and PR Coordinator volunteered with other Office of Communications staff at the Virginia Foodbank as part of National Public Service Week.

Via GovDelivery Email Listserv (April - June)

• 6/29/18 – EMS Bulletin Summer Edition

Customer Service Feedback Form (Ongoing)

- PR Assistant provides monthly reports to EMS management regarding OEMS Customer Service Feedback Form.
- PR Assistant also provides biweekly attention notices (when necessary) to director and assistant director concerning responses that may require immediate attention.

Social Media and Website Statistics

As of July 19, 2018, the OEMS Facebook page had 5,768 likes, which is an increase of 170 new likes since April 20, 2018. As of July 19, 2018, the OEMS Twitter page had 4,462 followers, which is a decrease of 28 followers since April 20, 2018.

Figure 1: This graph shows the total organic reach* of users who saw content from the OEMS Facebook page, April – June. Each point represents the total reach of organic users in the 7-day period ending with that day. **Our most popular Facebook post received 26,540 total organic reach and 1,065 reactions, comments and shares.**

*Organic reach is the number of unique people who saw our post in the newsfeed or on our page, including people who saw it from a story shared by a friend when they liked it, commented on it, shared our post, answered a question or responded to an event. Also includes page mentions and check-ins. Viral reach is counted as part of organic reach.

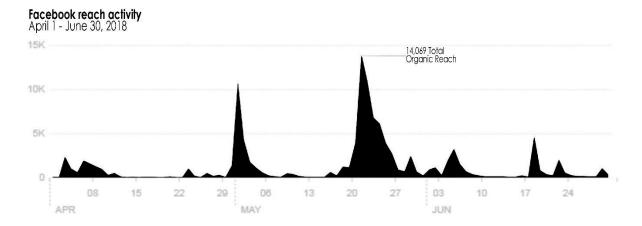


Figure 2: This graph shows the total organic impressions* over a 91-day period on the OEMS Twitter page, April - June. During this 91-day period, the OEMS Twitter page earned 477 impressions per day. The most popular tweet received 7,535 organic impressions.

*Impressions are defined as the number of times a user saw a tweet on Twitter. Organic impressions refer to impressions that are <u>not</u> promoted through paid advertising.

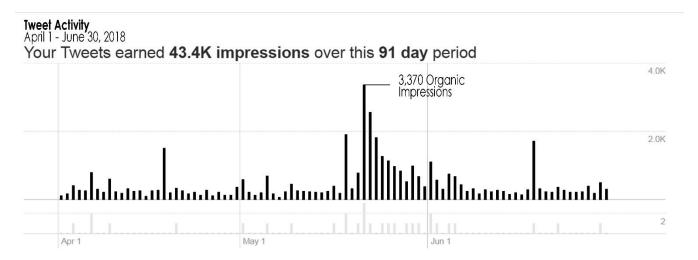


Figure 3: This table represents the top five most downloaded items on the OEMS website from April – June 2018. The Google Analytics reporting mechanism malfunctioned and did not gather the top downloaded items data for April – June. Unfortunately, this data is unrecoverable.

Figure 4: This table identifies the total number of unique pageviews, the average time on the homepage and the average bounce rate for the OEMS website from April – June 2018.

	Unique Pageviews	Average Time on Page (minutes: seconds)	Bounce Rate (Average for view)
April	9,970	00:49	3,111 (31.20%)
May	10,566	00:46	3,191 (30.20%)
June	12,868	00:50	2,838 (22.05%)

Google Analytics Terms:

A *unique pageview* aggregates pageviews that are generated by the same user during the same session. A *unique pageview* represents the number of sessions during which that page was viewed one or more times.

The **average time on page** is a type of visitor report that provides data on the average amount of time that visitors spend on a webpage. This analytic pertains to the OEMS homepage.

A **bounce rate** is the percentage/number of visitors or single page web sessions. It is the number of visits in which a person leaves the website from the landing page without browsing any further. This data gives better insight into how visitors are interacting with a website.

If the success of a site depends on users viewing more than one page, then a high bounce rate is undesirable. For example, if your homepage is the gateway to the rest of your site (e.g., news articles, additional information, etc.) and a high percentage of users are viewing only your home page, then a high bounce rate is undesirable.

The OEMS website is setup in this way; our homepage is a gateway to the rest of our information, so ideally users should spend a short amount of time on the homepage before bouncing to other OEMS webpages for additional information. Generally speaking, a bounce rate in the range of 26 to 40 percent is excellent and anything under 60 percent is good.

Events

EMS Week

- PR assistant coordinated the mailing of the EMS Week planning guides and drafted the letter of EMS Week activity ideas that was included in the mailing to all affiliated Virginia EMS agencies.
- PR assistant obtained a proclamation from the Governor's Office recognizing EMS Week in Virginia.
- PR coordinator prepared and distributed press release for EMS Week to statewide media.
- PR coordinator created an EMS Week webpage on the OEMS website and shared EMS
 Week info for the VDH homepage and prepared EMS Week-related tweet for VDH
 Twitter page. Information shared included the press release, Governor's proclamation,
 local promotions offered by area organizations and events occurring across the state in
 honor of EMS Week.
- PR assistant researched EMS Week events happening across Virginia and updated those
 events on the OEMS website. PR coordinator shared various promotions on Facebook
 and Twitter that were being offered for EMS Week by area retailers, in addition to events
 occurring across Virginia in honor of this special week.

EMS Week Analytics

During EMS Week, May 20 - 26, the PR Coordinator developed and coordinated a special challenge coin giveaway for the OEMS Facebook followers in order to engage EMS providers and boost social media traffic and reach. The PR Assistant was responsible for coordinating the mailing of the challenge coins to each of the winners.

This contest took place over four days, during which the PR Coordinator selected 15 winners each, for three out of the four giveaway days, and on the final giveaway day, 30 winners

were selected. The total number of random winners selected to receive a special edition OEMS challenge coin were 75 participants.

The following statistics are based off organic (unpaid) reach and impressions. During EMS Week, the OEMS Facebook and Twitter pages garnered the following social media interaction and engagement:

Facebook

- During EMS Week, we had 104 new Facebook page likes. That is more Facebook likes than we get in an entire quarter, we average around 30 new likes/month!
- Each giveaway post (there were four total) garnered more than 2k and upwards of 4k in organic reach.
 - o Our May 23 giveaway received an organic reach of 4,017 people with approximately 88 participants.
 - Our May 24 giveaway had an organic reach of 4,374 people with approximately 111 participants.
 - Our May 25 giveaway had an organic reach of 2,707 people with approximately 119 participants.
 - Our May 26 giveaway had an organic reach of 2,193 people with approximately 127 participants.
- Our most popular post was the EMS Week Governor's proclamation post, which reached 26,061 people, had 110 likes and was shared 221 times!

Twitter

- During EMS Week, our Tweets earned 11.9K impressions over this seven-day period.
 - o During this seven-day period, we earned 1.7K impressions per day.
- During EMS Week, our top tweet garnered 7,176 impressions, 37 likes and 19 retweets.
- For the month of May, we had 49 new followers and 22.4K in Tweet impressions. We average 38-40 new followers a month and 14.9K in tweet impressions/month.

Fire and EMS Memorial Week

The PR coordinator promoted Fire and EMS Memorial Week via the following plan:

- o Promoted the event date and brief information the memorial service and memorial week in the EMS Week press release.
- Created a special webpage on the OEMS website to promote this event. Also created information to be shared on the VDH website.
- Shared VDFP posts on the OEMS social media sites. Posted additional information on OEMS Facebook and Twitter pages.

EMS Symposium

- PR Coordinator continued design and layout of the Symposium Catalog, which will be posted online when registration opens at the end of July.
- PR Coordinator started updating the Symposium webpages on the OEMS website.
- PR Assistant started editing Symposium course content for online registration.
- On June 1, the PR Assistant designed and submitted a Symposium ad for the July edition of the Commonwealth Chiefs magazine.
- PR Coordinator revised the Symposium Sponsorship Guide and posted it on the OEMS website.
- PR Coordinator and PR Assistant reviewed Symposium commercials and submitted edits.

Governor's EMS Awards Program

- PR Assistant designed the Regional EMS Award Nomination Deadline and Awards Ceremony schedule as a flyer that was shared on the OEMS website.
- PR Assistant worked with photographer to schedule their attendance to take photos at each Regional EMS Council award ceremony.
- PR Assistant attended the Thomas Jefferson Regional EMS Council Awards ceremony in Charlottesville.
- PR Coordinator attended the Northern Virginia EMS Council Awards ceremony in Fairfax.
- PR Coordinator and PR Assistant provided press release templates for Regional EMS Councils to use when submitting their regional award announcements.

Media Coverage

The PR Coordinator was responsible for fielding the following OEMS and VDH media inquiries April – June, and submitting media alerts for the following requests:

- May 11 Reporter from Politico requested info about IMD Medicaid 1115 waiver.
- May 16 Reporter from the Virginian Pilot requested info regarding EMS/911 services pertaining to the Tidewater region.

OEMS Communications

The PR Coordinator and PR Assistant are responsible for the following internal and external communications at OEMS:

- On a daily basis, the PR Assistant monitors and provides assistance to the emails received through the *EMS Tech Assist* account and forwards messages to their respective divisions.
- The PR Assistant is the CommonHealth Coordinator at OEMS, and as such, she sends out weekly CommonHealth Wellnotes to the OEMS staff.
 - The PR Assistant coordinated a representative from the Virginia Retirement System to provide information to OEMS staff about Defined Contribution Plans.
 - The PR Assistant coordinated an OEMS Lunch and Learn session through the CommonHealth program. The Regional CommonHealth Coordinator, Craig Hicken came in to present the Metabolism Makeover campaign to office staff.
- The PR Coordinator designs certificates of recognition and resolutions for designated EMS personnel on behalf of the Office of EMS and State EMS Advisory Board.
- Upon request, the PR Coordinator creates certificates for free Symposium registrations to be used at designated Regional EMS Council events.
- PR Coordinator provides assistance for the preparation of some responses for constituent requests.
- PR Coordinator and PR Assistant respond to community requests by sending out letters, additional information, EMS items, etc.
- The PR Coordinator and PR Assistant provide reviews and edits of internal/external documents as requested.
- PR Coordinator and PR Assistant update OEMS website with content and documents upon request from office Division Managers.
- The PR Coordinator is responsible for monitoring social media activity and requests received from the public. She forwards questions to respective OEMS division managers and provides response to the inquiries through social media.
- The PR Coordinator is responsible for coordinating and submitting weekly OEMS reports to be used in the report to the Secretary of Health and Human Resources.
- When applicable, the PR Coordinator submits new hire bios and pictures to be included on the New Employees webpage on the VDH intranet.

VDH Communications

VDH Communications Tasks – The PR Coordinator and PR Assistant are responsible for covering the following VDH Communications Office tasks from April – June:

- April June The PR Coordinator is responsible for providing back-up for the Communications Office staff, including coverage for media alerts, VDH in the News, media assistance and other duties upon request.
- VDH Communications Conference Calls (Ongoing) The PR Coordinator and PR
 Assistant participate in bi-weekly conference calls and polycoms for the VDH
 Communications team.
 - PR Coordinator and PR Assistant participate in monthly Agencywide Communications Workgroup
 - PR Coordinator participates in the VDH website/social media subcommittee.
 - PR Assistant will begin participating on a subcommittee in August 2018.

Commissioner's Weekly Email – The PR Coordinator submitted the following OEMS stories to the commissioner's weekly email, from April – June. Submissions that were recognized appear as follows:

• 4/2/18 - OEMS Staff Attends National EMS Today Conference

In an effort to broaden its outreach to EMS providers in bordering states and on a national level, VDH's Office of Emergency Medical Services (OEMS) staff recently attended the renowned EMS Today conference in Charlotte February 20-23. OEMS members staffed an exhibitor booth at the conference and were able to collect contact information for 145 participants who visited the booth. This event provided a great opportunity to share important information about the Virginia Office of EMS, the Virginia EMS Symposium, additional training opportunities, reciprocity and legal recognition for out-of-state EMS providers interested in working in Virginia. EMS Today is a national event that offers networking with 4,500+ EMS professionals from around the world, countless hands-on experiences (both onsite and off) and the most innovative products and services available to the industry, displayed by more than 250 companies. Many thanks to Advanced Life Support Training Specialist Debbie Akers and Division Manager for Community Health and Technical Resources Tim Perkins for staffing the exhibitor booth and sharing their wealth of knowledge pertaining to OEMS, training opportunities and all of the great things happening in Virginia's EMS System. Thanks also to Public Relations Coordinator Marian Hunter for organizing staff attendance, coordinating event marketing and staffing the exhibitor booth.

• 4/9/18 - OEMS Staff Attends Fire Rescue Conference

Office of Emergency Medical Services staff members attended the recent Virginia Fire Chiefs Association Fire Rescue Conference in Virginia Beach. During this event, Division of Educational Development staff members Training Manager Warren Short, Advanced Life Support Training Specialist Debbie Akers, Training and Development

Coordinator Sr. Charles Faison and Basic Life Support Training Specialist Billy Fritz assisted with the recording of continuing education. Public Relations Assistant Tristen Graves staffed an exhibitor booth and handed out information regarding the Governor's EMS Awards, the Virginia EMS Symposium, EMS Scholarship Program Emergency Medical Services Approved Training webcasts and other EMS-related info. These outreach efforts enabled OEMS to obtain contact information for 100 event participants who visited its booth.

• 4/23/18 - OEMS Staff Provides Traffic Incident Management Training

The Office of Emergency Medical Services (OEMS) hosted a Train-the-Trainer Class for the Federal Highway Traffic Incident Management Program, Strategic Highway Research Program (SHRP) 2 February 28 and March 1, 2018. The class was offered to help increase the number of trainers for the statewide program for first responders that handle traffic incidents. The program was first put together by the Federal Highway Administration and was recently updated. Virginia became one of the first states to tailor the federal program to be more state-specific. This class was the first train-the-trainer class lead by OEMS Health and Medical Emergency Response Team Coordinator Frank Cheatham, along with trainers from the Virginia State Police and the Virginia Department of Transportation. Twenty-one students representing various disciplines of the first responder community participated in the training

Regulation and Compliance

VII. Regulation and Compliance

The Division of Regulation and Compliance performs the following tasks:

- Licensure
 - o EMS Agency and vehicles
- Regulations/Compliance
 - o EMS Agencies
 - o EMS Vehicles
 - o EMS Personnel
 - o RSAF Grant Verification
 - o Regional EMS Councils
 - o EMS Physicians
 - o Virginia DDNR
- Background Investigation Unit
- EMS Physician Endorsement

The following is a summary of the Division's activities for the second quarter, 2018:

EMS Agency/Provider Compliance

Enforcement	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Citations	1	3			40	55	53	78	
EMS Agency	0	2			22	23	23	37	
EMS Provider	1	1			18	32	30	41	
Verbal Warning	1	1			21	6	7	5	

EMS Agency	1	1			11	5	3	2	
EMS Provider	0	0			10	1	4	3	
Correction Order	0	2			59	64	62	30	
EMS Agency	0	2			59	64	62	30	
EMS Provider	0	0			0	0	0	0	
	1st	2nd	3rd	4th	CY	CY	CY	CY	CY
	Quarter	Quarter	Quarter	Quarter	2014	2015	2016	2017	2018
Temp. Suspension	Quarter 12	Quarter 3	Quarter	Quarter	2014	2015	2016	2017	2018
			Quarter	Quarter					2018
Suspension	12	3	Quarter	Quarter	20	26	25	15	2018
Suspension EMS Agency	0	0	Quarter	Quarter	20 0	26 0	25 0	15	2018
EMS Agency EMS Provider	0 12	3 0	Quarter	Quarter	0	26 0 26	25 0 25	15 1 14	2018

						11	7	
Revocation	0	0		7	8	4	4	
EMS Agency	0	0		0	0	0	0	
EMS Provider	0	0		4	8	4	4	
Compliance Cases	21	38		202	166	121	160*	
EMS Opened	16	17		140	112	71	77*	
EMS Closed	5	12		62	54	48	53	
Drug Diversions	2	2		21	15	16	20	
Variances	8	15		29	23	16	8*	
Approved	6	10		16	14	13	6*	
Denied	2	4		13	9	3	2*	

Note: Not all enforcement actions require opening a compliance case. Because some actions are stand-alone, on the spot infractions, a full compliance case is not opened. Therefore, the number of enforcement actions will not equal the total number of compliance cases.

x – Indicates data not available

Hearings

May 23 - (3) Informal Fact Finding Conferences scheduled. Only 2 were conducted with determinations submitted to the Health Commissioner for disposition.

Licensure

Licensure	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
EMS Agency	600	596			669	646	638	621	
New	0	4					6	5	
EMS Vehicles	4,154	4211			4,137	4,568	4,227	4,679	
Inspection	612	1114			2,997	2,854	3,400	3,089*	
EMS Agency	65	96			289	319	222	319	
EMS Vehicles	547	923			2,261	1,964	2,564	2,278	
Spot	65	75			447	571	563	492*	

^{*}Note: Statistical date may be slightly incomplete due to the migration to Oracle platform.

Background Investigation Unit

The Office of EMS began the process of conducting criminal history background checks utilizing the FBI fingerprinting process through the Central Criminal Record Exchange (CCRE) of the Virginia State Police on July 1, 2014. A dedicated section with relevant information about this process is on the OEMS web site at: http://www.vdh.virginia.gov/emergency-medical-services/regulations-compliance/criminal-history-record/.

Background	1st	2nd	3rd	4th					
Checks	Quarter	Quarter	Quarter	Quarter	CY	CY	CY	CY	CY
					2014	2015	2016	2017	2018
Processed	1,837	1693			3,488	6,773	8,157	7,633	
Eligible	1,746	1575			2,683	5,415	5,916	6,015	
Non-Eligible	10	13			19	50	46	30	
Outstanding	23	0			546	1,091	1,362		
Jurisdiction	246	359				189	1,167	1,301	
Ordinance									

Regulatory

OEMS staff continue to work with key EMS stakeholder groups to review suggested revisions to sections of the current EMS Regulations (12VAC5-31). Once completed, these recommended changes will be sent to the Rules and Regulations Committee of the state EMS Advisory Board for review and then submitted as a regulatory review packet.

- A Notice of Intended Regulatory Action (NOIRA) posted in the Virginia Register of Regulations (Vol. 33 Issue 19) on May 15, 2017. The deadline for public comment was June 14, 2017. No public comments were submitted. OEMS Staff is working to complete the required documentation for the next step for the "Proposed" EMS Regulations.
- The first work session of the Rules and Regulations Committee was held on October 25, 2017 in Waynesboro to work on the draft of the "Proposed" EMS Regulations (Chapter 32). A second work session of the Rules and Regulations Committee was held in Charlottesville on April 3, 2018. The third work session of the Rules & Regulations Committee was held in Charlottesville on June 19, 2018. The Assistant Attorney General attended the June 19 work session where changes to the proposed draft EMS Regulations (12VAC5-32) were finalized related to:
 - legislative action completed during the 2018 session of the VA General Assembly impacting the EMS Regulations,
 - o correction of references to Code of Virginia sections that have changed,
 - changes in practice, process and procedures resulting from the development of a new Licensure, Compliance and Regulations (LCR) program utilized by OEMS,
 - incorporating definitions and terminology used in the Recognition of EMS Personnel Licensure Interstate Compact (REPLICA),
 - updating references to current national EMS certification levels and testing procedures,
 - o amending policies related to criminal convictions,
 - o updating EMS physician qualifications and responsibilities,
 - o updating equipment and supply requirements for EMS vehicles,

- And including references to fatigue management, use of red lights and sirens, mental health awareness training, impaired EMS providers, and new ambulance standards and specifications designed to improve the safety of EMS personnel and patients.
- It is projected a draft of the proposed EMS regulations will be presented to the state EMS Advisory Board at the November 7, 2018 meeting.

EMS Physician Endorsement

Number of Endorsed EMS Physicians: As of June 30, 2018: 231

Four regional OMD workshops were conducted during Q2, Thomas Jefferson Regional EMS Council, Lord Fairfax Regional EMS Council, the combined workshop with Western Virginia and Southwest Virginia Regional EMS Councils, and Old Dominion Regional EMS Council. The next OMD workshop is scheduled on November 8, 2018 in conjunction with the Virginia EMS Symposium in Norfolk.

Interested OMD's can contact the Office to register for the upcoming workshop. There is no cost to attend the workshop and CME is offered. OEMS staff is also reviewing and updating the online OMD training program that is utilized as a pre-requisite for anyone interested in becoming an endorsed EMS Physician in Virginia.

Additional Regulation & Compliance Division Work Activity

The Regulation and Compliance staff held their bi-monthly staff meetings on June 6-8, 2018 in Glen Allen, Virginia. The next divisional staff meeting is scheduled for September 5-7, 2018 in Roanoke, Virginia.

During Q2 of CY2018 Regulation and Compliance Division Manager attended and completed the Reid Technique of Investigative Interviewing & Advanced Interrogation in Washington, DC. Ongoing training includes the Leadership Essentials Certificate Program in Richmond, Virginia (November 2018), and National Certified Investigator & Inspector training in Denver, CO (August). Staff have provided technical assistance and conducted educational presentations to EMS agencies, entities and local governments as requested.

OEMS field staff assists the OEMS Grants Manager and the RSAF program by performing reviews of submitted grant requests as well as verification of RSAF grants awarded each funding cycle.

OEMS staff, in conjunction with the VDH, Office of Information Management (OIM), has completed the process of converting data, files and processes from the existing Licensure and Investigation Lotus Notes database to a new Licensure, Compliance and Regulations (LCR) Oracle database for the Division of Regulation and Compliance. This new platform went live on

December 16, 2017. This project streamlines the process for EMS agencies to submit requests for permits, schedule inspections, report drug diversions and offers additional tools for them to upload records, reports and information; in addition to staff tracking, agency management and access to inspection results. Mr. Paul Fleenor and Mr. Wayne Berry worked extremely hard to assist OIM with the design, implementation and training for OEMS staff members on this project. Staff are currently working on user guidelines for EMS agencies that will soon be disseminated.

Mr. Ronald D. Passmore has served as the new Manager of the Regulation and Compliance Division since April 25, 2018. Over the 6 months between the former manager & Mr. Passmore, managerial unit work activities were handled by Mr. Scott Winston, Assistant Director; and Mr. Jimmy Burch & Ms. Heather Phillips, EMS Program Representative Supervisors.

Impaired EMS Provider Policy

The Office, in conjunction with VDH is in the process of finalizing an internal policy to provide a pathway for the re-instatement of impaired EMS providers who have been sanctioned because of a substance abuse issue. Collaborative efforts have begun with several committees of the state EMS Advisory Board to ensure consistency with project development regarding treatment and monitoring programs, such as the Health Practitioners Monitoring Program (HPMP) utilized by the Virginia Board of Nursing and the Board of Medicine. Once the policy is finalized it will be posted on the OEMS web site.

Special Event Permits

The Office, in collaboration with the Assistant Attorney General, Ms. Amanda Lavin, developed the policy regarding utilization of out of state EMS providers for widely attended public events when local resources of Virginia certified providers are unavailable.

§ 32.1-111.9:1. Out-of-state emergency medical services providers; exceptions.

A copy of this policy regarding how to apply for a special event permit is located on the Virginia Office of EMS – Regulations & Compliance website.

http://www.vdh.virginia.gov/content/uploads/sites/23/2018/06/Special-Event-Staffing-Policy.pdf

Trauma and Critical Care

VIII. Trauma and Critical Care

Patient Care Informatics

- ImageTrend Elite
 - Support staff fielded over 300 emails, support tickets and phone calls for the following issues:
 - User Account maintenance
 - Data import issues
 - Report Writer issues
 - DDNR related questions
 - General Software Issues
- Virginia Elite Updates
 - The initial three-year contract term with ImageTrend ended June 30, 2018. OEMS exercised its option to renew the contract for a one-year period beginning July 1, 2018. There are two one-year renewal options remaining in the original contract.
 - A new optional feature, JotPad, was activated in June 20188. JotPad will allow a
 provider to write notes during the patient encounter for reference when creating the
 EPCR later. The notes are not visible in incident print reports and are available
 even if the incident is locked.
 - New/updated validation rules went into effect 4/30/2018. The rules (eDisposition.02, eVitals.08, eDispotition.24, ePayment.01, eDispotition.01) were implemented in the ongoing effort to improve data quality. More information on the changes are in the Knowledgebase: Virginia Elite Validation Rule updates Activation Date: 04.30.2018.
- Virginia Trauma Registry Updates
 - O Support staff attended a weeklong intensive training session at the ImageTrend headquarters in June 2018. The focus of the training was database management of the trauma registry product in preparation for the first major update since the purchase of the software in 2015. This update will bring Virginia more in line with nationally tracked data elements and is scheduled to occur early fourth quarter of 2018.

• EMS Data

- Submission and Data Quality: Staff works monthly with EMS agencies and the Regulation and Compliance Division to improve the quality of the data that is being submitted to the Elite system.
 - The latest Data Quality Report and Data Submission Compliance Reports can be found on the Knowledgebase here:
 Knowledgebase - Data Submission Report

Average Incident Validity Score by Council			
	Apr-18	May-18	18-Jun
Blue Ridge	96.6	96.7	96.7
Central Shenandoah	99.6	99.7	99.8
Lord Fairfax	99.6	99.7	99.8
Northern VA	92.6	92.9	94.8
Old Dominion	97.5	97.5	97.6
Peninsulas	99.2	99.3	99.3
Rappahannock	95.8	95.9	97.6
Southwest	93.6	93.7	95.3
Thomas Jefferson	98.6	99	99.1
Tidewater	94.2	97.9	98.2
Western	98.3	98.5	98.9

0

- 0
- OEMS support staff has been working to decrease the submission of custom codes that are outside the parameters of the Virginia Data Dictionary.
 - A review of the disposition codes of 260,000 records from 1st quarter 2018 revealed 2266 records with invalid codes. The same period in 2017 revealed 14,000 invalid codes. The delinquent agencies were notified of the results and were given steps to correct the issue.
 - Staff also conducted initial documentation reviews on the City, County, and State fields in over 370,000 records. The results were shared with our agencies and staff created educational materials for the agencies to assist them in improving their data input for these fields. Follow up documentation reviews will be conducted to assess the effectiveness of the education.
- Staff attended the June meeting of the Virginia Technology Group and conducted a presentation on the importance of data quality and the need for adherence to the

standards in the Virginia Data Dictionary. The presentation included:

- Examples of specific issues with data quality utilizing de-identified data from both the first QTR of 2017 and first QTR of 2018 for comparisons and examples.
- Explanation of how research projects are affected when the standards are not followed.
- Description of the volume of issues in relationship to the total volume of data the state received.

Trauma and Critical Care

- Trauma System Plan Taskforce
 - The Trauma System Plan Taskforce is a multi-disciplinary task force representing the trauma and EMS system in Virginia. Convened at the request of the Chair and Executive Committee of the State EMS Advisory Board, the Taskforce is addressing the recommendations contained in the American College of Surgeons Trauma System Consultation Report. The task force identified subject matter experts to serve on work groups that examined key aspects and components of the current trauma system in Virginia. The Trauma System Plan Taskforce and the workgroups have been meeting over the last two years to develop the Commonwealth of Virginia Trauma System Plan.
 - Highlights
 - 101 system stakeholders participated in the ACS Trauma Consultation Visit held September 1-4, 2015. The group represented all facets of trauma care to include trauma surgeons, emergency medicine physicians, neurosurgeons, trauma program managers, prehospital providers, Regional Council representatives, state agency representatives (DARS, OAG, VDOT, VDH, UNOS) hospital administrators, air medical service providers, representatives from medical and nursing professional organizations, and the Chief Deputy Commissioner for Public Health and Preparedness.
 - The work was accomplished by seven workgroups:
 Administrative, Injury and Violence Prevention,
 Data/Education/Research/System Evaluation, Post-Acute
 Rehabilitative, Pre-Hospital Care, Acute Definitive Care and
 Disaster Preparedness.

- The workgroups met 99 times between March 2016 and March 2018.
- 129 individuals contributed to The Trauma System Plan.
- The membership rosters, meeting dates, locations and meeting minutes are on the OEMS web site at <u>Trauma System Emergency</u> Medical Services.
- The workgroups presented the final draft plan to the Trauma System Oversight and Management Committee at the June 7, 2018 meeting. The Plan was unanimously approved by the Committee and is has been submitted to the State EMS Advisory Board for approval at the August 3, 2018 meeting. The Motion is in Appendix A; the final Plan is in Appendix B of this report for review prior to voting.

Trauma Center Updates

- Verification Visits
 - o Inova Loudon Hospital underwent a successful one-year provisional review in May 2018. The Commissioner has verified them as a Level III trauma center.
- Designation Visits
 - Carilion Roanoke Memorial Hospital has submitted a letter of intent to seek Level
 1 Pediatric Trauma Designation. They are still in the application process and a site visit has not been scheduled.
 - Sentara Norfolk General has indicated intent to seek Level I Burn designation.
 They are still in the application process and a site visit has not been scheduled.
- The Trauma /Critical Care Coordinator gave a presentation to the Association of Virginia Trauma Registrars (AVaTR) at their regular meeting on June 6. The presentation, titled "Trauma Scoring Systems: A Recipe for Understanding", explains the various injury scales and scoring systems, how they are calculated, and how they are used in patient care and trauma research, providing baseline knowledge for Registrars. The presentation was well received and several Registrars have commented on its day-to-day usefulness. Further work with AVaTR will be arranged to help improve the quality of data submitted to the Virginia State Trauma Registry.

EMS for CHILDREN (EMSC) PROGRAM

New 4-Year EMSC State Partnership Grant awarded.

The Office of EMS has officially received a new EMSC State Partnership Grant from the



Department of Health and Human Services (HHS). The grant period began April 1, 2018 and will run through March 31, 2022, with the possibility of a 1-year extension; the amount of \$520,000 over the 4-year period is the base award. As an aside, the EMS for Children budget relies annually on

Congress to re-affirm its access to funds, which averages about \$130,000 per state program funded yearly. Each state and six U.S. protectorates are eligible for <u>one</u> EMSC State Partnership Grant.

Initially, the President had chosen not to fund the federal EMS for Children program in his budget recommendation, but it was reauthorized for funding when the President signed the recent Omnibus legislation (with a slight overall increase in funding). Here is a short list of activities included in the next EMSC 4-year grant cycle (4/1/18 through 3/31/22):

Pediatric Preparedness:

- Collaborate to support pediatric disaster planning and preparedness for hospitals, EMS agencies and governmental entities,
- Provide no-cost <u>on-site</u> emergency department pediatric capability evaluations *upon* request (8 planned per year),
- Participate in two major Quality Improvement (QI) Collaboratives
- Champion Virginia participation in the 2019 National Pediatric Readiness Assessment.

Education and training:

- Support and manage a dedicated pediatric track at each annual EMS Symposium—provide at least 30 pediatric Symposium registration awards for the 2018 EMS
 Symposium (interested attendees should contact David Edwards (david.edwards@vdh.virginia.gov),
- Support regional pediatric training and ENPC courses,
- Assist in producing two EMSAT (satellite-based and taped) pediatric topics each year
- Develop resources for "regular provider level pediatric skills checking" (PM 03)

- In Years 2,3 and 4, a potential EMSC Boot Camp to support and train agency pediatric coordinators (PM 02), roll out pediatric skills check CE modules (PM 03), provide pediatric medication dosing best practices, demonstrate child safe transport alternatives, etc.)
- Support and provide resources for outreach programs (like "Stop the Bleed")
- Continued efforts to promote pediatric dosing accuracy, with some purchases as funds allow.

Injury Prevention:

- Promote and support injury and illness prevention initiatives
- Actively support a NASEMSO initiative to <u>develop specific accredited ambulance and equipment standards</u> (these may guide future manufacture and crash testing of safer equipment alternatives)
- Continued purchasing of ambulance child restraint systems, as funds allow.

2018 Hospital Assessment ends August 17

Surveying of hospitals regarding the presence of *written inter-facility transfer guidelines and agreements* (Performance Measures EMSC 06 and 07) began in June and will end August 17, 2018. The target contacts for the survey are emergency department nurse managers, but the information may come from any reliable resource within the selected hospitals (generally, 24-hour civilian facilities that have an Emergency Department—not free-standing EDs). Every state is being surveyed simultaneously, instead of by cohort, in order to meet urgent deadlines for the data faced by the Health Resources and Services Administration (HRSA).

Previous Peds-Ready Assessment results continue to drive hospital follow-up efforts

Readiness gaps identified as part of the Peds Ready Assessment of 2014 continue to receive attention and have resulted in specific Emergency Department recommendations for Virginia:

- Weigh and record children in *kilograms* (to help prevent medication errors)
- Include children *specifically* in hospital disaster/emergency plans
- Designate a *Pediatric Emergency Care Coordinator* (PECC) (the single most important item a hospital can implement to ensure pediatric readiness including patient safety)
- Ensure pediatric patients *are included* in the quality improvement process

• Review and/or adopt *pediatric safety policies* (radiation dosing, medication dosages, abnormal vital signs).

Sheltering Plan re-design continues...

The EMSC Coordinator continues to serve on the Mass Care Task Force, charged with redesigning Virginia's Sheltering Plan.

Results of 2018 EMS Agency Assessment.

The 2018 national assessment of EMS Agencies to determine baseline data for new EMSC Performance Measures (PM) EMSC 02 (coordination of pediatric care) and EMSC 03 (use of pediatric-specific equipment) was competed at the end of February.

Virginia Results

Response Rate: 73%

PM 2 13.4% (agency has a PECC)

PM 3 20.1% (skills verification 6+ points)

[87 out of 328 (26.5%) stated they are interested in adding a PECC, or are planning to add a PECC]

National Results

Response Rate: 79%

PM 2 23% (agency has a PECC) PM3 23% (skills verification 6+

points)

Virginia submitted 435 surveys, the 6th largest number submitted by any state, and demonstrated a high level of cooperation in obtaining the data. The Virginia EMSC program is indebted to individual agency leaders, EMS regional councils, OMDs and OEMS Program Representatives for their assistance.

Ambulance child restraint systems now available

The EMS for Children Program is preparing to distribute a number of Quantum ACR-4 Child Restraint Systems to Virginia EMS agencies who have need. A survey of EMS agencies is in progress to help prioritize which agencies will first be accommodated, and more of the restraint systems are being purchased with new EMSC funding, and will enable us to continue distribution. EMS agency leadership is encouraged to contact David Edwards (david.edwards@vdh.virginia.gov) if they wish to be considered for placement of any these devices.

EMSC Committee Quarterly Meeting

The EMS for Children Committee met July 12, 2018 from 3-5 pm at the Office of EMS headquarters in Glen Allen, VA. In addition to the posted draft agenda, many of the items in this report were discussed, as well as discussion of:

- the forthcoming trauma system plan proposal under consideration and the scope of pediatric participation in the process (to this point and going forward)
- support of the pediatric track at the 2018 Symposium (including 30+ paid registrations),
- reports of interest soon be generated by the state child fatality review team,
- relevant issues pertaining to school nurses and collaboration with EMSC,
- practical challenges presented by a recent critical power outage at a Richmond hospital.

Several work groups are forming under the umbrella of the Virginia EMSC program (<u>not</u> the EMSC Committee) to assist in projects and details connected with upcoming grant activities summarized earlier in this report. There was a quorum present at the meeting, but there were no action items generated by the Committee. The next quarterly meeting of the EMS for Children Committee will be October 4, 2018 at the OEMS headquarters in Glen Allen, VA.

Suggestions/Questions

Please submit suggestions or questions related to the Virginia EMSC Program to David P.

Edwards via email (david.edwards@vdh.virginia.gov), or by calling 804-888-9144 (direct line).

The EMS for Children (EMSC) Program is a part of the Division of Trauma and Critical Care, within the Virginia Office of Emergency Medical Services (OEMS).

The Virginia EMSC Program receives significant funding for programmatic support through the EMSC State Partnership Grant (H33MC07871) awarded by the U.S. Department of Health and Human Services (HHS) via the Health Resources & Services Administration (HRSA), and administered by the Maternal and Child Health Bureau (MCHB) Division of Child, Adolescent and Family Health.

Respectfully Submitted

OEMS Staff

Appendix

A

State EMS Advisory Board Motion Submission Form

⊠ Co	mmittee Motion:	Name:	Trauma System Oversight and Management Committee
Inc	dividual Motion:	Name:	
Motion	•		
		Commony	vealth of Virginia Trauma System Plan dated June 7, 2018.
1301110	o moves to decept the	Commons	vedicit of vinginia frauma system fram dated same 7, 2010.
ENAS DI	lan Dafaranaa /inalud		and a subsection of the subsec
	lan Reference (include		unities to work collaboratively with other state agencies,
			ove processes and patient outcomes. 3.1.4 Maintain and enhance
	numa Center designati		
		1	
Comm	itteee Minority Opini	on (as nee	ded):
For Bo	ard's secretary Use o	nly:	
Motio	n Seconded by:		
Vote:	By Acclamation:	Appro	ved Not Approved
	By Count	Yea:	Nay: Abstain:
Board'	s Minority Opinion:		

Commonwealth of Virginia Trauma System Plan FINAL DRAFT

Final Draft for EMS Advisory Board Approval

Created: September 1, 2017 Last modification: June 7, 2018 By: Trauma System Plan Task Force

Approved by:

- ◆ Trauma System Plan Task Force June 7, 2018
- ◆ Trauma System Oversight and Management Committee June 7, 2018

Table of Contents

<u>Introduction</u>	
Introduction	
Purpose of the Virginia Trauma System Plan	
Justification for the Development of a Comprehensive Trauma System PlanPlan	
Proposed Trauma System Committee Structure	
Trauma System Plan Task Force Mission, Vision, Values and Code of Conduct	
Committees Commerities Coals and Objectives	
Committees – Composition, Goals and Objectives	
Administrative Components	
Trauma Administrative and Governance	10
System Improvement =	
Operational Components	
Injury and Violence Prevention —	15
Prehospital Care =	16
Acute Care =	18
Post-Acute Care -	19
Emergency Preparedness and Response 🗷	
Benchmarks, Indicators and Scoring (by Committee assignment)	
Trauma Administrative and Governance 📙	22
System Improvement =	43
Injury and Violence Prevention —	
Prehospital Care =	
Acute Care =	
Post-Acute Care -	70
Emergency Preparedness and Response	72
<u>Appendices</u>	
Appendix A – EMS Advisory Board members, 2016-2018	
Appendix B – Trauma System Management and Oversight Committee members, 2016-2018	
Appendix C – Trauma System Plan Contributors	
Appendix D – Meetings of the Trauma System Plan Task Force and workgroups	
Appendix E – American College of Surgeons Trauma System Consultation participant list	80

Introduction

Injury is the leading cause of death for persons between the ages of 1 and 44, and one of the leading causes for all age groups.

When a person is severely injured there are three factors that improve chances of survival and decrease chances of permanent disability. These three factors are getting that person 1) to the right hospital, 2) in the right manner, and 3) in the right amount of time. An organized trauma system focuses on enhancing these three factors, as well as all of the other elements surrounding and influencing them. These other elements include and, as this plan demonstrates, are not limited to, rehabilitation to return the patient to their pre-injury health status, prevention of injury, and planning and preparing for disaster. Multiple research studies have shown that an injured person's chances of dying or suffering a severe or permanent disability are significantly reduced if their injuries are sustained in an area with an organized trauma system.

Purpose of the Virginia Trauma System Plan

The purpose of this document is to provide Virginia Trauma System stakeholders – including healthcare providers, government regulators and the public – with a road map of the steps needed to close identified gaps in the system. This will help ensure people injured in the Commonwealth are taken to the right hospital, in the right manner, and in the right amount of time.

<u>Justification for the Development of a Comprehensive Trauma System Plan</u> Background

- In September 2015 the Commonwealth of Virginia voluntarily underwent a consultation visit by the Trauma Systems Consultation program of the American College of Surgeons (ACS). The purpose of the consultation was to gain an objective evaluation and assessment of the current trauma system in Virginia. The basis for the consultation is the Model Trauma Systems Planning and Evaluation document (MTSPE), created by the federal Health Resources and Services Administration (HRSA). The resulting Consultation Report is a comprehensive review of Virginia's current status from a public health perspective and includes recommendations for all facets of the system;
- The Executive Committee of the Emergency Medical Services Advisory Board charged the Trauma System Oversight and Management Committee (TSOMC) with addressing the ACS recommendations;
- Central to the request for the ACS consultation visit and the findings and recommendations of the ACS
 Consultation Report is the development of a Vision for Trauma Care in Virginia with a well-defined, specific and
 comprehensive Trauma System Development Plan, including a revised and effective reporting structure and
 legislative power to affect change;
- In the early stages of trauma center designation and trauma system development (1980s), partnering with Emergency Medical Services (EMS) was an appropriate and common practice around the country;
- Currently in Virginia, a statewide EMS System Plan exists that is both operational and strategic. It undergoes regular, triennial updates and involves a wide range of stakeholders;
- The provision of prehospital care has broadened significantly, requiring EMS to focus and adopt protocols and practices specific to prehospital management of heart attacks, strokes, and disasters;
- Currently, the trauma care plan in Virginia exists as an extension of the EMS system and is, by definition, significantly limited in perspective, structure and service to the injured.

Perspective and Service

- The trauma care plan in the Commonwealth of Virginia, as an extension of the EMS system, is limited to a
 prehospital perspective focusing mainly on the establishment of field triage criteria and prehospital trauma
 designation of trauma centers;
- In Virginia, as trauma centers have matured, their role in injury prevention, education, definitive care, organ donation and transplant, rehabilitation, and community activities has reached beyond the prehospital focus;
- A trauma system plan based on the public health model as recommended by the ACS visit and documented in the HRSA model does not currently exist in Virginia;
- Currently all essential components of the trauma system function independently and without integration;
- At the pre-injury level, there is no integration of the injury control efforts of the various components of the trauma system, leaving strategies ineffective at connecting the public health system with clinical health systems;
- At the prehospital level, a mature system exists but remains disconnected from a comprehensive trauma system
 plan, placing the burden on prehospital providers to navigate between various health system agendas with
 competitive market strategies;
- At the hospital level, there are no specific destination criteria and no defined expectations for trauma team activation;
- At the rehabilitation level, there is a lack of regional and state representation, as well as a lack of integration with the trauma system at all levels;
- There is no comprehensive trauma performance improvement (PI) plan with enforcement strategies at the local, regional or state level;
- There is no integrated data system for the preinjury, prehospital, hospital, rehabilitation, and post discharge phases of care rendering appropriate policy measures difficult.

Current structure

- Currently, trauma system oversight falls under the EMS Advisory Board with no separate process established for trauma system issues;
- The state trauma program advisory group is the Trauma System Oversight and Management Committee (TSOMC), a committee of the EMS Advisory Board;
- TSOMC does not have operational authority to conduct either oversight or management of the trauma system, operating instead as an advisory body to the EMS Advisory Board;
- The EMS Advisory Board is mainly and appropriately focused on prehospital activities, and by necessity there is preponderance of prehospital representatives, including 11 regional EMS representatives;
- Trauma system leaders have no current process to make needed, appropriate, effective and efficient changes;
- OEMS provides support and guidance to the care of the injured, but remains significantly unbalanced in favor of EMS activities.

Need and Goals

• There is a need for the development of a comprehensive trauma system based on the HRSA MTSPE with built-in structural and legislative empowerment to deliver the optimal care for the injured in Virginia;

- There is a need for a trauma system oversight and management structure that is adequately represented at and can provide advice to the Virginia Board of Health;
- There is a need for the designation of a lead governmental agency, with sufficient funding, human resources, and the authority to develop policies, including those for system development, implementation, coordination, evaluation, and identification of additional funding sources;
- There is a recognized need for the revision of the Office of Emergency Medical Services' organizational structure to elevate the state trauma program to provide greater support to trauma system development through the realignment;
- There is a need for adequate representation of all components of the trauma system at the EMS Advisory Board, including pre-injury, acute care, and post-acute care;
- There is a need to realign existing resources within the Virginia Department of Health structure to support the development of a comprehensive trauma system;
- There is a need for a Virginia Trauma System with structure and processes that allows for effective policy development to promote the use of scientific knowledge in decision making to include:
 - Building constituencies
 - Identifying needs and setting priorities
 - Using legislative authority and funding to develop plans and policies to address needs
 - Ensuring the public's health and safety;
- There may be a need for the modification of the Code of Virginia to achieve the above goals.

Proposed Trauma System Committee Structure

- The Trauma System Committee should be integrated into the existing EMS Advisory Board structure. To achieve the mission and vision of the proposed system, the following leadership and governance structure will be needed:
 - Executive Committee of the EMS Advisory Board
 - Create a Trauma System Coordinator
 - On par with Administrative, Infrastructure, Professional Development and Patient Care Coordinators
 - Serves on the Executive Committee
 - Represents the Committees of the Trauma System
 - Add Trauma System representation to the other Committees of the EMS Advisory Board under the Administration, Infrastructure, and Professional Development Coordinators
 - The Trauma System will function under Committees representing the Pre-injury, Prehospital, Acute Care, and Post-Acute phases of care:
 - Trauma Administrative and Governance (comprised of the Trauma System Coordinator, Committee chairs and other stakeholders of the Trauma System)
 - System Improvement
 - Injury and Violence Prevention
 - Prehospital Care
 - Acute Care
 - Post-Acute
 - Emergency Preparedness and Response

Committee Structure:

- The EMS Advisory Board's Trauma System Coordinator (TSC) will serve as chair of the Trauma Administrative and Governance Committee;
- Chairs of the Trauma System Committees will be appointed by the TSC;
- The TSC will ensure that all committees have fair and equal representation from Trauma System stakeholders;
- The chair of the System Improvement Committee (SIC) shall serve a 3-year term with a limit of two consecutive terms;
- The chairs of the trauma system committees (except TAG and SIC) will serve either 2-year or 3-year terms with a limit of two consecutive terms:
 - The following committee chairs will serve 3-year terms:
 - Acute Care
 - Post-Acute
 - The following committee chairs will serve 2-year terms:
 - Injury & Violence Prevention
 - Prehospital
 - Emergency Preparedness and Response
- The members of each committee will serve alternating 2-year and 3-year terms with a limit of two consecutive terms with no more than 50% committee members (i.e., 7 members) rotating at the end of a term. The chair of each committee will submit the name and position of the rotating members and the proposed incoming members to the TSC for consideration and approval.
- The Office of EMS, Division of Trauma and Critical Care, will need the following personnel:
 - Trauma OMD minimum of 0.25 FTE (new)
 - Trauma Manager 0.75 FTE (existing)
 - Trauma Coordinator 1 FTE (existing)
 - Trauma Data Manager 1 FTE (new)
 - Data Analysts 2 FTEs (existing)
 - Administrative Assistant 0.5 FTE (existing)
- State EMS Advisory Board
 - Modification of the EMS Advisory Board to provide adequate representation of all components of the Trauma System to include the following:
 - Pre-Injury
 - The representative for the Pre-Injury component of the Trauma System should be familiar with injury-oriented community health assessments, epidemiology, and prevention of injury and violence (injury epidemiologist preferred);
 - Prehospital (existing)
 - Acute Care
 - The representative for the Acute Care component of the Trauma System should be familiar with the care of trauma victims in hospitals, both trauma centers and nondesignated hospitals, from arrival at the ED until discharge;

Post-Acute Care

 The representative of the Post-Acute Care component of the Trauma System should be familiar with returning trauma victims to the highest possible levels of quality of life and independence following injury (preferred representatives from physical, occupational and speech therapy, rehabilitation facilities or skilled nursing facilities);

Hospital Quality

 The representative of the Hospital Quality component of the Trauma System should be familiar with hospital quality assurance and control processes and measures for decreasing mortality and morbidity caused by injuries;

• Burn Care

• The representative of the Burn component of the Trauma System should be familiar with all aspects of burn care, including burn service management;

Trauma Nursing Care

- The representative of trauma nursing care should be a registered nurse familiar with hospital trauma program structure and requirements for state trauma center designation including personnel CME, quality improvement, trauma registry maintenance, trauma center budget management, and community outreach (Trauma Program Manager preferred);
- ACS Committee on Trauma (Existing) will serve as the Trauma System Coordinator.
- Name change to State EMS and Trauma Advisory Board

<u>Trauma System Plan Task Force Mission, Vision, Values and Code of Conduct Mission Statement</u>

To reduce the burden of preventable injury and to deliver the highest quality, evidence-based care for all within
the Commonwealth along the continuum of care from the prehospital setting, through definitive acute care and
rehabilitation with data analysis, quality improvement and ongoing funding.

Vision Statement

• The Commonwealth of Virginia trauma system will be a high quality, cost effective, accessible statewide system of injury prevention and trauma care for all.

Values

- <u>Effective</u>: Successful in producing the intended results in terms of injury prevention & optimal care to the injured in Virginia.
- <u>Efficiency</u>: The ability to perform a defined task or deliver a specific outcome with a minimum amount of waste, expense or unnecessary effort.
- <u>Timely</u>: Patients should experience no waits or delays in receiving care and service. Critical access facilities should experience no delay in consults or transferring injured patients.
- Safety: Avoiding harm to patients in the process of providing care for the medical condition needing treatment.
- Equitable: All citizens of and visitors to the Commonwealth should have equal access to high quality care.
- <u>Patient Centered/Focused</u>: Care that is respectful of and responsive to individual patient preference, needs and values and ensures that patient values guide all clinical decisions.

Code of Conduct

- <u>Accountability</u>: The obligation of one party to provide justification and be held responsible for their actions/results by another interested party.
- <u>Commitment</u>: Being bound emotionally or intellectually to a course of action.
- <u>Compassion</u>: Sympathetic consciousness of the suffering of the injured patients and concern for their loved ones, together with a desire to alleviate the suffering and its source.
- <u>Collaboration</u>: Health providers from different professions providing comprehensive services by working with people, their families, car providers, and communities to deliver the highest quality of care across settings.
- <u>Honesty</u>: We will not condone or engage in any behavior which would provide false or misleading statements to patients, their families and healthcare organizations related to the care of the patient.
- Transparency: Readily understood, honest and open; not secretive.
- Respectful Communication: Opinions, feelings and attitudes will be expressed honestly and in a way that respects the rights of others.



Administrative Components

Trauma Administrative and Governance
System Improvement

Trauma Administrative and Governance Committee

Committee Proposed Composition

16 Members maximum (15 voting members and Chair)

- Trauma System Coordinator (Chair)
- Chairs of the Trauma System Committees
 - System Improvement
 - o Injury and Violence Prevention
 - Prehospital Care
 - o Acute Care
 - o Post-Acute Care
 - Emergency Preparedness and Response
- Trauma Program Manager Representative
- Citizen Representative
- Legislative
- Financial
- Virginia Hospital and Healthcare Association
- Burn
- Pediatrics
- American College of Emergency Physicians
- Level 3 Trauma Center

Goals and Objectives

Goal 1: Grow and elevate the trauma system to support the mission, vision, and values.

Objective ID	Objective
TAG 1.1	Evaluate the current structure.
TAG 1.2	Determination of meeting the needs of vision, mission, and values of trauma system plan.
TAG 1.3	Modify structure if necessary to support the vision, mission and values of the trauma
TAG 1.5	system plan.
	Review and recommend realignment of new and existing resources within the Virginia
TAG 1.4	Department of Health structure to support the development and sustainability of a
	comprehensive trauma system

Goal 2: Create trauma system development to meet the vision, mission and values of the trauma system plan.

Objective ID	Objective
TAG 2.1	Provide strategic plan to meet the outlined mission and goals
TAG 2.2	Develop prioritization and timeline of benchmarks and indicators
TAG 2.3	Provide guidance to TS committees in meeting specified goals
TAG 2.4	Assure TS committees alignment with overall vision & mission of the TSP
TAG 2.5	Provide continuous monitoring of processes, outcomes, and deliverables with regular
1AG 2.3	reports to Trauma system stakeholders

Goal 3: Develop a financial framework to meet our vision, mission and value statements.

Objective ID	Objective
TAG 3.1	Evaluate the current funding for the trauma system.
TAG 3.2	Develop strategies to create permanent and adequate funding for the trauma system.

Goal 4: Identify key stakeholders to support the trauma system vision, mission and values.

Objective ID	Objective
TAG 4.1	Identify key officials with the authority to implement and enforce changes.
TAG 4.2	Determine key components of the state legislative and regulatory processes.



System Improvement Committee

Committee Proposed Composition

15 Members maximum (14 voting members and Chair)

- Chair (appointed by Trauma System Coordinator)
- Representatives of the Trauma System Committees (5)
 - o Injury and Violence Prevention
 - Prehospital Care
 - Acute Care (Level 1,2,3)
 - o Post-Acute Care
 - Emergency Preparedness and Response
- Burn center representative
- Pediatric center representative
- Non-designated trauma center
- Citizen representative
- Epidemiologist (VDH Office of Family Health Service Division of Population Health Data)
- Registrar Representative
- PI Coordinator representative
- Education representative
- Research representative

Goals and Objectives

Goal 1: To promote and support integrated data systems regarding the continuum of care and disposition of the patient in order to support trauma system education, performance improvement, public health planning, injury prevention and outcomes research

Objective ID	Objective
SIC 1.1	Conduct system-wide assessment and inventory of current data systems
SIC 1.2	Contract with expert in data system analysis to analyze current data systems
SIC 1.3	Develop a strategic plan and outline plan for implementation
SIC 1.4	Implement linkage of data

Goal 2: To promote, educate and empower institutions and providers to reduce the burden of preventable deaths and suffering as a result of injury through optimized care, implementation of best practice, development of clinical practice guidelines and engagement of our populace in their trauma system through training, advocacy and understanding.

Objective ID	Objective
SIC 2.1	Create plan for providing risk adjustment mortality reports by institution
SIC 2.2	Conduct an educational gap analysis of institutions, populace and providers regarding the role of
	the trauma system in the community.
SIC 2.3	Conduct a gap analysis of guidelines and protocols of care of the trauma patient

(continued)

Goal 3: To build a trauma system that works toward continuous improvement at all levels through periodic external and internal benchmarking, consultation, adoption of best practices and collaboration with local, state, regional and national resources.

Objective ID	Objective
SIC 3.1	Develop a plan for regional benchmarking
SIC 3.2	Develop state level continuous improvement for hospitals
SIC 3.3	Engage medical direction committee council in development of regional benchmarking

Goal 4: To conduct research to attain new insights and innovative solutions to injury-related health problems.

Objective ID	Objective
SIC 4.1	Gather insight from hospital collaboratives to develop regional injury prevention research activities
SIC 3.2	Create structure for determining research goals
SIC 3.3	Develop a strategic plan for research funding

Goal 5. To advise the Virginia Department of Health, Office of Emergency Medical Services on matters relating to maintaining a performance improvement process that supports the trauma center designation process, trauma triage plan, and improves trauma care throughout Virginia (§ 32.1-111.3:B.3).

Objective ID	Objective
SIC 5.1	To develop a performance improvement program for monitoring the quality of care, consistent with other components of the Trauma system plan
SIC 5.2	To develop a performance improvement program for monitoring the quality of care, consistent with other components of the Emergency Medical Services Plan

Operational and Clinical Components

Injury & Violence Prevention

Prehospital Care

Acute Care

Post-Acute Care

Emergency Preparedness and Response

Injury and Violence Prevention Committee

Committee Proposed Composition

15 Members maximum (14 voting members and Chair)

- Chair (appointed by Trauma System Coordinator)
- VDH Injury & Violence Prevention representative
- Safe Kids representative
- VDH Aging and Rehabilitation Services representative
- Hospital injury prevention coordinators representative
- Epidemiologist
- State Police representative
- Judicial system representative
- Office of the Attorney General representative
- State Public School System representative
- Community/Advocacy group representative
- Citizen representative
- Prehospital Committee representatives 2 (EMS, Fire)
- Office of Chief Medical Examiner

Goals and Objectives

Goal 1: Use integrated data surveillance process to strengthen analyses, establish injury and violence prevention priorities and further statewide injury prevention efforts by trauma systems.

priorities and rather state mad y prevention errors by trauma systems.	
Objective ID	Objective
IVP 1.1	Use established databases to identify leading injury-related causes of morbidity and mortality.
IVP 1.2	Track and trend injury-related morbidity and mortality benchmarked against national data.
IVP 1.3	Identify high risk populations using existing data sources and public health tools.
IVP 1.4	Evaluate state trauma system through data analysis from existing data sources and public health tools.
IVP 1.5	Review data from key sources to identify gaps and review accomplishments to avoid duplication.
IVP 1.6	Develop a dashboard for continuous monitoring of injury-related morbidity and mortality status.

Goal 2: Integrate injury and violence prevention support by increasing opportunities for collaborative injury and violence prevention in all priority areas.

Objective ID	Objective
IVP 2.1	Build a sustainable infrastructure to provide leadership, data, and technical assistance for advancing injury and violence prevention in trauma systems
IVP 2.2	Develop and maintain active participation and partnerships with the lead injury prevention agency, Virginia Injury and Violence Prevention Collaborative

Goal 3: Implement a statewide injury and violence prevention initiative.

Objective ID	Objective
IVP 3.1	Assess the state trauma system's capacity to prevent injuries.
IVP 3.2	Establish a collaborative effort to provide statewide direction and focus on injury prevention among adults, children, and geriatrics

Prehospital Care Committee

Committee Proposed Composition

15 Members maximum (14 voting members and Chair)

- Chair (appointed by Trauma System Coordinator)
- Ground EMS provider (2)
- Helicopter EMS provider
- Ground critical care transport representative
- Medical Direction Committee representative
- Trauma Program Manager (1 adult, 1 pediatric)
- Fire Chief
- 911 communication officer
- Law enforcement representative
- EMS Educator
- Regional EMS Council Director
- Trauma survivor / Citizen representative
- Non-trauma center designated hospital

Goals and Objectives

Goal 1: Develop and implement a minimum set of statewide trauma treatment protocols for adult, pediatric, and geriatric patients.

Objective ID	Objective
PCC 1.1	Develop statewide minimum required treatment standards for treating injured patients that each
	EMS agency shall have within their protocols / polices.

Goal 2: Establish minimum statewide destination guideline standards for each step of the state trauma triage criteria for both adult and pediatric populations

Objective ID	Objective
PCC 2.1	Determine if disparities in the application of field triage exist based upon geography or patient
	type (pediatrics, geriatrics, etc.)
PCC 2.2	Allow regions to adapt the destination guidelines to match trauma system resources but ensure
	adherence to the statewide minimum standards

Goal 3: Develop resources for ground critical care transport

Objective ID	Objective
PCC 3.1	Define what critical care transport is within the Commonwealth of Virginia
PCC 3.2	Establish state standards for what is required on critical care transport ambulances in terms equipment / staff
PCC 3.3	Change Virginia code to read "Each jurisdiction is tasked to ensure that ground transport for the critically ill and injured patient is available."

(continued)

Goal 4: Support programs for the recruitment and retention of EMS Providers

Objective ID	Objective
PCC 4.1	Reinforce the existing state and regional committees in place that are currently focusing on EMS recruitment and retention
PCC 4.2	Enhance the educational opportunities within the hospitals for EMS personnel.
PCC 4.3	Competitive salaries for EMS providers across the Commonwealth

Goal 5: Strengthen the language in Virginia Code (12VAC5-31-860 (48)) to update the safe transportation of children in the back of ambulances

Objective ID	Objective
PCC 5.1	Use the NHTSA Best Practice Recommendations for Safe Transportation of Children in Emergency
	Ground Ambulances (Sept 2012)
PCC 5.2	Allocate funds to assist EMS services in purchasing necessary devices that are age / size specific
	restraint systems for each ambulance
PCC 5.3	EMS agencies should utilize grant funding opportunities when needing to purchase equipment for the
	safe transport of children in the back of ambulances.
PCC 5.4	Update the Virginia Code 12VAC-31-860 (48) with the following:
	1) Insert: "9g. Pediatric immobilization device (1)." and "9h. Pediatric restraint device (1)."
	2) Edit Virginia Code: 12VAC5-31-710 to state, "All occupants in an ambulance need to be
	appropriately restrained."

Acute Care Committee

Committee Proposed Composition

15 Members maximum (14 voting members and Chair)

- Chair (appointed by Trauma System Coordinator)
- Trauma Center representatives (recommend TPM and TMD)
 - Level 1 Trauma Center (2)
 - o Level 2 Trauma Center (2)
 - o Level 3 Trauma Center (2)
- Pediatric Trauma Center representative
- Burn Center representative
- Non-designated facility representative
- Trauma Center Administrator
- Prehospital Care Committee representative
- Post-Acute Committee representative

Goals and Objectives

Goal 1: Continue to evaluate the process for designation of trauma centers

Objective ID	Objective
ACC 1.1	Review and update current standards
ACC 1.2	Evaluate for concurrent visit between state and ACS

Goal 2: Evaluate the process for designation of additional trauma centers

Objective ID	Objective
ACC 2.1	Review current standards
ACC 2.2	Evaluate/modify the criteria and guidelines for trauma center designation
ACC 2.3	Increase data sharing and statistical data analysis, to identify the areas of need

Goal 3: Engage all acute care facilities in the trauma system

Objective ID	Objective
ACC 3.1	Review how to provide technical assistance and guidelines for treatment and transfer protocols
ACC 3.2	Bring to TAG a proposal to discuss the "Inter-hospital Triage Criteria" and form a work group to approve and put into action
ACC 3.3	Review the process to promote participation in statewide trauma system performance improvement
ACC 3.4	Engage with non-designated acute care facility for involvement in state wide trauma system

Post-Acute Care Committee

Committee Proposed Composition

15 Members maximum (14 voting members and Chair)

- Chair (appointed by Trauma System Coordinator)
- Rehabilitation physician
- Acute Care Committee representative
- Administrative director of a rehabilitation facility
- Case manager / Social Worker from a trauma center
- Case manager / Social Worker from an acute rehabilitation center
- Brain Injury Council representative
- Department of Aging and Rehabilitative Services representative
- VA Physical Therapy Association (VPTA) representative
- VA Occupational Therapy Association (VOTA) representative
- Speech-Language-Hearing Association of Virginia (SHAV) representative
- Pediatric representative
- Skilled nursing facility representative

Goals and Objectives

Goal 1: Complete a resource assessment for the trauma system as it relates to post-acute care /rehabilitation

Objective ID	Objective
PAC 1.1	Complete a comprehensive system status inventory that identifies the availability and
	distribution of current capabilities and resources.

Goal 2: Integrate adequate rehabilitation facilities into the trauma system and ensure these resources are made available to all populations requiring them

Objective ID	Objective
PAC 2.1	Incorporate within the trauma system plan and the trauma center standards requirements for post-acute services, including interfacility transfer of trauma patients to rehabilitation centers.
PAC 2.2	Rehabilitation centers and outpatient rehabilitation services provide data on trauma patients to the central trauma system registry that include final disposition, functional outcome, and rehabilitation costs and also participate in performance improvement processes.

Emergency Preparedness and Response Committee

Committee Proposed Composition

15 Members maximum (14 voting members and Chair)

- Chair (appointed by Trauma System Coordinator)
- Regional Healthcare Coordinators (or designees) from each Emergency Preparedness Coalition (6)
- VDH Office of Emergency Preparedness representative
- VHHA Director of Emergency Preparedness
- Prehospital Committee representative
- Acute Care Committee representative
- Post-Acute Care Committee representative
- EMS for Children representative
- Burn representative
- Hospital Emergency Manager from a designated Trauma Center

Goals and Objectives

Goal 1: Ensure trauma system is engaged in the State disaster planning process.

Objective ID	Objective
EPR 1.1.	Create awareness of existing coalition preparedness and response capability
EPR 1.2	Ensure appropriate stake holders within the coalitions are adequately represented
EPR 1.3	Ensure a comprehensive trauma system is inclusive of the State Disaster
	preparedness/management plan.

Goal 2: Collaborate with the OEP and ensure the provision of disaster preparedness education to trauma centers, regional councils, and local emergency medical services (EMS) providers.

Objective ID	Objective
EPR 2.1	Contribute to the state emergency preparedness plan
EPR 2.2	Collaborate with the OEP to evaluate and modify a disaster preparedness guide for the
	EMS and trauma system

Goal 3: Collaborate with the OEP to assess and maximize the use of Assistant Secretary of Preparedness and Response (ASPR) funding to enhance the medical surge capabilities of the state's trauma centers.

Objective ID	Objective
EPR 3.1	Contribute to the assessment for each region annually via collaboration with VDH/VHHA.

Benchmarks, Indicators and Scoring

By Committee Assignment

<u>Trauma Administrative and Governance Committee</u> <u>Benchmarks, Indicators and Scoring</u>

Benchmark 103: A resource assessment for the trauma system has been completed and is regularly updated.

Indicator	Scoring	Status
103.1: The trauma	There is no statewide resource assessment.	
system has	2. A State resource assessment has been completed that documents the	2017-18 Assessment
completed a	frequency and distribution of resources for at least two of the following	Score: 3
comprehensive	categories: prehospital and hospital personnel, education programs,	
system status	facilities, and prehospital equipment.	
inventory that	3. A State resource assessment has been completed that documents the	
identifies the	frequency and distribution of resources for more than two of the	
availability and	following categories: leadership, system development, legislation,	
distribution of	finances, injury prevention, workforce resources, education, EMS,	
current capabilities	transport, communications, trauma care facilities, interfacility transfer,	
and resources.	medical rehabilitation, information systems, medical oversight, system	
	evaluation, performance improvement, and research.	
	4. A trauma jurisdiction-specific resource assessment has been completed	
	for at least half of the trauma jurisdictions.	
	5. Trauma jurisdiction-specific resource assessments have been	
	completed for the State, regional, and local areas and are updated at	
	least biennially.	

Benchmark 103: A resource assessment for the trauma system has been completed and is regularly updated.

benchmark 105. A resource assessment for the tradina system has been completed and is regularly updated.			
Indicator	Scoring	Status	
103.2: The trauma	1. There are no resource standards on which to base a gap analysis.		
system has	2. The State trauma advisory committee has begun to develop statewide	2017-18 Assessment	
completed a gap	trauma system resource standards so that a gap analysis can be	Score: ②	
analysis based on the	completed.		
inventories of	3. State trauma system resource standards have been approved by the		
internal and external	appropriate approving authority.		
system status as well	4. A gap analysis of statewide trauma system resources has been		
as system resource	completed for the entire State based on the system resource standards		
standards	adopted.		
	5. A gap analysis of statewide trauma system resources has been		
	completed for the entire State and is updated at regular intervals based		
	on the trauma resource standards in place.		

Benchmark 103: A resource assessment for the trauma system has been completed and is regularly updated.

Indicator	Scoring	Status
103.4 The trauma system	No external examination of the trauma system or individual	
has undergone a	components has occurred.	2017-18
jurisdiction-wide external	2. Individual trauma centers have undergone outside consultation and	Assessment Score:
independent analysis.	verification.	4
	3. In addition to trauma center verification, at least one other component	
	of the system has been analyzed by external reviewers, for example, prehospital, rehabilitation, burns, and others.	
	4. An outside group of trauma system "experts" has conducted a formal trauma system external assessment and has made specific recommendations to the system.	
	5. Independent, external reassessment occurs regularly, at least every 5	
	years.	

<u>Benchmark 105</u>: The system assesses and monitors its value to its constituents in terms of cost-benefit analysis and societal investment.

Indicator	Scoring		Status
105.2 Cases that	1.	No effort is made to gather, catalogue, or report cases that	
document the		document the societal benefit of the trauma system so that the	2017-18 Assessment
societal benefit are		community sees and hears the benefit of the trauma system to	Score: ②
reported on so that		society. Such cases, for example, document descriptive information	
the community sees		on dramatic "saves" within the trauma system.	
and hears the benefit	2.	Dramatic saves and functional outcome returns are documented at	
of the trauma system		each facility or within various components of the system.	
to society.	3.	Cases concerning dramatic saves and return to a quality life are on	
		file (at a system level), but not reported unless asked for by the press.	
	4.	Dramatic saves and functional outcome returns are provided to, and reported by, the press.	
	5.	Cases are used as part of information fact sheets that are distributed to the press and other segments of the community.	
		These information fact sheets document the cost-benefit of the trauma system to the community.	

Benchmark 105: The system assesses and monitors its value to its constituents in terms of cost-benefit analysis and societal investment.

Indicator	Scoring	Status
105.3: An	There is no routine or planned contact with the media.	
assessment of the	2. Plans are in place to feed information to the media in response to a	2017-18 Assessment
needs of the media	particular traumatic event.	Score: 2
concerning trauma	3. The media have been formally asked about what types of	
system information	information would be helpful in reporting on trauma cases and	
has been conducted.	issues.	
	4. Information resources for the media have been developed, based	
	on the stated needs of the media; media representatives are included in trauma system informational events.	
	5. In addition to routine media contact, the media are involved in	
	various oversight activities such as local, regional, and State trauma	
	advisory councils.	

<u>Benchmark 105</u>: The system assesses and monitors its value to its constituents in terms of cost-benefit analysis and societal investment.

Indicator	Scoring	Status
105.4 An assessment	1. There is no routine or planned contact with public officials.	
of the needs of	2. Plans are in place to provide information to public officials in	2017-18 Assessment
public officials	response to a particular traumatic event.	Score: ①
concerning trauma	3. Public officials and policy makers have been formally asked what	
system information	types of information would be helpful in planning, monitoring, and	
has been conducted.	reporting on trauma system issues.	
	4. Information resources for public officials have been developed,	
	based on the stated needs of the public officials; public officials are	
	included in trauma system informational events.	
	5. In addition to routine contact, public officials are involved in various	
	oversight activities such as local, regional, and State trauma	
	advisory councils.	

Benchmark 105: The system assesses and monitors its value to its constituents in terms of cost-benefit analysis and societal investment.

Indicator	Scoring	Status
105.5: An	1. There is no routine or planned contact with the general public.	
assessment of the	2. Plans are in place to provide information to the general public in	2017-18 Assessment
needs of the general	response to a particular traumatic event.	Score: ①
public concerning	3. The general public has been formally asked about what types of	
trauma system	information would be helpful in understanding and supporting	
information has	trauma system issues.	
been conducted.	4. Information resources for the general public have been developed,	
	based on the stated needs of the general public; general public	
	representatives are included in trauma system informational	
	events.	
	5. In addition to routine contact, the general public is involved in	
	various oversight activities such as local, regional, and State trauma	
	advisory councils.	

<u>Benchmark 105</u>: The system assesses and monitors its value to its constituents in terms of cost-benefit analysis and societal investment.

Indicator	Scoring	Status
105.6 An assessment of the	1. There is no routine or planned contact with health insurers.	
needs of health insurers	2. Plans are in place to provide information to health insurers during a	2017-18
concerning trauma system	response to a particular payment, reimbursement, and cost issue.	Assessment Score:
information has been	3. Health insurers have been formally asked about what types of	1
conducted.	information would be helpful in reporting on trauma cases and issues.	
	4. Information resources for health insurers have been developed, based	
	on the stated needs of the insurers; insurance representatives are	
	included in trauma system informational events.	
	5. In addition to routine contact, health insurers are involved in various	
	oversight activities such as local, regional, and State trauma advisory	
	councils.	

<u>Benchmark 105</u>: The system assesses and monitors its value to its constituents in terms of cost-benefit analysis and societal investment.

Indicator	Scoring		Status
105.7: An	1.	There is no routine or planned contact with the broad medical	
assessment of the		community.	2017-18 Assessment
needs of the general	2.	Plans are in place to provide information to the broad medical community	Score: ①
medical community,		in response to a particular trauma system event or issue.	
including physicians,	3.	The broad medical community has been formally asked about what types	
nurses, prehospital		of information would be helpful in reporting on trauma cases and issues.	
care providers, and	4.	Information resources for the general medical community have been	
others, concerning		developed, based on the stated needs of the general medical community;	
trauma system		general medical community representatives are included in trauma	
information, has		system informational events.	
been conducted.	5.	In addition to routine contact, the broad medical community is involved in	
		various oversight activities such as local, regional, and State trauma	
		advisory councils.	

<u>Benchmark 201</u>: Comprehensive State statutory authority and administrative rules support trauma system leaders and maintain trauma system infrastructure, planning, oversight, and future development.

Indicator	Scoring	Status
201.1: The legislative authority	1. There is no specific legislative authority to plan, develop,	
(statute and regulations)	implement, manage, and evaluate, or fund, the trauma system	2017-18
plans, develops, implements,	and its component parts.	Assessment Score:
manages, and evaluates the	2. There is legislative authority for establishing a trauma system,	3
trauma system and its	and specific timelines for adoption are being drafted and	
component parts, including the	reviewed by trauma and injury constituencies.	
identification of the lead	The lead agency is identified in State statute and is required to plan and develop a statewide trauma system.	
	4. The lead agency is authorized to take actions to implement the trauma system and to report on the progress and effectiveness of system implementation.	
	The lead agency is required to plan, develop, implement, manage, monitor, and improve the trauma system while reporting regularly on the status of the trauma system within the State.	

<u>Benchmark 201</u>: Comprehensive State statutory authority and administrative rules support trauma system leaders and maintain trauma system infrastructure, planning, oversight, and future development.

Indicator	Scoring		Status
201.2: The legislative authority	1.	There is no legislative authority or integrated management,	
states that all the trauma system		and system participants do not routinely work together.	2017-18
components, EMS, injury control,	2.	There is no legislative authority; planning documents reflect a	Assessment Score:
incident management, and		silo management structure in that participating agencies are	4
planning documents, work		not linked. For key issues, stakeholders sometimes come	
together for the effective		together to resolve problems.	
implementation of the trauma	3.	There is no legislative authority, but people are working	
system (infrastructure is in place).		together to improve system effectiveness and management	
		within their individual jurisdictions.	
	4.	There is legislative authority, although it is not clearly evident	
		that system components are integrated and working together.	
	5.	There is legislative authority; it clearly provides for the	
		integration of trauma system components for an effective	
		management and infrastructure to plan and implement the	
		trauma system, as evidenced by agency involvement and	
		interaction.	

<u>Benchmark 201</u>: Comprehensive State statutory authority and administrative rules support trauma system leaders and maintain trauma system infrastructure, planning, oversight, and future development.

trauma system minastructure, p	lanning, oversight, and future development.	
Indicator	Scoring	Status
201.3 Administrative	1. There is no legal authority to adopt administrative rules/ regulations	
rules/regulations direct the	regarding the development of a trauma system at the State,	2017-18
development of operational	regional, or local level.	Assessment Score:
policies and procedures at	2. There is legal authority, but there are no administrative	2
the State, regional, and local	rules/regulations governing trauma system development, including	
levels.	components of the trauma system such as designation of trauma	
	facilities, adoption of triage guidelines, integration of prehospital	
	providers and rehabilitation centers, communication protocols, and	
	integration with public health and all hazards preparedness plans.	
	3. There are draft State, regional, or local rules/regulations for the	
	different components of trauma system development including	
	integration with public health and all-hazards preparedness plans.	
	4. There are existing statewide administrative rules/regulations for	
	planning, developing, and implementing the trauma system and its	
	components at the State, regional, and local levels.	
	5. The lead agency regularly reviews, through established committees	
	and stakeholders, the rules/regulations governing system	
	performance, including policies and procedures for system	
	operations at the State, regional, and local levels that include	
	integration with public health and all-hazards preparedness plans.	

<u>Benchmark 201</u>: Comprehensive State statutory authority and administrative rules support trauma system leaders and maintain trauma system infrastructure, planning, oversight, and future development.

Indicator	Scoring		Status
201.4 The lead agency has	1.	The lead agency does not have sufficient legal	
adopted clearly defined trauma		authority and has not adopted or defined trauma	2017-18 Assessment Score:
system standards (e.g., facility		system performance and operating standards, nor is	2
standards, triage and transfer		there sufficient legal authority to do so.	
guidelines, and data collection	2.	Sufficient authority exists to define and adopt	
standards) and has sufficient		standards for trauma system performance and	
legal authority to ensure and		operations, but the lead agency has not yet	
enforce compliance.		completed this process.	
	3.	There is sufficient legal authority to adopt and	
		implement operation and performance standards	
		including enforcement. Draft process procedures	
		have been developed.	
	4.	The authority exists to fully develop all operational	
		guidelines and standards; the stakeholders are	
		reviewing draft policies and procedures; and	
		adoption by the lead agency, including	
		implementation and enforcement, is pending.	
	5.	The authority exists; operational policies and	
		procedures and trauma system performance	
		standards are in place; and compliance is being	
		actively monitored.	

<u>Benchmark 202</u>: Trauma system leaders (lead agency, trauma center personnel, and other stakeholders) use a process to establish, maintain, and constantly evaluate and improve a comprehensive trauma system in cooperation with medical, professional, governmental, and citizen organizations.

Indicator	Scoring		Status
202.1 The lead agency	1.	There is no evidence of partnerships, alliances, or organizations	
demonstrates that it can bring	· ·	working together to implement and maintain a comprehensive	2017-18
organizations together to		trauma system.	Assessment Score:
implement and maintain a	2.	There have been limited attempts to organize groups, but to	3
comprehensive trauma system.		date no ongoing system committees meeting regularly to design or implement the trauma system.	
	3.	The lead agency has multiple committees meeting regularly to develop and implement a comprehensive trauma system plan.	
	4.	The lead agency demonstrates, through its various committees, an ability to bring together multidisciplinary groups interested in developing, implementing, and maintaining a comprehensive trauma system plan. Multiple stakeholders for various disciplines are routinely recruited to participate in system operational issues and refinement depending on expertise needed (e.g., data vs. public information and education).	
	5.	The lead agency has brought together multiple stakeholder groups to assist with, and make recommendations on, the development and implementation of the trauma system, preferably through a trauma-specific statewide multidisciplinary, multi-agency advisory committee.	

<u>Benchmark 202</u>: Trauma system leaders (lead agency, trauma center personnel, and other stakeholders) use a process to establish, maintain, and constantly evaluate and improve a comprehensive trauma system in cooperation with medical, professional, governmental, and citizen organizations.

Indicator	Scoring		Status
202.2 The lead agency has	1.	There is no trauma-specific statewide multidisciplinary, multi-	
developed and implemented a		agency advisory committee providing guidance to the State lead	2017-18
trauma-specific statewide		agency in planning and developing a statewide trauma system.	Assessment Score:
multidisciplinary, multi-agency	2.	There is no trauma-specific statewide multidisciplinary, multi-	4
advisory committee to provide		agency advisory committee, and attempts to organize one have	
overall guidance to trauma		not been successful but are continuing.	
system planning and	3.	There is a trauma-specific statewide multidisciplinary, multi-	
implementation strategies. The		agency advisory committee, but its meetings are infrequent and	
committee meets regularly and is		guidance is not always sought or available. Collaborative	
instrumental in providing		working arrangements have not been realized.	
guidance to the lead agency.	4.	There is a trauma-specific statewide multidisciplinary, multi-	
		agency advisory committee. Committee members and	
		stakeholders regularly attend meetings. Collaboration and	
		consensus are beginning.	
	5.	There is a trauma-specific multidisciplinary, multiagency	
		advisory committee with well-defined goals and responsibilities.	
		It meets regularly with the lead agency providing staff support.	
		The committee routinely provides guidance and assistance to	
		the lead agency on system issues. Multiple subcommittees meet	
		as often as necessary to resolve specific system issues and to	
		report back to the trauma-specific statewide multidisciplinary,	
		multi-agency advisory committee. There is strong evidence of	
		consensus building among system participants.	

<u>Benchmark 202</u>: Trauma system leaders (lead agency, trauma center personnel, and other stakeholders) use a process to establish, maintain, and constantly evaluate and improve a comprehensive trauma system in cooperation with medical, professional, governmental, and citizen organizations.

Indicator	Scoring	Status
202.3 A clearly defined and easily understood structure is in place	 There is no defined decision-making process (written policy ar procedure) regarding the trauma program within the trauma 	nd 2017-18
for the trauma system decision	system lead agency or its committees.	Assessment Score:
making process.	There is an unwritten decision-making process that stakeholders use when convenient, although not regularly or consistently.	2
	 The decision-making process is articulated within the State Trauma System Plan, although it has not been fully implemented. Policies are not written. The decision-making process is contained within the trauma system plan, and there are current policies and procedures in place to guide decision making. Use of the decision-making 	
	process is infrequent. 5. There is a clearly defined process for making decisions affectir the trauma program. The process is articulated in the trauma system plan and is further identified within system policies. Stakeholders know and understand the process and use it to resolve issues and to improve the program.	ng

<u>Benchmark 202</u>: Trauma system leaders (lead agency, trauma center personnel, and other stakeholders) use a process to establish, maintain, and constantly evaluate and improve a comprehensive trauma system in cooperation with medical, professional, governmental, and citizen organizations.

Indicator	Scoring	Status
202.4 Trauma system leaders	1. There are no goals or time-specific, quantifiable, and measurable	
have adopted and use goals and	objectives for the trauma system.	2017-18
time-specific, quantifiable, and measurable objectives for the	2. Trauma system leaders have met to discuss time-specific quantifiable goals.	Assessment Score:
trauma system.	3. Trauma system leaders are beginning the process of identifying measurable program goals and outcome-based, time-specific, quantifiable, and measurable objectives.	
	 Trauma system leaders have adopted goals and time-specific, quantifiable, and measurable objectives that guide system performance. 	
	5. Trauma system leaders, in consultation with their trauma-specific statewide multidisciplinary, multi-agency advisory committee, have established measurable program goals and outcome-based, time- specific, quantifiable, and measurable objectives that guide system effectiveness and system performance.	

<u>Benchmark 203</u>: The State lead agency has a comprehensive written trauma system plan based on national guidelines. The plan integrates the trauma system with EMS, public health, emergency preparedness, and incident management. The written trauma system plan is developed in collaboration with community partners and stakeholders.

Indicator	Scoring	Status
203.1 The lead agency, in concert	1. There is not trauma system plan, and one is not in progress.	
with a trauma-specific multi-	2. There is no trauma system plan, although some groups have begun	2017-18
disciplinary, multi-agency	meeting to discuss the development of a trauma system plan.	Assessment Score:
advisory committee, has adopted	3. A trauma system plan was developed and adopted by the lead	2
a trauma system plan.	agency. The plan, however, has not been endorsed ty trauma stakeholders.	
	 A trauma system plan has been adopted, developed with multi- agency groups, and endorse by those agencies. 	
	5. A comprehensive trauma system plan has been developed, adopted in conjunction with trauma stakeholders, and includes the integration of other systems (e.g. EMS, public health, and emergency preparedness).	

<u>Benchmark 203</u>: The State lead agency has a comprehensive written trauma system plan based on national guidelines. The plan integrates the trauma system with EMS, public health, emergency preparedness, and incident management. The written trauma system plan is developed in collaboration with community partners and stakeholders.

Indicator	Scoring	Status
203.2 A trauma system plan	1. There is no effort under way to develop a trauma system plan.	
exists and is based on analysis of	2. The lead agency is developing a trauma system plan without	2017-18 Assessment
the trauma demographics and	reference to the trauma demographics and resource assessments	Score: 2
resource assessments.	and analyses.	
	3. The lead agency is actively developing a trauma system plan	
	based on trauma demographics and resource assessments and analyses.	
	4. A trauma system plan has been developed identifying system	
	priorities and timelines and integrating trauma demographics	
	and resource assessments and analyses preparedness plans.	
	5. The trauma system plan is updated at least biennially based on	
	changes in trauma demographics and resource assessments and	
	analyses. It is reviewed for integration of other relevant plans	
	such as EMS, emergency preparedness, and public health.	

<u>Benchmark 203</u>: The State lead agency has a comprehensive written trauma system plan based on national guidelines. The plan integrates the trauma system with EMS, public health, emergency preparedness, and incident management. The written trauma system plan is developed in collaboration with community partners and stakeholders.

system plan is developed in collaboration with community partners and stakeholders.			
Indicator	Scoring	Status	
203.3 There is within the trauma	1. There is no evidence that population demographics drive resource		
system plan congruence of the	allocation or that this information is used to establish system	2017-18	
population demographics with	priorities in developing or implementing the trauma system plan.	Assessment Score:	
system development and	2. Population demographics and system resources have been	1	
resource allocation priorities.	identified. It is not clear that this information is used for system		
	allocation, priority setting, or system planning.		
Note: Needs of specific	3. There is evidence that planning processes take into consideration		
populations (e.g., pediatric, burn,	the needs of special populations and other cultural or geographic		
and Native American) are	parameters.		
integrated into the plan.	4. There is evidence within the trauma system plan that consideration		
Considerations should be given to	of the needs of differing groups, cultural, geographic, and others,		
age, population characteristics,	has been included. Specific application of information regarding the		
and urban and rural	needs of special groups is occurring at the provider level.		
environments.	5. The plan addresses the needs of all residents and visitors including		
	special population groups applicable to the geographic area.		

<u>Benchmark 203</u>: The State lead agency has a comprehensive written trauma system plan based on national guidelines. The plan integrates the trauma system with EMS, public health, emergency preparedness, and incident management. The written trauma system plan is developed in collaboration with community partners and stakeholders.

Indicator	oring	Status
203.4 The trauma system plan	There is no trauma system plan.	
clearly describes the system	The trauma system plan does not address or	incorporate the 2017-18 Assessment
design (including the	trauma system components (prehospital, cor	nmunication, Score: 1
components necessary to have	transportation, acute care, rehabilitation, and	d others), nor is it
an integrated and inclusive	inclusive of all-hazards preparedness, EMS, o	r public health
trauma system) and is used to	integration.	
guide system implementation	The trauma system plan provides general info	ormation about all
and management. For example,	the components including all-hazards prepare	edness, EMS, and
the plan includes references to	public health integration; however, it is diffic	ult to determine who
regulatory standard and	is responsible and accountable for system pe	rformance and
documents, and includes	implementation.	
methods of data collection and	The trauma system plan addresses every com	nponent of a well-
analysis.	organized and functioning trauma system inc	luding all-hazards
	preparedness and public health integration.	Specific information
	of each component is provided, and trauma s	system design in
	inclusive of providing for specific goals and ol	bjectives for system
	performance.	
	The trauma system plans used to guide syste	m implementation
	and management. Stakeholders and policy le	aders are familiar
	with the plan and its components and use the	e plan to monitor
	system progress and to measure results.	

<u>Benchmark 204</u>: Sufficient resources, including those both financial and infrastructure related, support system planning, implementation, and maintenance.

Indicator		Scoring	Status
204.1 The trauma system plan	1.	There is no method of assessing available resources or of identifying	
clearly identifies the human		resource deficiencies in either the clinical or administrative areas of	2017-18
resources and equipment		the trauma system.	Assessment
necessary to develop, implement,	2.	The trauma system plan addresses resource needs and identifies	Score: ①
and manage the trauma program,		gaps in resources within the trauma system, but no mechanism for	
both clinically and		correcting resource deficiencies has been identified.	
administratively. (The trauma	3.	Resource needs are identified, and a draft plan, inclusive of goals	
system plan integrates with the		and timelines, has been prepared to address the resource needs.	
Assessment of Resources done		The plan has not been implemented.	
previously.)	4.	Resource needs are clearly identified, and action plans are being	
		implemented to correct deficiencies in both clinical areas and	
		administrative support functions.	
	5.	A resource assessment survey has been completed and is	
		incorporated into the trauma system plan. Goals and measurable	
		objectives to reduce or eliminate resource deficiencies have been	
		implemented. Evaluation of progress on meeting resource needs is	
		evident, and when necessary, the plan has been adapted.	

<u>Benchmark 204</u>: Sufficient resources, including those both financial and infrastructure related, support system planning, implementation, and maintenance.

Indicator	Scoring	Status
204.2 Financial resources exit	1. There is no funding to support the trauma system planning,	
that support the planning,	implementation, or ongoing management and operations for either	2017-18
implementation, and ongoing	trauma system administration or trauma clinical care.	Assessment Score:
management of the	2. Some funding for trauma care within the third-party reimbursement	3
administrative and clinical care	structure has been identified, but ongoing support for administration	
components of the trauma	and clinical care outside the third-party reimbursement structure is	
system.	not available.	
	3. There is current funding for the development of the trauma system	
	within the lead agency organization consistent with the trauma	
	system plan, but costs to support clinical care support services have	
	not been identified) transportation, communication, uncompensated	
	care, standby fees, and others). No ongoing commitment of funding	
	has been secured.	
	4. There is funding available for both administrative and clinical	
	components of the trauma system plan. A mechanism to assess	
	needs among various providers has begun. Implementation costs	
	and ongoing support costs of the lead agency have been addressed within the plan.	
	5. A stable (consistent) source of reliable funding for the development,	
	operations, and management of the trauma program (clinical care	
	and lead agency administration) has been identified and is being used	
	to support trauma planning, implementation, maintenance, and	
	ongoing program enhancements.	

<u>Benchmark 204</u>: Sufficient resources, including those both financial and infrastructure related, support system planning, implementation, and maintenance.

Indicator	Scoring	Status
204.3 Designated funding for	1. There is no designated funding to support the trauma system	
trauma system infrastructure	infrastructure.	2017-18
support (lead agency) is	2. One-time funding has been designated for trauma system	Assessment Score:
legislatively appropriated.	infrastructure support, and appropriations have been made to the lead agency budget.	3
Note: Although nomenclature	3. Limited funds for trauma system development have been	
varies between jurisdictions, the	identified, but the funds have not been appropriated for trauma	
intent of the indicator is to	system infrastructure support.	
demonstrate long-term, stable	4. Consistent, though limited, infrastructure finding has been	
funding for trauma system	designated and appropriated to the lead agency budget.	
development, management,	5. The legislature has identified, designated, and appropriated	
evaluation, and improvement.	sufficient infrastructure funding for the lead agency consistent with	
	the trauma system plan and priorities for funding administration	
	and operations.	

<u>Benchmark 204</u>: Sufficient resources, including those both financial and infrastructure related, support system planning, implementation, and maintenance.

Indicator	Scoring	Status
204.4 Operational budgets	1. There are no operational budgets.	
(system administration and	2. There are limited operational budgets, not sufficient to	2017-18 Assessment Score:
operations, facilities	cover related program costs for the lead agency, the EMS	2
administration and operations,	system, or the trauma center.	
and EMS administration and	3. There are operational budgets that may be sufficient to	
operations) are aligned with the	cover most program costs, but they are without regard to	
trauma system plan and	the trauma system plan or priorities.	
priorities. Examples: Full-Time	4. There are operational budgets that have some ties to the	
Equivalents (FTEs) per population	trauma system plan and that include consideration for	
to support the infrastructure;	the extraordinary costs to the trauma system (e.g.,	
costs to improve the	providers).	
communication system.	5. An operational budget exists for each component in the	
	plan and matches system needs and priorities with	
	program and operational expenditures.	

<u>Benchmark 206</u>: Trauma system leaders, including a trauma-specific statewide multidisciplinary, multi-agency advisory committee, regularly review system performance reports.

Indicator	Scoring	Status
206.2 The trauma-specific statewide	1. There is no trauma-specific statewide multidisciplinary,	
multidisciplinary,	multi-agency advisory committee, and there are no regular	2017-18
Multi-agency advisory committee	reports of system performance.	Assessment Score:
regularly reviews annotated trauma	2. There is a trauma-specific statewide multidisciplinary,	2
system data reports and system	multi-agency advisory committee, but it does not routinely	
compliance information to monitor	review trauma system data reports.	
trauma system performance and to	3. The trauma-specific statewide multidisciplinary, multi-	
determine the need for system	agency committee meets regularly and reviews process-	
modifications	type reports; no critical assessment of system performance has been completed.	
	4. The trauma-specific statewide multidisciplinary, multiagency advisory committee meets regularly and routinely	
	assesses reports from trauma data to determine system	
	compliance and operational issues needing attention.	
	5. The trauma-specific statewide multidisciplinary,	
	multiagency advisory committee and related stakeholder	
	groups meet regularly and review trauma data reports to	
	assess system performance over time, looking for ways to	
	improve system effectiveness and patient outcomes.	

<u>Benchmark 207</u>: The lead agency informs and educates State, regional, and local constituencies and policy makers to foster collaboration and cooperation for system enhancement and injury control.

Indicator	Scoring	Status
207.1 The lead agency ensures communications, collaboration, and cooperation between State, regional, and local systems.	1. There is no evidence of active dialogue, either written or verbal, to suggest a strong working relationship between the trauma system lead agency and other governmental agencies (State, regional, or local).	2017-18 Assessment Score:
regional, and local systems.	 There is little evidence that the lead agency and other governmental agencies working to implement a trauma system actively engage in system planning and operational dialogue. 	
	3. The lead agency issues a quarterly update on trauma system activities. The update is largely one-way communication to other governmental agencies. Routine communication usually revolves around an event (reactionary); proactive, open communication is not the norm.	
	4. The lead agency, though its multidisciplinary committee, engages in open, frequent communication with its constituencies. Newsletters, activity reports, and proactive planning are occurring though the lead agency. Communication and collaboration among governmental organizations is occurring, although they are largely event based.	
	5. State, regional, and local systems engage in mutual and cooperative plan development and implementation. The lead agency seeks input and dialogue with a multitude of stakeholders. The communication is open, frequent, and proactive. Frequent dialogue occurs between the lead agency and local, regional, or state trauma system participants and leaders. There is evidence of mutual respect and sharing of information among the multidisciplinary groups.	

<u>Benchmark 207</u>: The lead agency informs and educates State, regional, and local constituencies and policy makers to foster collaboration and cooperation for system enhancement and injury control.

Indicator	Scoring	Status
207.2 The trauma system leaders	1. No targeted messaging or media campaigns have begun to educate	
(lead agency, advisory	and inform community and State leaders or policy makers about	2017-18
committees, and others) informs	either injury prevention needs or trauma system development	Assessment Score:
and educates constituencies and	activities.	2
policy makers through	2. Limited interfaces with policy makers and the media, aimed at both	
community development	injury prevention and trauma system development, have occurred.	
activities, targeted media	Community development activities have been limited to incident-	
messaging, and active	specific response opportunities.	
collaborations aimed at injury	3. Community activities have begun with the development of an injury	
prevention and trauma system	prevention campaign, and there have been initial discussions with	
development.	policy makers regarding trauma system development.	
	4. Trauma system leaders are engaging policymakers' discussions	
	about injury prevention and the trauma system. Media awareness	
	and media messaging have been targeted at injury prevention	
	activities with limited trauma system integration.	
	5. A well-orchestrated and continuing trauma media campaign is under	
	way. Key policy makers at the State, regional, and local levels are	
	keenly aware of the benefits of a trauma system and of the	
	importance of injury prevention programs.	

<u>Benchmark 207</u>: The lead agency informs and educates State, regional, and local constituencies and policy makers to foster collaboration and cooperation for system enhancement and injury control.

Indicator	Scoring	Status
207.3 Trauma system leaders (lead agency; trauma-specific statewide multidisciplinary, multi-agency advisory committees; and others) mobilize community partners in identifying the injury problem throughout the State and in building coalitions of personnel to design systems that can reduce the burden of injury.	 No State lead agency exists to establish, maintain, or mobilize community partners in identifying the injury problem or in building community coalitions A State lead agency to review and report in the injury problem statewide exists, but there is limited involvement with community coalitions or trauma system partners. A State lead agency for injury prevention has been established, and a statewide injury coalition has been meeting regularly and reporting on the status of injury in the State. Interface between the injury coalition and the trauma-specific statewide multidisciplinary, multi-agency advisory committee or trauma system leaders 	2017-18 Assessment Score:
 ACS Recommendation Encourage participation on the Injury and Violence Prevention subcommittee that extends beyond the trauma center representatives, e.g., state injury epidemiologist, EMS, fire, police, public health, and injury prevention organizations. Strengthen and maintain the relationship between the state trauma program and the VDH Injury and Violence Prevention Program 	 (government, acute care, or rehabilitation) has been limited. 4. Trauma system leaders (lead agency; trauma-specific statewide multidisciplinary, multi-agency advisory committees, and others) for injury prevention have a proven track record for identifying the injury problem and for targeting messages and programs to reduce the impact of injury in the State. The injury prevention lead agency (if not the trauma system lead agency) interfaces with trauma-specific statewide multidisciplinary, multi-agency advisory committee. Trauma system and injury prevention leaders have begun to identify strategies and are working collaboratively. Key policy makers are well informed about the burden of injury in the State. 5. Trauma system and injury prevention leaders regularly inform and educate policy makers on trauma system development and injury prevention. Injury coalitions and trauma-specific statewide multidisciplinary, multi-agency advisory committees are integrated and work collaboratively to inform the community and to educate community leaders. 	

<u>Benchmark 207</u>: The lead agency informs and educates State, regional, and local constituencies and policy makers to foster collaboration and cooperation for system enhancement and injury control.

Indicator	Scoring	Status
207.4 A trauma system public	1. There is not written public information and education plan on	
information and education plan	trauma system or injury prevention and control	2017-18
exists that heightens public	2. There is a trauma system public information and education plan, bu	t Assessment Score:
awareness of trauma as a	linkages between programs and implementation of specific	1
disease, the need for a trauma	objectives have waned.	
care system, and the prevention	3. There is a trauma system, and injury prevention plans have a linked	
of injury.	public information and education component that has specific	
	timetables and measurable goals and objectives	
ACS Recommendation	4. The trauma system public information and education plan are being	5
Implement a web-based	implemented in accordance with the timelines established and	
clearinghouse for the collection	agreed on by the stakeholders and coalitions	
and maintenance of evidence-	5. The trauma system public information and education plan are being	
based injury prevention programs	implemented in accordance with the timelines. Data concerning the	
that can be accessed by the	effectiveness of the strategies are used to modify the plan and	
public.	programs.	

<u>Benchmark 302</u>: The trauma system is supported by an EMS system that includes communications, medical oversight, prehospital triage, and transportation; the trauma system, EMS system, and public health agency are well integrated.

Indicator	Scoring	Status
302.1 There is well-defined	1. There is not medical oversight for EMS providers within the trauma	
trauma system medical oversight	system.	2017-18
integrating the specialty needs of	2. EMS medical oversight for all level of prehospital providers caring	Assessment Score:
the trauma system with the	for the trauma patient is provided, but such oversight is provided	2
medical oversight for the overall	outside of the purview of the trauma system.	
EMS system.	3. The EMS and trauma medical directors have integrated prehospital	
	medical oversight for prehospital personnel caring for trauma	
Note: The EMS System medical	patients.	
director and the trauma medical	4. Medical oversight is routinely given to EMS providers caring for	
director may, in fact, be the same	trauma patients. The trauma system has integrated medical	
person.	oversight for prehospital providers and routinely evaluates the	
	effectiveness of both on-line and off-line medical oversight.	
	5. The EMS and trauma system fully integrate the most up-to-date	
	medical oversight and regularly evaluate program effectiveness.	
	System providers are included in the development of medical	
	oversight policies.	

<u>Benchmark 302</u>: The trauma system is supported by an EMS system that includes communications, medical oversight, prehospital triage, and transportation; the trauma system, EMS system, and public health agency are well integrated.

Indicator	Scoring		Status
302.2 There is a clearly	1.	The trauma specialty physician leaders and the EMS system medical	
defined, cooperative, and		director provide conflicting medical oversight to emergency care	2017-18
ongoing relationship		providers.	Assessment Score:
between the trauma	2.	There is no formally established, ongoing relationship between the	2
specialty physician leaders		trauma medical director (within each trauma center) and the EMS	
(e.g., trauma medical		system medical director; there is no evidence of informal efforts to	
director within each trauma		cooperate and communicate.	
center) and the EMS system	3.	There is no formally established, ongoing relationship between the	
medical director.		trauma medical director (within each trauma center) and the EMS	
		system medical director; however, the trauma medical director and	
		the EMS system medical director meet or visit informally to resolve	
		problems, "to plan strategies," and to coordinate efforts.	
	4.	There is a formal, written procedure delineating the responsibilities	
		of the trauma medical director (within each trauma center) and the	
		EMS system medical director and specifying the formal method by	
		which they work together. However, there is no evidence that the	
		system is regularly used.	
	5.	There is a formal, written procedure delineating the responsibilities	
		of the trauma medical director (within each trauma center) and the	
		EMS system medical director and specifying the formal method by	
		which they work together. There is written documentation	
		including, for instance, meeting minutes indicating this relationship	
		is regularly used to coordinate efforts.	

<u>Benchmark 303</u>: Acute care facilities are integrated into a resource-efficient, inclusive network that meets required standards and that provides optimal care for all injured patients.

Indicator	Scoring	Status
303.1 The trauma	1. There is no trauma system plan that outlines roles and responsibilities of all	
system plan has clearly	acute care facilities treating trauma and of facilities that provide care to	2017-18
defined the roles and	special populations.	Assessment Score:
responsibilities of all	2. There is a trauma system plan, but it does not address the roles and	1
acute care facilities	responsibilities of licensed acute care and specialty care facilities.	
treating trauma and of	3. The trauma system plan addresses the roles and responsibilities of licensed	
facilities that provide	acute care facilities or specialty care facilities, but not both.	
care to specialty	4. The trauma system plan addresses the roles and responsibilities of licensed	
populations (e.g., burn,	acute care facilities and specialty care facilities.	
pediatric, spinal cord	5. The trauma system plan clearly defines the roles and responsibilities of all	
injury, and others).	acute care facilities treating trauma within the system jurisdiction. Specialty	
	care services are addressed within the plan, and appropriate policies and	
	procedures are implemented and tracked.	

<u>Benchmark 303</u>: Acute care facilities are integrated into a resource-efficient, inclusive network that meets required standards and that provides optimal care for all injured patients.

Indicator	Scoring	Status
303.3 The trauma lead authority ensures that trauma facility patient	There is no requirement for trauma facilities to monitor patient outcomes and quality of care. Designated trauma facilities are required to maintain a trauma registry	2017-18 Assessment Score:
outcomes and quality of care are monitored. Deficiencies are	including patient outcomes, but they are not required to regularly monitor these outcomes, or quality of care, and are required to report those findings to the lead trauma authority.	4
recognized and corrective action is implemented.	3. Designated trauma facilities are required to maintain a trauma registry and to use data from the registry in an ongoing performance improvement program to monitor and to improve the quality of care and patient outcomes.	
Variations in standards of care are minimized, and improvements are made routinely.	4. Designated trauma facilities are required to maintain a trauma registry including patient outcomes, to use these data in an ongoing performance improvement program, to provide regular comparisons to local trauma system standards, and to report those findings to the lead trauma authority.	
	5. Designated trauma facilities are required to maintain a trauma registry including patient outcomes, to use these data in an ongoing performance improvement program. Deficiencies in meeting the local trauma system standards are recorded, and corrective action plans are instituted. Results of comparisons with State or national norms are regularly provided to the trauma	
	agency, along with an explanation for significant variations from these norms, and a written plan to reduce these variations.	

<u>Benchmark 303</u>: Acute care facilities are integrated into a resource-efficient, inclusive network that meets required standards and that provides optimal care for all injured patients.

Indicator	Scoring	Status
303.3 The specific	1. There has been no consideration of the specific needs of unique populations,	
needs of unique	for example, EASL, in making an impact on the patient's access to care within	2017-18
populations, for	the trauma system.	Assessment Score:
example, English As a	2. The lead agency and stakeholders are beginning to consider the specific needs	2
Second Language	of unique populations in implementing the trauma system.	
(EASL), socially	3. The lead agency has, within the trauma system plan, identified the unique	
disadvantaged,	populations that may require special accommodations with the trauma system	
migrant/transient,	to effectively meet their needs.	
remote, rural, and	4. The lead agency has, within the trauma system plan, accommodations for	
others, are	unique populations that allow them to effectively access trauma care.	
accommodated within	Monitoring processes are in development.	
the existing trauma	5. The trauma system has accommodated the specific needs of unique	
system.	populations by allowing them to effectively access trauma care. Routine	
	monitoring, review, and reporting of these populations are incorporated into	
	the evaluation of trauma system effectiveness.	

<u>Benchmark 309</u>: The financial aspects of the trauma systems are integrated into the overall performance improvement system to ensure ongoing "fine-tuning" and cost-effectiveness.

Indicator	Sco	oring	Status
309.1 Cost data are collected and	1.	No cost data are collected.	
provided to the trauma system	2.	Administrative and program cost data are collected and included	2017-18
registry for each major		in the annual trauma system report.	Assessment Score:
component including prevention,	3.	In addition to administrative and program costs, clinical charges	1
prehospital, acute care all-hazards		and costs are included in one or more major component areas and	
response planning, and		are provided to the trauma system registry for inclusion I the	
rehabilitation.		annual trauma system report.	
	4.	The costs associated with individual system components, for	
		example, prehospital, can be determined and are proved to the	
		trauma system registry for inclusion in the annual trauma system	
		report.	
	5.	The cost of an aggregate system can be determined and is	
		provided to the trauma system registry for inclusion in the annual	
		trauma system report.	

<u>Benchmark 309</u>: The financial aspects of the trauma systems are integrated into the overall performance improvement system to ensure ongoing "fine-tuning" and cost-effectiveness.

Indicator	Scoring	Status
309.2 Collection and	1. Collection and reimbursement data are not gathered, nor do	
reimbursement data are	common definitions exist.	2017-18
submitted by each agency or	2. Common definitions exist, and collection and reimbursement data	Assessment Score:
institution on at least an annual	are available and reports to the lead agency for one or more	1
basis. Common Definitions exist	clinical components.	
for collection and reimbursement	3. Common definitions exist. Collection and reimbursement data are	
data and are submitted by each	available and reported to the lead agency for one or more clinical	
agency.	components, and are compared to cost data for those components.	
	4. Common definitions exist. Collection and reimbursement data are available and reported to the lead agency for all clinical components, and are compared to cost data for those	
	 components. Common definitions exist. Collection and reimbursement data are available and report to the lead agency for all clinical components, are compared to cost data for those components, and are reported in an aggregate for in the annual trauma system report. 	

<u>Benchmark 309</u>: The financial aspects of the trauma systems are integrated into the overall performance improvement system to ensure ongoing "fine-tuning" and cost-effectiveness.

Indicator	Scoring	Status
309.3 Cost, charge, collection, and	1. No outside financial data are captured.	
reimbursement data are	2. Outside financial data are collected from one or sources (e.g.,	2017-18
aggregated with other data sources	Medicaid or private insurers).	Assessment Score:
including insurers and data system	3. Extensive financial data, for example, cost charge, collection, and	1
costs and are include in annual	reimbursement, are collected from one or more sources.	
trauma system reports.	Sufficient expertise is available to the trauma system to analyze	
	and report complex fiscal data.	
Note: "Outside" financial data	4. Outside financial data are combined with internal trauma system	
means costs that may not routinely	data and are used to estimate total system costs.	
be captured in trauma center or	5. Outside financial data are combined with internal trauma system	
registry data.	data and are used to estimate total system costs. There financial	
	data are described in detail in the annual trauma system report.	

<u>Benchmark 309</u>: The financial aspects of the trauma systems are integrated into the overall performance improvement system to ensure ongoing "fine-tuning" and cost-effectiveness.

Indicator	Scoring	Status
309.4 Financial data are combined	1. No nonfinancial burden of disease costs and outcome measures	
with other cost, outcome, or	are collected or modeled.	2017-18
surrogate measures, for example,	2. Estimated savings using various burdens of disease costs or	Assessment Score:
years of potential life (YPLL),	outcome measure models are calculated for all injury prevention	1
quality-adjusted life years (QALY),	programs.	
and disability-adjusted life years	3. Estimated saving using various burdens of disease costs or	
(DALY); length of stay; length of	outcome measure models are calculated for actual system costs.	
Intensive Care Unit (ICU) stay;	4. Estimated savings using various burdens of disease costs or	
number of ventilator days; and	outcome measure models are calculated for all injury prevention	
others, to estimate and track true	programs and are combined with actual system cost data to	
system costs and cost-benefits.	determine costs and saving of the total system.	
	5. Estimated savings using various burdens of disease costs or	
	outcome measure models are calculated for all injury prevention	
	programs, are combined with actual system cost data to	
	determine costs and savings of the total system, and are	
	described in detail in the annual trauma system report.	

Benchmark 310: The lead trauma authority ensures a competent workforce.

Indicator	Scoring	Status
310.13 There is authority for a	1. There is no requirement for a trauma medical director, and no	
trauma medical director, and a clear	job description has been developed.	2017-18 Assessment
job description, including requisite	2. There is authority for a trauma medical director, but no job	Score: 1
education, training, and	description has been developed.	
certification, for this position.	3. There is authority for a trauma medical director, and a job	
Note: The trauma medical director	description is under development. Approval to hire is pending.	
and the EMS system medical	4. There is authority for a trauma medical director. The plan to	
director may be the same person.	hire one has been developed along with a comprehensive job	
	description, including requisite education, training, and	
	certification.	
	5. There is authority for a trauma medical director, and the job	
	description, including requisite education, training, and	
	certification, for the trauma medical director is clear. A	
	physician appropriately credentialed has been hired, and the	
	job classification is routinely assessed for appropriateness of	
	the duties required.	

Benchmark 311: The lead agency acts to protect the public welfare by enforcing various laws, rules, and regulations as they pertain to the trauma system.

Indicator	Scoring	Status
311.2 The lead agency refers	Individual personnel performance is not monitored.	
issues of personnel	2. Complaints about individual personnel noncompliance with trauma	2017-18
noncompliance with trauma	laws, rules, and regulations go directly to appropriate boards or	Assessment Score:
laws, rules, and regulations	licensure authorities.	2
to appropriate boards or	3. Trauma authority personnel collaborate actively with licensure	
licensure authorities.	authorities to resolve complaints involving individual personnel	
	noncompliance with trauma laws, rules, and regulations.	
	4. Individual personnel performance issues are addressed within trauma	
	performance improvement processes unless they involve breaches of	
	State or Federal statute.	
	5. Appropriate boards or licensure authorities are involved in the system	
	performance improvement processes addressing individual personnel	
	performance issues.	

<u>Benchmark 311</u>: The lead agency acts to protect the public welfare by enforcing various laws, rules, and regulations as they pertain to the trauma system.

Indicator	Scoring	Status
311.4 Laws, rules, and	1. There is no process for examining laws, rules, or regulations.	
regulations are routinely	2. Laws, rules, and regulations are reviewed and revised only in response to	2017-18
reviewed and revised to	a "crisis" (e.g., malpractice insurance costs).	Assessment Score:
continually strengthen and	3. Laws, rules, and regulations are reviewed and revised on a periodic	2
improve the trauma system.	schedule (e.g., every 5 years).	
	4. Laws, rules, and regulations are reviewed by agency personnel on a	
	continuous basis and are revised as needed.	
	5. Laws, rules, and regulations are reviewed as part of the performance	
	improvement process involving representatives of all system components	
	and are revised as they negatively impact system performance.	

<u>Benchmark 311</u>: The lead agency acts to protect the public welfare by enforcing various laws, rules, and regulations as they pertain to the trauma system.

Indicator	Scoring	Status
311.5 The lead agency routinely evaluates all	1. The lead agency does not have the authority to evaluate all system components (e.g., prehospital).	2017-18
system components to ensure compliance with various laws, rules, and	Complaints concerning individual component performance within the trauma system go directly to the licensure agency responsible for that component.	Assessment Score: 5
regulations pertaining to their role and performance within the trauma system.	 Trauma agency personnel collaborate actively with licensure agencies to resolve complaints involving component performance within the trauma system. 	
	4. Deficiencies in individual system components are addressed as part of the trauma system performance improvement process.	
	5. System components are equitably represented in the trauma system improvement process and work to improve individual component compliance and overall trauma system performance. De-designation, or revocation of licenses or certifications, is used only as a course of last resort to safeguard public health.	

<u>Benchmark 311</u>: The lead agency acts to protect the public welfare by enforcing various laws, rules, and regulations as they pertain to the trauma system.

ney pertain to the trauma system.		
Indicator	Scoring	Status
311.6 Incentives are	1. There are no incentives for outside review and accreditation.	
provided to individual	2. Accreditation processes are generally encouraged but are not	2017-18
agencies and institutions to	specifically acknowledged; for example, no special dispensation is	Assessment Score:
seek State or nationally	offered to agencies or institutions completing such accreditation.	1
recognized accreditation in	3. Accreditation processes are strongly encouraged, and some incentives	
areas that will contribute to	are provided, for example, extension of EMS agency review from 2 years	
overall improvement across	to 3 years after CAAS accreditation.	
the trauma system, for	4. Incentives are provided to agencies that successfully complete outside	
example, Commission on	accreditation processes, for example, acceptance of CAAS accreditation	
Accreditation of Ambulance	instead of local EMS agency review.	
Services (CAAS) for	5. As part of the system performance improvement process, the impact of	
prehospital agencies,	outside review and accreditation on various agencies and institutions is	
Council on Allied Health	monitored, and incentives are provided as appropriate.	
Education Accreditation		
(CAHEA) for training		
programs, and American		
College of Surgeons (ACS)		
verification for trauma		
facilities.		

System Improvement Committee Benchmarks, Indicators and Scoring

<u>Benchmark 101</u>: There is a thorough description of the epidemiology of injury in the system jurisdiction using both population-based data and clinical databases.

Indicator	Scoring	Status
101.1 There is a thorough	1. There is no thorough description of the epidemiology of injury mortality	
description of the	in the system jurisdiction.	2017-18
epidemiology of injury	2. Death certificate data have been used to describe the statewide	Assessment Score:
mortality in the system	incidence of trauma deaths aggregating all etiologies, but no E-code	4
jurisdiction using	reporting is available.	
population-based data.	3. Death certificate data, by E-code, are reported on a statewide basis, but are not reported by sub-State jurisdiction.	
	4. Death certificate data, by E-code, are reported on statewide and sub- State jurisdictions. These data are compared to national benchmarks, if available.	
	 Death certificate data, by E-code, are used as part of the overall assessment of trauma care in a State or sub- State, including statewide rural and urban preventable mortality studies. 	

<u>Benchmark 102:</u> There is an established trauma management information system (MIS) for ongoing injury surveillance and system performance assessment.

Indicator	Scoring	Status
102.1 There is an established injury surveillance process that can, in part, be used as an MIS performance measure.	 There is no established system-wide injury surveillance process. There is a system-wide trauma registry, but not all hospitals in the service area contribute to the trauma management information system. There is a system-wide trauma registry with all hospitals in the service area contributing data. The system-wide trauma registry data are bolstered by one or more of 	2017-18 Assessment Score:
ineasure.	 the system-wide trauma registry data are bolstered by one of more of the following databases: EMS data system, ED data system, or hospital discharge data. The statewide trauma registry, EMS data system, ED data system, hospital discharge data, rehabilitation, and burn data system are accessible, electronically linked, and have consistent data definitions and elements. The data are used for both 	

<u>Benchmark 102</u>: There is an established trauma management information system (MIS) for ongoing injury surveillance and system performance assessment.

Indicator	Scoring	Status
102.2 Injury surveillance is	1. Injury surveillance, as described in 102.1, does not occur within the	
coordinated with statewide	system.	2017-18 Assessment
and local community health	2. Injury surveillance occurs in isolation from other health risk	Score: ③
surveillance.	surveillance and is reported separately.	
	3. Injury surveillance occurs in isolation but is combined and reported	
	with other health risk surveillance processes.	
	4. Injury surveillance occurs as part of broader health risk assessments.	
	5. Processes of sharing and linkage of data exist between EMS systems,	
	public health systems, and trauma systems, and the data are used to	
	monitor, investigate, and diagnose community health risks.	

<u>Benchmark 102</u>: There is an established trauma management information system (MIS) for ongoing injury surveillance and system performance assessment.

Indicator	Scoring	Status
102.3 Trauma data are electronically linked from a	 Trauma registry data exist but are not deterministically or probabilistically linked to other databases. 	2017-18
variety of sources.	2. Trauma registry data exist and can be deterministically linked through hand-sorting processes.	Assessment Score: 1
Note: Deterministically means with such patient	3. Trauma registry data exist and can be deterministically linked through computer-matching processes.	
identifiers as name and date of birth. Probabilistically means computer software is used to match likely records	4. Trauma registry data exist and can be deterministically and probabilistically linked to at least one other injury database including: EMS data systems (i.e., patient care records, dispatch data, and others), ED data systems, hospital discharge data, and others.	
through such less certain identifiers as date of incident, patient age, gender, and others.	5. All data stakeholders (insurance carriers, FARS, and rehabilitation, in addition to typical trauma system resources) have been identified, data access agreements executed, hardware and software resources secured, and the "manpower" designated to deterministically and probabilistically link, analyze, and report a variety of data sources in a timely manner.	

<u>Benchmark 102</u>: There is an established trauma management information system (MIS) for ongoing injury surveillance and system performance assessment.

Indicator	Scoring	Status
102.4 There is a process to	1. There is no process or written policy to evaluate the quality, timeliness, completeness, and confidentiality of the data collected in the system.	2017-18
evaluate the quality, timeliness, completeness,	2. There is a process of evaluation and written policy but no compliance with governance. Confidentiality of information is not ensured.	Assessment Score: (3)
and confidentiality of data.	3. The process of reviewing the quality, timeliness, completeness, and confidentiality of data is just beginning. There is some compliance with a draft written policy.	
	 There are draft written policies in place for evaluating the quality (including both reliability and validity), timeliness, and completeness of data and for ensuring confidentiality. 	
	5. There is a comprehensive written policy and demonstrated compliance concerning data management and governance including an evaluation of the quality, timeliness, and completeness of data, with confidential	
	protection of records ensured while allowing appropriate access for research purposes.	

<u>Benchmark 102</u>: There is an established trauma management information system (MIS) for ongoing injury surveillance and system performance assessment.

Indicator	Scoring	Status
102.5 There is an	1. Financial data are not collected as part of the trauma system registry.	
established method of	2. Financial data are collected as part of the trauma system registry at	2017-18
collecting trauma financial	individual facilities but are not reported to the lead trauma authority.	Assessment Score:
data from all health care	3. Financial data are collected as part of the trauma system registry and	1
facilities and trauma	are analyzed and reported by the lead trauma authority.	
agencies including patient	4. Financial data from the trauma registry are linked with at least one	
charges as well as	other source of cost data such as hospital discharge data.	
administrative and system	5. Financial data are linked and analyzed from the trauma registry,	
costs.	insurers, emergency department, EMS, hospital discharge, and	
	rehabilitation and are compared with general trauma system	
	infrastructure costs to establish the general financial health of the	
	system and its value to the community.	

Indicator	Scoring	Status
105.1 The benefits of the	1. There are no cost data available to the system to compare to quality of	
trauma system, in terms of	life indicators.	2017-18
years of productive life lost	2. Trauma system costs are included in the trauma management	Assessment Score:
(YPLL), quality-adjusted life	information system that can serve as the basis for these calculations.	1
years (QALY), disability-	3. Additional sources of data, in terms of other economic and quality of life	
adjusted life years (DALY),	measures, are available.	
and so on, are described.	4. Cost and quality of life measures can be analyzed and presented in	
	descriptive and graphic form.	
	5. A series of reports and fact sheets are available and regularly updated to	
	descriptively and graphically illustrate costs and benefits of the trauma	
	system as well as the cost and benefits of specific personal behaviors.	

Benchmark 205: Collected data are used to evaluate system performance and to develop public policy.

Indicator	Scoring	Status
205.1 Collected data are used for strategic and budgetary planning.	 There is no central data repository that can be accessed for strategic or budgetary planning. There are varying databases that can be accessed but no single 	2017-18 Assessment Score:
	reporting structure to produce reports and to analyze findings. 3. Data are collected and stored in a central repository; however, reports are not routinely generated that could be used for strategic or budgetary planning.	2
	 There is a central warehouse for trauma and system financial data that are used for annual reporting of system performance. There is a central repository and data warehouse for all trauma system data. System participants including trauma centers and the lead agency can access the data. Regular (written, on-line, or electronic) reports are 	
	generated to identify financial information and budget utilization. Regular reports are used for strategic planning and performance efficiency.	

Benchmark 205: Collected data are used to evaluate system performance and to develop public policy.

Indicator	Scoring	Status
205.2 Collected data from a	1. There are no written, quantifiable trauma system performance	
variety of sources are used	standards or performance improvement mechanisms.	2017-18
to review the	2. There are draft written, quantifiable system performance standards or	Assessment Score:
appropriateness of trauma	performance improvement mechanisms for each component of the	2
system policies and	trauma system.	
procedures.	3. There are written, quantifiable system performance standards and	
	performance improvement mechanisms that have been adopted by the	
Note: The format of the	lead agency in consultation with the trauma-specific statewide	
reports in this and other	multidisciplinary, multi-agency advisory committee.	
sections may be written,	4. Data from trauma, EMS, public safety, and other sources are routinely	
Web-based, or other	used by the lead agency to assess the extent of compliance of the	
electronic media	trauma system with adopted standards.	
	5. The lead agency, in cooperation with the trauma-specific statewide	
	multidisciplinary, multi-agency advisory committee, uses compliance	
	data from trauma, EMS, public safety, and other sources to improve	
	system design changes or to make other system refinements. There is	
	routine and consistent feedback to all system providers to ensure that	
	data-identified deficiencies are corrected.	

Benchmark 205: Collected data are used to evaluate system performance and to develop public policy.

Indicator	Scoring	Status
205.3 The trauma	1. There is no trauma management information system.	
management information	2. There is a limited trauma management information system consisting of	2017-18
system (MIS) is used to	a trauma patient registry, but no data extraction is used to identify	Assessment Score:
assess system performance,	resource needs, to establish performance standards, or to routinely	2
to measure system	assess and evaluate system effectiveness.	
compliance with applicable	3. There is a trauma management information system that routinely	
standards, and to allocate	reports (written, on-line, or electronic) on system-wide management	
trauma system resources to	performance and compliance. Linkage between management reports,	
areas of need or to acquire	resource utilization, and performance measures has begun.	
new resources.	4. Routine trauma MIS reports are issued at the State, regional, and local	
	levels as well as at the provider level. Reports focus on management	
	strengths, compliance with standards, and resource utilization. Trends	
	are used to improve system efficiency and performance.	
	5. Trauma MIS reports are used extensively to improve and report on	
	system performance. The lead agency issues regular and routine reports	
	to providers. Trauma leaders assess reports to determine system	
	deficiencies and to allocate resources to areas of greatest need. System	
	performance and standard compliance are assessed and reported.	

Benchmark 205: Collected data are used to evaluate system performance and to develop public policy.

Indicator	Scoring	Status
205.5 Education for trauma	1. There is no correlation between training programs for providers and the	
system participants is	trauma management information system.	2017-18
developed based on a	2. There is limited use of trauma MIS reports to target educational	Assessment Score:
review and evaluation of	opportunities.	1
trauma MIS data.	3. There is evidence that some providers are using trauma MIS reports to	
	identify educational needs and to incorporate them into training programs.	
	 Many educational forums have been conducted based on an analysis of the performance data in the trauma management information system. Clear ties link education of providers with identified areas of need from trauma MIS reports. 	
	 Routine analysis of trauma information and educational opportunities is being conducted. Integrated program objectives tying system performance and education are implemented and routinely evaluated. Regular updates to trauma information and education are available. Trauma MIS data are used to measure outcomes and effectiveness. 	

<u>Benchmark 206</u>: Trauma system leaders, including a trauma-specific statewide multidisciplinary, multi-agency advisory committee, regularly review system performance reports.

Indicator	Scoring	Status
206.1 Trauma data reports	1. No trauma data reports are generated to evaluate and improve system	
are generated by the trauma	performance effectiveness.	2017-18
system no less than once	2. Some general trauma system information is available for the	Assessment Score:
per year and are	stakeholders, but it is not consistent or regular.	3
disseminated to trauma	3. Trauma data reports are done on an annual basis but are not used for	
system leaders and	decision making and evaluating system effectiveness.	
stakeholders to evaluate	4. Routine reports are generated using trauma system data and other	
and improve system	databases so that the system can be analyzed, standards evaluated, and	
performance effectiveness.	performance measured.	
	5. Regularly scheduled reports are generated from trauma system data	
	and are used by the stakeholder groups to evaluate and improve system	
	performance effectiveness.	

Benchmark 208: The trauma, public health, and emergency preparedness systems are closely linked.

Indicator	Scoring	Status
208.1: The trauma system	1. There is no evidence that demonstrates program linkages, a working	
and the public health	relationship, or the sharing of data between public health and the	2017-18
system have	trauma system. Population-based public health surveillance, and	Assessment Score:
established linkages	evaluation, for acute or chronic traumatic injury and injury prevention	1
including programs with an	has not been integrated with the trauma system.	
emphasis	2. There is little population-based public health surveillance shared with	
on population-based public	the trauma system, and program linkages are rare. Routine public health	
health surveillance,	status reports are available for review by the trauma system lead agency	
and evaluation, for acute	and constituents.	
and chronic traumatic injury	3. The trauma system and the public health system have begun sharing	
and injury prevention.	public health surveillance data for acute and chronic traumatic injury.	
	Program linkages are in the discussion stage.	
	4. The trauma system has begun to link with the public health system, and	
	the process of sharing public health surveillance data is evolving.	
	Routine dialogue is occurring between programs.	
	5. The trauma system and the public health system are integrated. Routine	
	reporting, program participation, and system plans are fully vested.	
	Operational integration is routine, and measurable progress can be	
	demonstrated. (Demonstrated integration and linkage could include	
	such activities as rapid response to and notification of incidents,	
	integrated data systems, communication cross-operability, and regular	
	epidemiology report generation.)	

<u>Benchmark 301</u>: The trauma management information system (MIS) is used to facilitate ongoing assessment and assurance of system performance and outcomes and provides a basis for continuously improving the trauma system including a cost-benefit analysis.

Indicator	Scoring	Status
301.1 The lead trauma	1. There is no system-wide management information data collection	
authority ensures that each	system that the trauma centers and other community hospitals regularly	2017-18
member hospital of the	contribute to or use to evaluate the system.	Assessment Score:
trauma system collects and	2. There is a trauma registry system in place in the trauma centers, but it is	2
uses patient data as well as	used by neither all facilities within the system nor the lead trauma	
provider data to assess	authority to assess system performance.	
system performance and to	3. The trauma management information system contains information from	
improve quality of care.	all facilities within a geographic area.	
Assessment data are	4. The trauma management information system is used by the trauma	
routinely submitted to the	centers to assess provider and system performance issues.	
lead trauma authority.	5. Hospital trauma registry data are routinely submitted to the lead	
	trauma authority, are aggregated, and are used to evaluate overall	
	system performance.	

<u>Benchmark 301</u>: The trauma management information system (MIS) is used to facilitate ongoing assessment and assurance of system performance and outcomes and provides a basis for continuously improving the trauma system including a cost-benefit analysis.

Indicator	Sco	oring	Status
301.2 Prehospital care	1.	There is no jurisdiction-wide prehospital data collection.	
providers collect patient	2.	Prehospital care providers have a patient care record for each episode	2017-18
care and administrative data		of care, but it is not yet automated or integrated with the trauma	Assessment Score:
for each episode of care and		management information system.	2
provide these data not only	3.	The prehospital patient care record electronically captures patient care	
to the hospital, but have a		provided by field personnel and can be transferred or entered into the	
mechanism to evaluate the		trauma registry system within individual trauma centers.	
data within their own	4.	The prehospital patient data system is integrated into the trauma	
agency including monitoring		management information system and is used by prehospital and	
trends and identifying		hospital personnel to review and evaluate prehospital and system	
outliers		performance.	
	5.	Individual prehospital agency data are electronically submitted to the	
		lead trauma authority, are aggregated with other prehospital agency	
		data, and are used to evaluate overall trauma system performance.	

<u>Benchmark 301</u>: The trauma management information system (MIS) is used to facilitate ongoing assessment and assurance of system performance and outcomes and provides a basis for continuously improving the trauma system including a cost-benefit analysis.

Indicator	Scoring	Status
301.3 Trauma registry,	1. Some trauma registry and prehospital patient records are manually	
emergency department	entered into a database when needed to answer system questions.	2017-18
(ED), prehospital,	There is no rehabilitation registry.	Assessment Score:
rehabilitation, and other	2. There are databases for trauma, emergency departments, prehospital,	1
databases are linked or	and rehabilitation as well as statewide injury databases. None of the	
combined to create a	databases are routinely linked.	
trauma system registry.	3. There are electronic trauma registry and prehospital patient record	
	databases. Both databases are linked, but the system does not use these	
	data for routine review of system performance. Some rehabilitation	
	data are collected separately from the trauma registry.	
	4. There is an integrated management information system that includes, at	
	a minimum, hospital and prehospital databases. The information is	
	linked, and providers use the databases for system evaluation.	
	Rehabilitation centers routinely provide electronic data to the trauma	
	registry system.	
	5. There is an integrated management information system that includes, at	
	a minimum, trauma, ED, prehospital, 9-1-1 dispatch, and rehabilitation	
	databases that are regularly used by the lead trauma authority and	
	system provider agencies to monitor trauma system performance.	

<u>Benchmark 302</u>: The trauma system is supported by an EMS system that includes communications, medical oversight, prehospital triage, and transportation; the trauma system, EMS system, and public health agency are well integrated.

Indicator	Scoring	Status
302.5 The retrospective	1. There is no retrospective medical oversight procedure for trauma triage,	
medical oversight of the	communications, treatment, and transport.	2017-18
EMS system for trauma	2. There is a retrospective medical oversight procedure for trauma triage,	Assessment Score:
triage, communications,	communications, treatment, and transport by both the trauma system	3
treatment, and transport is	and the EMS system, but the two processes are in conflict with each	
closely coordinated with the	other or use different review criteria.	
established performance	3. There is a retrospective medical oversight procedure for trauma triage,	
improvement processes of	communications, treatment, and transport by the performance	
the trauma system	improvement processes of the trauma system or by the EMS system;	
	however, this procedure is not coordinated.	
	4. By the performance improvement processes of the trauma system,	
	there is retrospective medical oversight for trauma triage,	
	communications, treatment, and transport that is coordinated with the	
	EMS system retrospective medical direction, or by performance	
	improvement processes of the EMS system that are coordinated by the	
	trauma system.	
	5. There is retrospective medical oversight of the trauma triage,	
	communications, treatment, and transport that is coordinated with the	
	EMS system retrospective medical direction. There is evidence this	
	procedure is being regularly used to monitor system performance and	
	to make system improvements.	

<u>Benchmark 302</u>: The trauma system is supported by an EMS system that includes communications, medical oversight, prehospital triage, and transportation; the trauma system, EMS system, and public health agency are well integrated.

Indicator	Scoring	Status
302.6 There are mandatory system-wide prehospital	1. There are no mandatory universal triage criteria to ensure trauma patients are transported to the most appropriate hospital.	2017-18
triage criteria to ensure that	2. There are differing triage criteria guidelines used by different providers. Appropriateness of triage criteria and subsequent transportation are not	Assessment Score: (5)
trauma patients are transported to an	evaluated for sensitivity or specificity.	
appropriate facility based on their injuries. These triage	3. Universal triage criteria are in the process of being linked to the management information system for future evaluation. The triage	
criteria are regularly	criteria are used by all prehospital providers.	
evaluated and updated to ensure acceptable and	4. There is system-wide evaluation of the effectiveness of the triage tools in identifying trauma patients and in ensuring that they are transported	
system-defined rates of	to the appropriate facility.	
sensitivity and specificity for appropriately identifying	5. System participants routinely evaluate the triage criteria for effectiveness. There is linkage with the trauma system, and sensitivity	
the major trauma patient.	and specificity (over- and under- triage rates) of the tools used are regularly reported through the trauma lead authority. Updates to the	
	triage criteria are made as necessary to improve system performance.	

<u>Benchmark 304</u>: The jurisdictional lead agency, in cooperation with other agencies and organizations, uses analytical tools to monitor the performance of population-based prevention and trauma care services.

Indicator	Scc	oring	Status
304.2 The trauma system	1.	There is no sharing of databases between emergency department,	
MIS database is available for		trauma, prehospital, medical examiner, or public health epidemiology.	2017-18
routine public health	2.	The databases can be accessed by only the owner of the data and	Assessment Score:
surveillance. There is		sharing of information goes through a formal request process.	1
concurrent access to the	3.	There is concurrent access to the databases (emergency department,	
databases (emergency		trauma, prehospital medical examiner, and public health epidemiology)	
department, trauma,		but no sharing of databases that would support public health	
prehospital medical		surveillance.	
examiner, and public health	4.	The databases are shared among emergency department, trauma,	
epidemiology) for the		prehospital, medical examiner, and public health epidemiology. Access	
purpose of routine		issues have been resolved, and epidemiologic monitoring is beginning to	
surveillance and monitoring		routinely monitor the data for unusual events.	
of health status that occurs	5.	The databases of emergency departments, trauma, prehospital, medical	
regularly and is a shared		examiner, and public health epidemiology are shared files. The	
responsibility.		epidemiology staff can review all the databases and registries for	
		routine surveillance and unusual occurrences. Concurrent review by the	
		respective groups is used to ensure the effectiveness of the injury	
		prevention and trauma system.	

<u>Benchmark 306</u>: The lead agency ensures that the trauma system demonstrates prevention and medical outreach activities within its defined service area.

Indicator	Scoring	Status
306.1 The trauma system has developed mechanisms to engage the general	1. There is no evidence that the trauma system reaches out to the general medical community at large to integrate it into trauma system improvements.	2017-18 Assessment Score:
medical community and other system participants in	2. There is some evidence of general medical community interface with the trauma centers, but it is sporadic and not well coordinated.	1
their research findings and performance improvement efforts.	3. The trauma system can demonstrate routine interface with the general medical community regarding trauma care updates and performance improvements.	
	4. The trauma system has a formal mechanism to discuss trauma care, system improvements, and research results with the general medical community within its jurisdiction.	
	5. There is strong evidence of active participation between the trauma system and the general medical community. Routine discussions are held; performance updates are shared; and research results are integrated within the medical care system.	

Benchmark 307: To maintain its State, regional, or local designation, each hospital will continually work to improve the trauma care as measured by patient outcomes.

Indicator	Scoring	Status
307.2 The trauma system implements and regularly reviews a standardized	1. There is no evidence that the trauma system engages in any review of patient care outcome data to evaluate its performance against national norms.	2017-18 Assessment Score:
report on patient care outcomes as measured	 There is some standardized measurement of outcomes for trauma patients within the trauma system and applied to the trauma centers. 	
against national norms	 Through the lead agency, trauma centers use a national standardized measurement tool to assess the quality of trauma patient care outcomes and to regularly report trends in performance improvement committee reports. 	
	4. The trauma system has established standardized measurements of trauma patient care outcomes based on national norms and routinely uses the report to highlight improvements in trauma patient care or to identify patient care issues needing remedial action.	
	5. The trauma system has completed an assessment of trauma care outcomes based on national norms and implements any corrective action noted. Routine measurements of quality are carried out, and regular reporting is accomplished with improvements instituted, trends reported, and highlights acknowledged as necessary	

Benchmark 310: The lead trauma authority ensures a competent workforce.			
Indicator	Scoring	Status	
310.11 There are	1. There is no mechanism to identify, through performance improvement		
mechanisms within the	processes, systemic personnel deficiencies within the trauma system.	2017-18	
system performance	2. The trauma system has begun to identify systemic personnel	Assessment Score:	
improvement processes to	deficiencies.	1	
identify and correct	3. The trauma system has a mechanism to identify systemic personnel		
systemic personnel	deficiencies and is working on a process for corrective action.		
deficiencies within the	4. The trauma system has a mechanism to identify systemic personnel		
trauma system.	deficiencies and is instituting corrective actions across the system.		
	5. Trauma stakeholders, including trauma centers and the lead agency,		
Note: Systemic personnel	monitor and correct personnel deficiencies as identified through quality		
deficiencies are those that	assurance and performance improvement processes. A method of		
cut across multiple agencies	corrective action has been instituted, and appropriate follow up is		
and institutions and impact	occurring. Monitoring of system deficiencies and corrective actions is		
the system as a whole. For	ongoing.		
example, if trauma triage			
protocols are not being			
adhered to by most			
prehospital providers from			
multiple agencies, then it is a			
systemic problem that could			
involve communication,			
training, medical direction,			
or performance			
improvement issues			

Injury and Violence Prevention Committee Benchmarks, Indicators and Scoring

<u>Benchmark 101</u>: There is a thorough description of the epidemiology of injury in the system jurisdiction using both population-based data and clinical databases.

Indicator	Scoring	Status
101.4 Collaboration exists	1. No injury risk assessments are conducted.	
between EMS, public health	2. Trauma system officials conduct injury assessments; however, there is	2017-18
officials, and trauma system	no involvement of EMS or public health officials in those assessments.	Assessment Score:
leaders to complete injury	3. Public health officials, along with EMS and trauma system participants,	1
risk assessments.	assist with the design of injury risk assessments.	
	4. Public health officials, along with EMS and trauma system leaders, assist with the design and analysis of injury risk assessments.	
	5. The public health epidemiologist, along with EMS and trauma system leaders, is involved in the development of injury reports. There is clear evidence of data sharing, data linkage, and well-defined reporting roles and responsibilities.	

Benchmark 101. There is a thorough description of the epidemiology of injury in the system jurisdiction using both population-based data and clinical databases.

Indicator	Scoring	Status
101.5: Integration of injury into other public health risk assessments occurs at State, regional, and community levels, resulting in the integration into key reports and planning documents such as Healthy People 2010.	 No injury risk assessments are completed. Injury risk assessments are conducted in a segregated manner by the trauma program, separate from other public health risk assessments. Injury risk assessments are combined with other assessment data, after separate collection and analysis efforts. Injury risk assessments are conducted by public health officials as an integrated component with other health risk assessments. Injury risk assessments are conducted by public health officials as an integrated component with other health risk assessments. Comparisons and contrasts between injury death and disability rates are made, fully integrated, and published, along with other leading health risk indicators, for example, HIV/AIDS, cardiac, and cancer, in Health of the State and other formal public health documents. 	2017-18 Assessment Score:

Benchmark 101. There is a thorough description of the epidemiology of injury in the system jurisdiction using both population-based data and clinical databases.

Indicator	Scoring	Status
101.6: The trauma system works with EMS and the public health system to complete a jurisdiction-wide study of the determinants of injury using existing data sources and public health tools.	 There is no jurisdiction-wide study of the determinants of injury. The trauma system, EMS, and public health officials (including EMS) using existing data sources such as the Behavioral Risk Factor Surveillance System (BRFSS) to describe determinants of injury among the general population. The trauma system, EMS, and public health officials (including EMS) use existing data sources such as the Youth Risk Behavior Survey (YRBS) to describe determinants of injury among high-risk subpopulations. Statewide data from all potential sources, for example, BRFSS, YRBS, Fatality Analysis Reporting System (FARS), vital records, and others, pertaining to the risk of injury, are summarized, electronically linked, and analyzed to determine the potential target areas for injury prevention activities. A State injury prevention plan identifies injury prevention targets based, in part, on the determinants of injury and injury risk, and identifies strategies to document and demonstrate the cost-benefit of various behaviors. 	2017-18 Assessment Score:

<u>Benchmark 101</u>: There is a thorough description of the epidemiology of injury in the system jurisdiction using both population-based data and clinical databases.

Indicator	Scoring	Status
101.7	1. There is no effort to describe risks to special at-risk populations such as	
The trauma system works	age categories, cultural/ethnic populations, geographic variances,	2017-18
with EMS and public health	pediatrics, and high-risk co-morbidities, for example, substance abuse,	Assessment Score:
to identify special at-risk	or children with special health care needs, or any combination of these.	1
populations.	2. Risk assessments have been conducted for various age groupings, for example, adolescents and elder persons.	
	3. In addition to risk assessments for age cohorts, cultural/ethnic variations have been analyzed.	
	4. In addition to risk assessments for age and cultural/ethnic cohorts, geographic distribution of injury within the jurisdiction has been analyzed, for example, inner city versus suburban.	
	There is strong evidence that multiple special at-risk populations have been identified during the assessment processes.	

Benchmark 103. A resource assessment for the trauma system has been completed and is regularly updated.

Indicator	Scoring		Status
103.3: There has	1.	No preventable mortality assessment has been conducted on a	
been an initial		system-wide basis.	2017-18 Assessment
assessment (and	2.	A system-wide preventable mortality study has been completed.	Score: ①
periodic	3.	A system-wide preventable mortality study that includes rates,	
reassessment) of		frequencies, and types of inappropriate care rendered within the	
overall system		hospitals participating in the trauma system has been conducted.	
effectiveness.	4.	A system-wide preventable mortality study that includes rates,	
		frequencies, and types of inappropriate care rendered in all phases	
		of care within the trauma system, for example, prehospital,	
		rehabilitation, and others, has been conducted.	
	5.	The system has completed preventable mortality studies that	
		include the determination of rates of inappropriate care, as well as	
		an examination of the number of severely injured (ISS>15) patients	
		arriving at the highest levels of available care within appropriate	
		times. The assessment is repeated at regular intervals (could be an	
		annual summary of deaths and complications).	

Benchmark 203. The State lead agency has a comprehensive written trauma system plan based on national guidelines. The plan integrates the trauma system with EMS, public health, emergency preparedness, and incident management. The written trauma system plan is developed in collaboration with community partners and stakeholders.

Indicator	Scoring	Status
203.5 A written injury prevention	1. There is no written plan for a coordinated injury prevention and	
and control plan is developed	control program	2017-18
and coordinated with other	2. There are multiple injury prevention and control programs that may	Assessment Score:
agencies and community health	conflict with one another or with the goals of the trauma system, or	2
programs. The injury program is	both.	
data driven, and targeted	3. There is written plan for a coordinated injury prevention and control	
programs are developed based	program that is linked to the trauma system plan and that has goals	
on high injury risk areas. Specific	and time-specific, measurable objectivesThe injury prevention and control plan is being implemented in	
goals with measureable	accordance with established timelines.	
objectives are incorporated into	 The injury prevention and control plan is being implemented in 	
the injury plan.	accordance with established timelines; data concerning the	
	effectiveness of the plan are being collected and are used to	
ACS Recommendation	validate, evaluate, and modify the plan.	
Identify injury prevention		
priorities based on state		
epidemiology data and develop a		
state injury prevention plan.		
Complete the plan within 1		
year.		
Implement one statewide		
injury prevention initiative		
the following year.		

Benchmark 205. Collected data are used to evaluate system performance and to develop public policy.

Indicator	Scoring	Status
205.4: Injury	1. There is no evidence to suggest that trauma MIS data are used to determine	
prevention programs	injury prevention strategies	2017-18
use trauma MIS data	2. There is some evidence that trauma MIS data are available for injury prevention	Assessment Score:
to develop	program strategies, but the use of these data is limited and sporadic	2
intervention	3. Trauma MIS reports are routinely provided to the injury prevention programs.	
strategies.	The usefulness of the reports has not been measured, and injury prevention providers are just beginning to use trauma injury reports for program strategies and decision making.	
	4. Trauma MIS reports on the status of injury, and injury mechanisms, are routinely available to injury prevention providers and are used routinely to realign injury programs to target the greatest need.	
	5. A well-integrated trauma an injury reporting system exists. Evidence is available to demonstrate how system providers routinely use MIS data to identify program needs, to develop strategies on program priorities, and to set annual goals for injury prevention.	

Benchmark 301. The trauma management information system (MIS) is used to facilitate ongoing assessment and assurance of system performance and outcomes and provides a basis for continuously improving the trauma system including a cost-benefit analysis.

Indicator		Chatus
Indicator	Scoring	Status
301.4: The lead agency	1. No computer/technology or analytical tools are available to the lead agency	
has available for use	or other stakeholders to facilitate the monitoring of, or reporting on, the	2017-18
the latest in	outcome of the implemented strategies for injury prevention and control	Assessment Score:
computer/technology	within the trauma system.	1
advances and analytical	2. There are integrated computer/technology systems, but the development	
tools for monitoring	and use of those systems for analytical monitoring and reporting has not yet	
injury prevention and	begun. 3. The lead agency is using the computer/technology systems and analytical	
control components of	tools available to assist in monitoring the injury prevention and control	
the trauma system.	programs of the trauma system. The evaluation of injury prevention and	
There is reporting on	control programs is in its formative stages.	
the outcomes of	4. The lead agency has integrated the use of new computer/technology systems	
implemented strategies	and analytical tools in the monitoring of injury prevention and control	
for injury prevention	programs within the trauma system.	
and control programs	5. The trauma system participants, under the leadership of the trauma lead	
within the trauma	agency, have been trained in the use of the computer/technology systems	
system.	and analytical tools. These tools are used routinely to monitor and report on	
	the outcome of implemented strategies and on the effectiveness of injury	
	prevention and control programs within the trauma system. A process is in	
	place to facilitate the access to data for evaluation and research.	

Benchmark 304. The jurisdictional lead agency, in cooperation with other agencies and organizations, uses analytical tools to monitor the performance of population-based prevention and trauma care services.

annual reports on the status of injury prevention and trauma other key stakeholders. Annual reports are written by the lead agency with input from the trauma centers. Annual reports are written by the lead agency in conjunction with the trauma	Indicator	Scoring	Status
centers and other stakeholders. Multiple sub-reports on the status of trauma care and injury prevention in State, regional, or local areas are distributed throughout the year. 5. There is an integrated annual reporting system that is electronically available to stakeholders. The lead agency, along with partner organizations, prepares and disseminates regular annual reports on the status of injury prevention and trauma care in State, regional, or local areas.	304.1: The lead agency, along with partner organizations, prepares annual reports on the status of injury prevention and trauma care in State, regional,	 No annual reports are available on the status of injury prevention or trauma care in State, regional, or local areas. Annual reports are prepared but are not based on input from providers and other key stakeholders. Annual reports are written by the lead agency with input from the trauma centers. Annual reports are written by the lead agency in conjunction with the trauma centers and other stakeholders. Multiple sub-reports on the status of trauma care and injury prevention in State, regional, or local areas are distributed throughout the year. There is an integrated annual reporting system that is electronically available to stakeholders. The lead agency, along with partner organizations, prepares and disseminates regular annual reports on the status of injury prevention and 	2017-18 Assessment Score:

Benchmark 306. The lead agency ensures that the trauma system demonstrates prevention and medical outreach activities within its defined service area.

Indicator	Scoring	Status
306.2: The trauma system is active within its jurisdiction with the evaluation of community-based activities and injury prevention and response programs.	 There is no active participation by the trauma system in the evaluation of community-based activities and injury prevention and response programs. There is some activity by the trauma system in the evaluation of community-based activities and injury prevention and response programs. The trauma system evaluates community-based activities and injury prevention and response programs. The trauma system is an active participant in community activities and in injury prevention and response programs, including the evaluation of program effectiveness. The trauma system has integrated community-based activities and injury prevention and response programs with similar efforts within the community. Outreach efforts are well coordinated and duplication of effort is avoided. Ongoing evaluation is routine, and data are used to make program improvements. 	2017-18 Assessment Score:

Benchmark 306. The lead agency ensures that the trauma system demonstrates prevention and medical outreach activities within its defined service area.

Indicator	Scoring	Status
306.3: The effect or impact of	1. There is no effort by the lead agency to review the efforts of the	
outreach programs (both medical	trauma centers in either medical community training/support or	2017-18
community training/support and	prevention activities.	Assessment Score:
prevention activities) is evaluated as	2. There is no routine evaluation of medical community	1
part of a system performance	training/support or prevention activities accruing within the	
improvement process.	jurisdiction. 3. Trauma centers do internal monitoring and evaluations of their	
ACS Recommendation	efforts in medical community training/support and prevention activities.	
Strengthen the Virginia trauma center designation criteria specific to injury prevention requirements.	 The lead agency participates with trauma centers in evaluating their efforts in medical community training/support and prevention activities. The outreach programs are regularly assessed for effectiveness. 	
Require Level I trauma centers to	5. The lead agency and trauma centers routinely use the data both	
have a dedicated full or part-time	to implement outreach programs and to communicate trauma	
injury prevention position that is not	system outcomes and performance to the medical community	
the trauma program manager.	through its annual report. Evaluation processes are	
	institutionalized and used to enhance future outreach programs.	

Prehospital Care Committee

Benchmarks, Indicators and Scoring

<u>Benchmark 203</u>: The State lead agency has a comprehensive written trauma system plan based on national guidelines. The plan integrates the trauma system with EMS, public health, emergency preparedness, and incident management. The written trauma system plan is developed in collaboration with community partners and stakeholders.

Indicator	Scoring	Status
203.7 The trauma system	1. There is no mention of integration between the trauma system plan and	
plan has established clearly	the EMS, emergency, and public health preparedness plans.	2017-18
defined methods of	2. There is some cross-reference between plans, but defined methods of	Assessment Score:
integrating the trauma	working collaboratively are not developed.	1
system plan with the EMS,	3. The written plans are integrated and there are defined methods for	
emergency, and public	working collaboratively; however, implementation or practice within the	
health preparedness plans.	geographic area has not occurred.	
	4. The trauma system plan has been integrated with other relevant plans.	
	There is evidence of system integration activity.	
	5. The trauma system planning and operations have been fully integrated	
	with the EMS, emergency, and public health preparedness plans.	
	Training and exercises are conducted regularly, and the integration of	
	the system and its plans is evident.	

<u>Benchmark 302</u>: The trauma system is supported by an EMS system that includes communications, medical oversight, prehospital triage, and transportation; the trauma system, EMS system, and public health agency are well integrated.

Indicator	Scoring	Status
302.3 There is clear-cut legal	There is no EMS system medical director.	
authority and responsibility	2. There is an EMS system medical director with a written job description;	2017-18
for the EMS system medical	however, the individual has no specific legal authority or time allocated	Assessment Score:
director including	for those tasks.	(5)
the authority to adopt	3. There is an EMS system medical director with a written job description,	
protocols, to implement a	but with no specific legal authority. The system medical director has	
performance improvement	adopted protocols, has implemented a performance improvement	
system, to restrict	program, and is generally taking steps to improve the medical	
the practice of prehospital	appropriateness of the EMS system.	
care providers, and to	4. There is an EMS system medical director with a written job description	
generally ensure medical	and whose specific legal authorities and responsibilities are formally	
appropriateness of the EMS	granted by law or by administrative rule.	
system.	5. There is an EMS system medical director with a written job description	
	and whose specific legal authorities and responsibilities are formally	
	granted by law or by administrative rule. There is written evidence that	
	the system medical director has, consistent with the formal authority,	
	adopted protocols, implemented a performance improvement program,	
	is restricting the practice of prehospital care providers, and is making	
	significant efforts to improve the medical appropriateness of the EMS	
	system and to fully integrate EMS into the trauma care system.	

<u>Benchmark 302</u>: The trauma system is supported by an EMS system that includes communications, medical oversight, prehospital triage, and transportation; the trauma system, EMS system, and public health agency are well integrated.

Indicator	Scoring	Status
302.4 The trauma system medical director is	1. There are no trauma system dispatch protocols.	
actively involved with the development,	2. Trauma system dispatch protocols have been adopted,	2017-18
implementation, and ongoing evaluation of	but without regard to the design of the trauma system.	Assessment Score:
system dispatch protocols to ensure they are	3. Trauma system dispatch protocols have been adopted	2
congruent with the trauma system design.	and are not in conflict with the trauma system design,	
These protocols include, but are not limited	but there has been no effort to coordinate the use of	
to, which resources to dispatch, for example,	protocols with the lead agency or trauma center.	
Advanced Life Support (ALS) versus Basic Life	4. Trauma system dispatch protocols have been	
Support (BLS), air-ground coordination, early	developed in close coordination with the trauma	
notification of the trauma care facility, pre-	system medical director and are congruent with the	
arrival instructions, and other procedures	trauma system design.	
necessary to ensure resources dispatched	5. Trauma dispatch protocols have been developed in	
are consistent with the needs of injured	close coordination with the trauma system medical	
patients.	director and are congruent with the trauma system	
Note: The trauma system medical director	design. There are established procedures to involve the	
and the EMS system medical director may be	dispatchers and their supervisors in trauma system	
the same person. However, specific	performance improvement and a "feedback loop" to	
responsibility for, and oversight of, the	change protocols or to update dispatcher education	
trauma system must be ensured.	when appropriate.	

<u>Benchmark 302</u>: The trauma system is supported by an EMS system that includes communications, medical oversight, prehospital triage, and transportation; the trauma system, EMS system, and public health agency are well integrated.

Indicator	Scoring	Status
302.7 There is a universal	1. There is no universal access number (9-1-1) for easy citizen access to the	
access number for citizens	EMS/trauma system and no coordinated communication system for	2017-18
to access the EMS/trauma	triage, treatment, and transport of trauma patients for either single or	Assessment Score:
system, with dispatch of	multiple patient encounters.	(5)
appropriate medical	2. There is a universal access number (9-1-1) for quick citizen access to	
resources. There is a central	care. However, there is no coordinated communication system within a	
communication system for	jurisdiction to allow for communications to occur among system	
the EMS/trauma system to	participants either routinely or during all-hazards events.	
ensure field-to-facility	3. There are a universal access number (9-1-1) and a central	
bidirectional	communication system for quick citizen access to care. A	
communications, inter-	communication plan for the trauma system has been completed.	
facility dialogue, and all-	4. The universal access number (9-1-1) and central communication system	
hazards response	are integrated and communications regularly occur among dispatch,	
communications among all	field providers, hospitals, and other system providers. The	
system participants.	communication plan is implemented. Evaluation of the effectiveness of	
Note: In some systems with	the communication system is done routinely, and corrective action is	
limited resources, for	implemented as needed.	
example, rural, the available	5. A state-of-the-art electronic communication system is available within	
resources are, at least	the jurisdiction. The trauma system communication plan is integrated	
initially, the "appropriate	with other system plans. The system is also available in all-hazards	
resources."	responses and can be used as a quick call system and as a paging	
	network and is linked to public health and other nontraditional partners.	
	Evaluation of the communication system interface with the trauma	
	system occurs routinely.	

<u>Benchmark 302</u>: The trauma system is supported by an EMS system that includes communications, medical oversight, prehospital triage, and transportation; the trauma system, EMS system, and public health agency are well integrated.

Indicator	Scoring	Status
302.8 There are sufficient	There is no coordination of transportation resources within a	
and well-coordinated	jurisdiction. Multiple ambulances or aeromedical providers, or both, can	2017-18
transportation resources to	all arrive on scene unannounced.	Assessment Score:
ensure EMS providers arrive	2. There is a priority dispatch system in place that sends transportation	2
at the scene promptly and	resources to the scene.	
expeditiously transport the	3. There is a priority dispatch system that ensures appropriate resources	
patient to the correct	arrive on scene promptly and transport patients to the hospital. A plan	
hospital by the correct	for transporting trauma patients from the field to the hospital has been	
transportation mode.	completed.	
	4. There is a priority dispatch and transportation system that ensures	
	appropriate system resources for prompt transport of trauma patients	
	to trauma centers. A trauma transportation plan has been implemented.	
	System issues are evaluated, and corrective plans are implemented as needed.	
	5. The transportation system has a priority dispatch system; it regularly	
	assesses its ability to get the right resources to the scene and to	
	transport patients by using the correct mode of transportation. The	
	transportation system is part of the overall EMS, trauma, and all-hazards	
	response system.	

Bereimark 320. The lead tradina authority chaires a competent worklotee.		
Indicator	Scoring	Status
310.1 In cooperation with	1. There are no trauma training guidelines for prehospital personnel as	
the prehospital certification	part of initial or ongoing certification or licensure.	2017-18
and licensure authority, set	2. Trauma training is incorporated into initial prehospital training programs	Assessment Score:
guidelines for prehospital	following the National Highway Traffic Safety Administration (NHTSA)	(5)
personnel for initial and	curricula.	
ongoing trauma training	3. Prehospital personnel are offered trauma training during their initial	
including trauma-specific	education, and specialty trauma continuing education courses are	
courses and those courses	available periodically.	
that are readily available	4. Prehospital trauma continuing education courses are regularly	
throughout the State.	scheduled throughout the State.	
	5. Prehospital personnel receive trauma training as part of their initial	
	certification and licensure. Routine continuing education in prehospital	
	trauma care is provided. Such additional certifications as Basic Trauma	
	Life Support (BTLS) and Pre-Hospital Trauma Life Support (PHTLS) are	
	offered regularly throughout the State	

Benchmark 310: The lead trauma authority ensures a competent workforce.

Indicator	Scoring	Status
310.2 In cooperation with	1. There is no mechanism to ensure that prehospital personnel, for	
the prehospital certification	example, Emergency Medical Technicians (EMTs) routinely providing	2017-18
and licensure authority,	care to trauma patients are certified in PHTLS and BTLS or have	Assessment Score:
ensure that prehospital	completed other trauma training.	1
personnel who routinely	2. There is a requirement for EMTs routinely providing care to trauma	
provide care to trauma	patients to complete a certification course in trauma; however, no	
patients have a current	mechanism to ensure compliance has been instituted.	
trauma training certificate,	3. There is a requirement for EMTs providing care to trauma patients to	
for example, PHTLS, BTLS,	complete a prehospital trauma course. Compliance with training	
and others, or that trauma	requirements is the responsibility of the employing agency as part of the	
training needs are driven by	quality assurance process.	
the performance	4. Requirements for EMT trauma training are provided by the trauma	
improvement process.	centers, the lead agency, or other educational training institutions.	
	Monitoring compliance with meeting the requirement is beginning.	
	5. Regular EMT trauma training is conducted through a variety of venues.	
	Other trauma training as identified through the performance	
	improvement process is completed in cooperation with the appropriate	
	authorities (e.g., trauma center, lead agency, and licensing body) to	
	ensure a collectively competent prehospital workforce in issues of	
	trauma care.	

<u>Benchmark 311</u>: The lead agency acts to protect the public welfare by enforcing various laws, rules, and regulations as they pertain to the trauma system.

Indicator	Scoring	Status
311.1 The lead agency works in conjunction with the prehospital	There is no evidence that the lead agency and the prehospital regulatory agency work together to ensure appropriate provider	2017-18 Assessment
regulatory agency to ensure that prehospital care is provided by licensed agencies that are in compliance with any rules,	agency licensure and compliance.The lead agency refers complaints concerning issues of prehospital agency performance to the prehospital regulatory agency.	Score: (3)
regulations, or protocols specific to prehospital trauma delivery (e.g., taking patients to the	 The trauma system lead agency and the prehospital regulatory agency work together to resolve complaints involving prehospital agencies that relate to trauma system performance. 	
correct facility in accordance with pre-existing destination protocols).	4. The trauma system and the prehospital regulatory agency work together to monitor compliance of prehospital provider agencies with any rules, regulations, or protocols specific to prehospital trauma delivery.	
Note: In many cases, the lead agency and the prehospital regulatory agency are the same entity.	5. The prehospital regulatory agency, working cooperatively with the lead agency, is involved in ongoing trauma system performance improvement processes and prehospital compliance with any rules, regulations, or protocols specific to prehospital trauma delivery (e.g., taking patients to the correct facility in accordance with pre-existing destination protocols).	

Acute Care Committee Benchmarks, Indicators and Scoring

<u>Benchmark 101</u>: There is a thorough description of the epidemiology of injury in the system jurisdiction using both population-based data and clinical databases.

Indicator	Scoring	Status
101.2 There is a description of injuries	1. There is no written description of injuries within the trauma	
within the trauma system jurisdiction	system jurisdiction.	2017-18
including the distribution by geographic	2. One or more population-based data sources (e.g., vital	Assessment Score:
area, high-risk populations (pediatric,	statistics and medical examiner data) describe injury within	4
elder, distinct cultural/ethnic, rural, and	the jurisdiction, but clinical data sources are not used.	
others), incidence, prevalence,	3. One or more population-based data sources and one or	
mechanism, manner, intent, mortality,	more clinical data sources are used to describe injury within	
contributing factors, determinants,	the jurisdiction.	
morbidity, injury severity (including	4. Multiple population-based and clinical data sources are	
death), and patient distribution using any	used to describe injury within the jurisdiction, and the	
or all the following: vital statistics,	description is systematically updated at regular intervals.	
emergency department (ED) data, EMS	5. Multiple population-based and clinical data sources (e.g.,	
data, hospital discharge data, State police	trauma registry, ED data, and others) are electronically	
data (those from law enforcement	linked and used to describe injury within the jurisdiction.	
agencies), medical examiner data,		
trauma registry, and other data sources.		
the description is updated at regular		
intervals.		

<u>Benchmark 101</u>: There is a thorough description of the epidemiology of injury in the system jurisdiction using both population-based data and clinical databases.

Indicator	Scoring	Status
101.3 There is a comparison of injury mortality using local, regional, statewide, and national data.	 There is no written comparison of injury mortality using local, regional, statewide, and national data. There is a written descriptive comparison of at least the leading cause of injury death using local, regional, and statewide data. There is a written descriptive, graphic, and tabular comparison of the leading cause of injury death using local, regional, statewide, and national data. There is a written descriptive, graphic, and tabular comparison of the top three leading causes of injury death using local, regional, statewide, and national data. There is a written descriptive, graphic, and tabular comparison of the top ten leading causes of injury death using local, regional, statewide, and national data. 	2017-18 Assessment Score:

<u>Benchmark 302</u>: The trauma system is supported by an EMS system that includes communications, medical oversight, prehospital triage, and transportation; the trauma system, EMS system, and public health agency are well integrated.

1. There are no specific communication plans or procedures to ensure communications among medical facilities when arranging for interfacility patient transfers. 2. Interfacility communication procedures are generally included in the patient transfer protocols for each medical facilities, but there is no system-wide procedure. 3. There are uniform, system-wide procedures to facilitate communications among medical facilities when arranging for interfacility patient transfers, but there are no redundant procedures in the event of power or other communication system failures. 4. There are uniform, system-wide procedures for communications among facilities when arranging for interfacility patient transfers, and there are redundant procedures in the event of power or other communication system failures. 5. There are uniform, system-wide procedures for communications among facilities when arranging for interfacility patient transfers. There are redundant procedures in the event of power or other communication system failures. The effectiveness of these procedures is regularly reviewed and changes made, if necessary, during the performance improvement process.
necessary during the performance improvement process

<u>Benchmark 303</u>: Acute care facilities are integrated into a resource-efficient, inclusive network that meets required standards and that provides optimal care for all injured patients.

Indicator	Scoring	Status
303.2 The trauma	1. There is no trauma system plan to identify the number, levels, and distribution	
system lead agency	of trauma centers required to meet system demand.	2017-18
should ensure that the	2. There is a trauma system plan, but it does not identify the number, levels, or	Assessment Score:
number, levels, and	distribution of trauma centers needed for the jurisdiction served.	2
distribution of trauma	3. There is a trauma system plan that identifies the number, levels, and	
centers required to	distribution of trauma centers needed for the jurisdiction. The plan, however, is	
meet system demand	not based on available data.	
are available.	4. There is a trauma system plan that identifies the number and levels of trauma	
	centers needed based on actual available data. However, this plan is not used	
	to make decisions about trauma facility designations.	
	5. There is a trauma system plan that identifies the number and levels of trauma	
	centers based on needs identified through the needs assessment process. The	
	plan is used to make decisions about trauma center designations and should	
	account for facility resources and their geographic distribution, population	
	densities, injured patient volumes, and transportation resource capabilities and	
	times. The plan is reviewed and revised periodically.	

<u>Benchmark 303</u>: Acute care facilities are integrated into a resource-efficient, inclusive network that meets required standards and that provides optimal care for all injured patients.

Indicator	Scoring	Status
303.4 When injured	1. There is no system to regularly review the conformity of	
patients arrive at a	interfacility transfers within the trauma system according to pre-	2017-18
medical facility that	established procedures.	Assessment Score:
cannot provide the	2. There is a fragmented system, usually event based, to monitor the	(1)
appropriate level of	interfacility transfer of trauma patients.	
definitive care, there is an	3. The system for monitoring interfacility transfers is new, the	
organized and regularly	procedures are in place, but training has yet to occur.	
monitored system to	4. There is an organized system of monitoring interfacility transfers	
ensure the patients are	within the trauma system.	
expeditiously transferred	5. The monitoring of interfacility transfers of trauma patients has	
to the appropriate,	been integrated into the overall program of system performance	
system-defined trauma	improvement. As the system identifies issues for correction, a plan	
facility.	of action is implemented.	

<u>Benchmark 307</u>: To maintain its State, regional, or local designation, each hospital will continually work to improve the trauma care as measured by patient outcomes.

Indicator	Scoring	Status
307.1 The trauma system engages in regular evaluation of	 There is no ongoing mechanism for the trauma system to assess or evaluate the quality of trauma care delivered by all licensed acute care facilities that provide trauma care to trauma patients and designated trauma hospitals. 	2017-18 Assessment Score:
all licensed acute care facilities that provide trauma care to trauma	2. There is a mechanism for the trauma system to evaluate trauma care services in designated trauma hospitals through internal performance improvement processes.	(2)
patients and designated trauma	 There is a mechanism to evaluate trauma care services across the entire trauma care system through performance improvement processes. 	
hospitals. Such evaluation involves independent external	4. Review of trauma care quality is both internal (through routine monitoring and evaluation) and external (through independent review during redesignation or reverification of trauma centers).	
reviews.	5. Quality of trauma care is ensured through both internal and external methods. Internal review is regular, and participation is routine for trauma stakeholders. External independent review teams provide further assurance of quality trauma care within all licensed acute care and trauma facilities treating trauma patients.	

<u>Benchmark 310</u>: The lead trauma authority ensures a competent workforce.

Indicator	Scoring	Status
310.3 As part of the	There are no trauma training standards for nursing personnel who routinely	
established standards,	care for trauma patients in acute care facilities, for example, Advanced Trauma	2017-18
set appropriate levels	Care for Nurses (ATCN), Trauma Nursing Core Course (TNCC), Advanced Trauma	Assessment Score:
of trauma training for	Life Support (ATLS), or any national or State-recognized trauma nurse	1
nursing personnel who	verification course.	
routinely care for	2. There are trauma training standards for nursing personnel but no requirement	
trauma patients in	for them to attend courses or to achieve certifications.	
acute care facilities.	3. There are trauma training standards for nursing personnel written into the trauma plan.	
	4. There are trauma training standards (and associated rules/regulations) for nursing personnel written into the trauma plan, and nurses who care for trauma patients attend trauma training courses.	
	5. Nursing personnel working in acute care facilities that see trauma patients receive initial and ongoing trauma training, including updates in trauma care, continuing education, and trauma nurse certifications, as appropriate. Outcome data are monitored for performance improvement and subsequent training opportunities.	

Indicator	Scoring	Status
310.4 Ensure that appropriate, approved	1. There is no mechanism to provide appropriate, approved trauma training courses for nursing personnel throughout the jurisdiction.	2017-18
trauma training courses are provided	2. There is a process to provide appropriate, approved trauma training courses for nursing personnel, but courses are sporadic and uncoordinated with needs.	Assessment Score:
for nursing personnel on a regular basis.	3. There are appropriate, approved trauma training courses for nursing personnel throughout the jurisdiction.	
	4. Appropriate trauma training courses for nursing personnel have been approved and are provided regularly. There are initial trauma courses and opportunities for special courses as needed.	
	5. Appropriate trauma training courses for nursing personnel have been approved and are provided regularly throughout the jurisdiction and within the trauma centers. Courses are open to nurses from any facility that treats trauma patients and are matched to needs identified in the performance improvement process.	

Benchmark 310: The lead trauma authority ensures a competent workforce.

Indicator	Scoring	Status
310.5 In cooperation with	1. There is no mechanism to ensure that nurses providing care to trauma	
the nursing licensure	patients are certified in an ATCN, TNCC, or any national or State trauma	2017-18
authority, ensure that all	nurse verification course.	Assessment Score:
nursing personnel who	2. There is a requirement for nurse verification in trauma; however, no	3
routinely provide care to	mechanism to ensure compliance has been instituted.	
trauma patients have a	3. There is a requirement for nurse verification in trauma for nursing	
current trauma training	personnel who routinely provide care to trauma patients. Compliance	
certificate (e.g., ATCN,	with training requirements is the responsibility of the trauma center as	
TNCC, or any national or	part of the quality assurance process.	
State trauma nurse	4. Requirements for nurse verification in trauma are provided by the	
verification course). As an	trauma centers and the lead agency. Monitoring compliance with	
alternative after initial	meeting the requirement is beginning.	
trauma course completion,	5. Courses for nurse verification in trauma are conducted. Other trauma	
training can be driven by the	training as identified through the performance improvement process is	
performance improvement	completed in cooperation with the appropriate authorities (e.g., trauma	
process.	center, lead agency, or licensing body). Compliance is documented and	
	forwarded to the appropriate oversight body to ensure a collectively	
	competent nursing workforce in issues of trauma care.	

Benchmark 310: The lead trauma authority ensures a competent workforce.

Indicator	Scoring	Status
310.6 As part of the	1. There are no trauma training standards for physicians who routinely care for	
established standards,	trauma patients in acute care facilities.	2017-18
set appropriate levels	2. There are physician trauma training standards but no mechanism to ensure	Assessment Score:
of trauma training for	course attendance or successful completion.	1
physicians who	3. There are physician trauma training standards written into the trauma plan.	
routinely care for	4. There are physician trauma training standards written into the trauma plan,	
trauma patients in	and physicians who care for trauma patients participate in trauma training.	
acute care facilities.	5. Physicians working in acute care facilities that see trauma patients receive	
	initial and ongoing trauma training, including updates in trauma care,	
	continuing education, and certifications, as appropriate.	

Indicator	Scoring	Status
310.7 Ensure that	1. There is no mechanism to approve or provide appropriate trauma	
appropriate,	training courses for physicians throughout the jurisdiction.	2017-18
approved trauma	2. There is a process to provide appropriate, approved trauma training	Assessment Score:
training courses are	courses for physicians, but courses are sporadic and uncoordinated with	(2)
provided for	needs.	
physicians on a	3. There are appropriate, approved trauma training courses provided	
regular basis.	regularly for physicians.	
	4. Trauma courses appropriate for physicians have been approved and are	
	provided regularly. There are initial trauma courses and opportunities	
	for special courses as needed.	
	5. Trauma courses for physicians are provided regularly throughout the	
	jurisdiction and within the trauma centers. Courses are open to	
	physicians from any facility that treats trauma patients and are matched	
	to needs identified in the performance improvement process.	

Benchmark 310: The lead trauma authority ensures a competent workforce.

Indicator	Scoring Status	;
310.8 In cooperation with	1. There is no mechanism to ensure that physicians who routinely provide	
the physician licensure	care to trauma patients are certified in ATLS.	2017-18
authority, ensure that	2. There is a requirement for ATLS for physicians who provide trauma care;	Assessment Score:
physicians who routinely	however, no mechanism to ensure compliance has been instituted.	1
provide care to trauma	3. There is a requirement for ATLS for physicians who provide trauma care.	
patients have a current	Compliance with trauma course completion is the responsibility of the	
trauma training certificate	trauma center as part of the quality assurance process.	
of completion, for example,	4. Requirements for ATLS and other trauma training for physicians are	
Advanced Trauma Life	provided by the trauma centers and the lead agency. Monitoring	
Support (ATLS) and others.	compliance with meeting the requirements is beginning.	
Alternatively, physicians	5. Regular ATLS, and other trauma training as identified through the	
may maintain trauma	performance improvement process, is completed in cooperation with the	
competence through	appropriate authorities (e.g., trauma center, lead agency, or licensing	
continuing medical	body) to ensure a collectively competent physician workforce in issues of	
education programs after	trauma care.	
initial ATLS completion.		

Benchmark 310: The lead trauma authority ensures a competent workforce.

Indicator	Scoring	Status
310.9 Conduct at least one multidisciplinary trauma conference annually that	 There are no multidisciplinary trauma conferences conducted within geographic boundaries of the trauma system. There are sporadic multidisciplinary trauma conferences conducted. 	2017-18 Assessment Score:
encourages system and team approaches to trauma	 Multidisciplinary trauma conferences are conducted occasionally, and attendance by trauma practitioners is monitored and reviewed. 	2
care.	 Multidisciplinary trauma conferences are conducted at least annually. Multidisciplinary (EMS, physicians, nurses, physiatrists, policy makers, consumers, and others) trauma conferences are conducted regularly; new findings from quality assurance and performance improvement 	
	processes are shared; and the conferences are open to all practitioners within the system. Regular attendance is required.	

Indicator	Scoring	Status
310.10 As new protocols and treatment approaches	1. There is no structured mechanism to inform or educate personnel in new protocols or treatment approaches within the jurisdiction.	2017-18
are instituted within the system, structured mechanisms are in place to	A structured mechanism is in place to inform or educate personnel in new protocols or treatment approaches, but it has not been tried or tested.	Assessment Score:
inform all personnel in those changes in a timely	3. A structured mechanism is in place to inform personnel in new protocols or treatment approaches as changes in the system are identified.	
manner.	 A structured mechanism is in place to educate personnel in new protocols and treatment approaches. 	
	5. A structured mechanism exists to educate personnel in new protocols and treatment approaches in a timely manner, and there is a method to monitor compliance with new procedures as they are instituted.	

Benchmark 310: The lead trauma authority ensures a competent workforce.

Indicator	Scoring	Status
310.12 There are mechanisms in place within agency and institutional	1. There is no mechanism in place to routinely assess the deficiencies in trauma care practice patterns of individual practitioners (e.g., EMTs, paramedics, nurses, physicians, and others) within the trauma system.	2017-18 Assessment Score:
performance improvement processes to identify and	2. The trauma system has begun a process to evaluate deficiencies in trauma care practice patterns of individual practitioners.	2
correct deficiencies in trauma care practice patterns of individual practitioners (e.g., EMTs,	 A mechanism is in place to monitor and report on deficiencies in practice patterns of individual practitioners within the trauma system. The process is evolving as part of the quality assurance and performance improvement processes. 	
paramedics, nurses, physicians, and others) within the trauma system.	4. There is a well-defined process to assess care provided by practitioners within the trauma system. The quality assurance and performance improvement processes identify deficiencies, and corrective action plans are instituted.	
	5. Practice patterns of individual practitioners performing outside the standards of care are routinely assessed by the trauma centers and the local, regional, or State lead agency. Corrective actions (training, additional education, and disciplinary), as appropriate, are instituted, and trends are monitored and reported to the lead agency or other licensing agency.	

<u>Post-Acute Care Committee</u> <u>Benchmarks, Indicators and Scoring</u>

<u>Benchmark 308</u>: The lead agency ensures that adequate rehabilitation facilities have been integrated into the trauma system and that these resources are made available to all populations requiring them.

Indicator	Scoring	Status
308.1 The lead agency has incorporated, within the	1. There are no written standards or plans for the integration of rehabilitation services with the trauma system or with trauma centers.	2017-18
trauma system plan and the trauma center standards, requirements for	2. The trauma system plan has incorporated the use of rehabilitation services, but the use of those facilities for trauma patients has not been fully realized.	Assessment Score:
rehabilitation services including interfacility transfer of trauma patients	3. The trauma system plan has incorporated requirements for rehabilitation services. The trauma centers routinely use the rehabilitation expertise although written agreements do not exist.	
to rehabilitation centers.	4. The trauma system plan incorporates rehabilitation services throughout the continuum of care. Trauma centers have actively included rehabilitation services and their programs in trauma patient care plans.	
	5. There is evidence to show a well-integrated program of rehabilitation is available for all trauma patients. Rehabilitation programs are included in the trauma system plan, and the trauma centers work closely with rehabilitation centers and services to ensure quality outcomes for trauma patients.	

<u>Benchmark 308</u>: The lead agency ensures that adequate rehabilitation facilities have been integrated into the trauma system and that these resources are made available to all populations requiring them.

Indicator	Scoring	Status
308.2 Rehabilitation centers	There is no requirement for the rehabilitation centers or outpatient	
and out-patient	rehabilitation services to contribute data on trauma patient outcomes.	2017-18
rehabilitation services	2. Rehabilitation centers and out-patient rehabilitation services are	Assessment Score:
provide data on trauma	integrated into the trauma plan, but there is no requirement for them to	1
patients to the central	submit data on trauma patients to the central trauma system registry.	
trauma system registry that	3. Rehabilitation centers and out-patient rehabilitation services are	
include final disposition,	integrated into the trauma plan, and rehabilitation care is begun early in	
functional outcome, and	the patient's treatment plan within the acute care hospital. Data	
rehabilitation costs and also	submission to the central trauma system registry is yet to be realized.	
participate in performance	4. Some trauma centers and rehabilitation facilities and outpatient	
improvement processes.	rehabilitation services have close links, and integration of services is	
	routine. Data sharing between individual trauma centers and	
	rehabilitation centers and services is accomplished, and some	
	integration with the central trauma system registry is ongoing.	
	Rehabilitation personnel participate in trauma system performance	
	improvement processes.	
	5. The trauma plan integrates rehabilitation centers and outpatient	
	rehabilitation services. Trauma centers integrate rehabilitation care	
	early in the patient's treatment plan. Rehabilitation data, including final	
	disposition, functional outcome, and rehabilitation costs, are collected.	
	These data are routinely submitted to trauma centers and to the central	
	trauma system registry for inclusion in system evaluation reports.	
	Rehabilitation personnel are fully integrated into trauma system	
	performance improvement processes.	

<u>Emergency Preparedness and Response Committee</u> Benchmarks, Indicators and Scoring

<u>Benchmark 104</u>: An assessment of the trauma system's emergency preparedness has been completed including coordination with the public health, EMS system, and the emergency management agency.

Indicator	Scoring	Status
104.1 There is a resource	1. There is no resource assessment of the trauma system's ability to	
assessment of the trauma	expand its capacity to respond to mass casualty incidents for in an all-	2017-18
system's ability to expand	hazards approach.	Assessment Score:
its capacity to respond to	2. An assessment of the ability of some components of the trauma care	4
mass casualty incidents	system to respond to a mass casualty incident has been included in all-	
(MCIs) in an all-hazards	hazards planning.	
approach.	3. An assessment of the ability of all components of the trauma system to	
	respond to a mass casualty incident has been conducted on a	
	jurisdiction-wide basis.	
	4. A written inventory of system-wide MCI capacity has been completed	
	and includes: medical reserve personnel, facility surge capacity,	
	additional equipment resources and caches, communication	
	interoperability, overall management structure such as NIMS (National	
	Incident Management System), and SEMS (Standardized Emergency	
	Management System).	
	5. The written inventory of trauma system-wide MCI capacity has been	
	shared with, and incorporated into, broader community-wide and	
	statewide planning efforts for all-hazards responses.	

<u>Benchmark 104</u>: An assessment of the trauma system's emergency preparedness has been completed including coordination with the public health, EMS system, and the emergency management agency.

Indicator	Scoring	Status
104.2 There has been a consultation by external	1. No external examination of the trauma system's performance or ability to respond within the all-hazards response system has occurred at the	2017-18
experts to assist in	State, regional, or local level.	Assessment Score:
identifying current status and needs of the trauma	Individual trauma centers have undergone outside consultation during tabletop and simulated incident drills.	(4)
system to be able to	3. In addition to the involvement of at least some individual trauma	
respond to mass casualty incidents.	centers, at least one other component of the trauma system has been analyzed by external reviewers, for example, prehospital, communications, information systems, and others.	
	4. Preparations are under way for a formal system-wide review of the trauma system response to a mass casualty incident (to occur within the next 6 months).	
	 An outside group of all-hazards response "experts" has conducted a formal external assessment and has made specific recommendations to the system. 	

<u>Benchmark 104</u>: An assessment of the trauma system's emergency preparedness has been completed including coordination with the public health, EMS system, and the emergency management agency.

Indicator	Scoring	Status
104.3 The trauma system	1. There are no resource standards on which to base a gap analysis.	
has completed a gap	2. The statewide trauma advisory committee, in conjunction with	2017-18
analysis based on the	appropriate incident management personnel, has begun to develop	Assessment Score:
resource assessment for	statewide MCI response resource standards.	1
trauma emergency	3. State resource standards for trauma system response during a mass	
preparedness.	preparedness. casualty incident have been developed and approved.	
	4. Some components (e.g., prehospital) of the trauma system, or facilities	
	within it, have completed a gap analysis based on the adopted	
	standards.	
	5. A system-wide trauma system MCI resource gap analysis has been	
	completed for the jurisdiction based on the system resource standards	
	adopted.	

<u>Benchmark 203</u>: The State lead agency has a comprehensive written trauma system plan based on national guidelines. The plan integrates the trauma system with EMS, public health, emergency preparedness, and incident management. The written trauma system plan is developed in collaboration with community partners and stakeholders.

Indicator	Scoring	Status
203.6 The trauma system	1. There is no trauma system plan and no integration between	
plan has established clearly	trauma and emergency preparedness.	2017-18
defined methods of	2. There is an established trauma system plan; but it is silent on	Assessment Score:
integrating with emergency preparedness plans (all	emergency integration, and no evidence is present to	(1)
hazards).	demonstrate integrated incident management and trauma systems.	
	3. The trauma system plan addresses the interaction of the lead	
	agency of the trauma system and emergency preparedness	
	service system. Close coordination and clearly defined goals and	
	objectives are in process.	
	4. The trauma system plan addresses coordination between the	
	lead agency of the trauma system and the lead agency for	
	emergency preparedness. Plans are integrated, and working	
	collaboration exists and is demonstrated. Routine working drills	
	and training exercises are incorporated into operational plans.	
	5. The trauma system plan addresses the lead agency coordination	
	between EMS and emergency preparedness. Plans are well	
	integrated, and routine simulated incident drills that are	
	conducted use an all-hazards approach. Results from drills and	
	live responses are used to further improve the plans and	
	processes.	

<u>Benchmark 204</u>: Sufficient resources, including those both financial and infrastructure related, support system planning, implementation, and maintenance.

Indicator	Scoring	Status
204.5 The trauma system plan includes identification of additional resources (both	The trauma system plan does not include the identification of additional resources necessary to respond to mass casualty incidents.	2017-18 Assessment Score:
manpower and equipment) necessary to respond to mass casualty incidents.	 The trauma system plan addresses mass casualty incidents but has not identified additional resources. The trauma system plan identifies resources, but it is 	
•	 unclear how the needs are going to be met. The trauma system plan identifies both equipment and manpower resources available currently and additional resources needed; it also defines a process for securing and ensuring that equipment and human resources are 	
	available.5. There is a well-drafted and rehearsed trauma system plan, along with sufficient caches of equipment and backup personnel, that ensures the rapid deployment of additional resources during mass casualty incidents.	

Benchmark 208: The trauma, public health, and emergency preparedness systems are closely linked.

Delicilliark 200. The tradilla	public health, and emergency preparedness systems are closely linked	•
Indicator	Scoring	Status
208.2 The incident	1. There are no formal established linkages for system integration or	
management and trauma	operational management between the incident management and	2017-18
systems have formal	trauma systems.	Assessment Score:
established linkages for	2. There are limited linkages or interfaces between the incident	(5)
system integration and	management and trauma systems specific to mass casualties.	
operational management.	3. Plans are in place for both incident management and trauma system	
	linkage. Integration is beginning, and cooperation within the	
	multidisciplinary groups is occurring. Draft policies are being reviewed,	
	and operational management strategies are being aligned.	
	4. There is evidence of program linkages between the incident	
	management and trauma systems. Operational management guidelines	
	exist and are routinely evaluated and tested.	
	5. Strong program linkages and interfaces are present. The incident	
	management and trauma systems are well integrated, and operational	
	procedures have been implemented, tested, and evaluated. System	
	participants meet regularly and are familiar with the operational plans	
	of both areas. Data from the trauma system and from the incident	
	management system are shared.	

<u>Benchmark 302</u>: The trauma system is supported by an EMS system that includes communications, medical oversight, prehospital triage, and transportation; the trauma system, EMS system, and public health agency are well integrated.

Indicator	Scoring	Status
302.10 There are	There are no written procedures for EMS and trauma system	
established procedures for	communications in the event of an all-hazards incident.	2017-18
EMS and trauma system	2. Local EMS systems have written procedures for EMS communications in	Assessment Score:
communications in an all-	the event of an all-hazards or major EMS incident. However, there is no	(4)
hazards or major EMS	coordination among the local jurisdictions.	
incident that are effectively	3. There are statewide or regional EMS communication procedures in the	
coordinated with the overall	event of an all-hazards or major EMS incident. These plans do not	
all-hazards response plan	involve other jurisdictions and are not coordinated with the overall all-	
for the jurisdiction.	hazards response plan and incident management system.	
	4. There are statewide or regional EMS communication procedures in the	
	event of an all-hazards or major EMS incident that are coordinated with	
	other jurisdictions, with the overall all-hazards response plan, and with	
	the incident management system.	
	5. There are statewide or regional EMS communication procedures in the	
	event of an all-hazards or major EMS incident that are coordinated with	
	other jurisdictions, with the overall all-hazards response plan, and with	
	the incident management system. There are one or more	
	communication system redundancies. These procedures are regularly	
	tested in simulated incident drills, and changes are made in the	
	procedures, when necessary, based on the results of these drills.	

<u>Benchmark 305</u>: The lead agency ensures that its trauma system plan is integrated with, and complementary to, the comprehensive mass casualty plan for both natural and man-made incidents, including an all-hazards approach to planning and operations.

planning and operations:		
Indicator	Scoring	Status
305.1 The EMS, the trauma	1. There is no system for integration between the EMS, the trauma system,	
system, and the all-hazards	and the all-hazards response system.	2017-18
medical response system	2. There have been some discussions between the EMS, the trauma	Assessment Score:
have operational trauma	system, and the all-hazards medical response system, but no formal	4
and all-hazards response	plans have been developed.	
plans and have established	3. Formal plans for the EMS, the trauma system, and the all-hazards	
an ongoing cooperative	medical response systems integration are in development and have	
working relationship to	started the approval process. Working relationships have formed and	
ensure trauma system	cooperation is evident.	
readiness to all-hazards	4. There are plans in place to ensure that the EMS, the trauma system, and	
events	the all-hazards medical response system are integrated and operational.	
	All-hazards exercises and simulated incident drills have the cooperation	
	and participation of the trauma system.	
	5. The EMS, the trauma system, and all-hazards response plans are	
	integrated and operational. Routine working relationships are present	
	with cooperation and sharing of information to improve trauma system	
	readiness for all-hazards responses.	

pg. 74

<u>Benchmark 305</u>: The lead agency ensures that its trauma system plan is integrated with, and complementary to, the comprehensive mass casualty plan for both natural and man-made incidents, including an all-hazards approach to planning and operations.

Indicator	Sco	ring	Status
305.2 All-hazards events	1.	All-hazards training is not a routine part of the trauma system.	
routinely include situations	2.	Training in response to all hazards is solely the responsibility of the EMS	2017-18
involving natural (e.g.,		and of emergency management agencies. Trauma response has not	Assessment Score:
earthquake), unintentional		been integrated into the system.	4
(e.g., school bus crash), and	3.	All-hazards exercises are conducted routinely and include both trauma	
intentional (e.g., terrorist		and EMS response capabilities.	
explosion) trauma-	4.	The trauma, EMS, and public health stakeholders have begun exercises	
producing events that test		in an all-hazards approach to mass casualty incidents.	
expanded response	5.	Exercises and training in all-hazards responses including testing of	
capabilities and surge		facility/clinic surge capacity are regularly conducted with trauma, EMS,	
capacity of the trauma		and public health stakeholders. Debriefing sessions occur after each drill	
systems.		or event.	

<u>Benchmark 305</u>: The lead agency ensures that its trauma system plan is integrated with, and complementary to, the comprehensive mass casualty plan for both natural and man-made incidents, including an all-hazards approach to planning and operations.

piailillig and operations.		
Indicator	Scoring	Status
305.3 The trauma system,	1. There is no surge capacity (prehospital, hospital, clinic, or coroner) built	
through the lead agency,	into the system for either smaller multipatient events or mass casualty	2017-18
has access to additional	incidents.	Assessment Score:
equipment, materials, and	2. The trauma system has begun to identify additional equipment,	4
personnel for large-scale	materials, and personnel needed to respond to all-hazards events in	
traumatic events.	light of new threats and emergencies.	
Note: The lead agency will	3. The lead agency, working with the trauma stakeholders, has in place	
work with other appropriate	additional equipment and materials for mass casualty incidents. A	
national, State, regional,	process to utilize additional personnel resources is in development.	
and local agencies to secure	Testing of newly acquired equipment, material, and personnel resources	
these additional resources.	has not yet been completed.	
	4. The lead agency, in conjunction with the trauma stakeholders, has	
	begun to test a method of deploying additional equipment, materials,	
	and personnel during all-hazards events.	
	5. The lead agency has acquired additional equipment and materials for	
	both the prehospital and hospital response to all-hazards events.	
	Deployment issues have been resolved. A mechanism to share	
	personnel resources has been developed and tested in both the	
	prehospital and hospital setting (e.g., mutual aid, precredentialing of	
	practitioners, and rapid assignment of privileges). The system routinely	
	tests its capabilities in this area.	

Appendix A – EMS Advisory Board members, 2016-2018

Michel B. Aboutanos, MD, MPH, FACS

The Honorable Sherrin Cherrell Alsop

Byron F. Andrews, III

Samuel T. Bartle, MD

Dreama Chandler

Gary P. Critzer - Chair

Valeta C. Daniels

Richard H. Decker, III

Lisa M. Dodd, DO

Stephen J. Elliott

Jason D. Ferguson

R. Jason Ferguson

William B. Ferguson

Joan F. Foster

S. Denene Hannon

Jonathan D. Henschel

David Hoback

Sudha Jayaraman, MD, MSc

Jason R. Jenkins

Lori L. Knowles

John Korman

Cheryl Lawson, MD, FACEP

Julia Marsden

Marilyn K. McLeod, MD

Genemarie McGee - Vice-Chair

Corina Nuckols

Christopher L. Parker, BSN, RN, CEN CPEN, NRP, CCEMTP

Ronald Passmore, NRP

Anita Perry

Jethro H. Piland

Valerie Quick

Jose V. Salazar, MPH, NREMT-P

Matthew Tatum

Charlotte Tyson

Daniel C. Wildman



<u>Appendix B – Trauma System Management and Oversight Committee members, 2016-2018</u>

Dr. Michel Aboutanos - Chair

Emory Altizer, RN

Sid Bingley

Dr. Forest Calland

Dr. Michael Feldman

Dr. Maggie Griffen

Dr. Scott Hickey

Melissa Hall

Anne Mills Hunt

Lou Ann Miller, RN

Dr. T. J. Novosel

Dr. Shawn Safford

Dr. Keith Stephenson

Ms. Susan Watkins

Lisa Wells, RN

Andi Wright, RN



Appendix C – Trauma System Plan Contributors

The following individuals contributed to the creation of the Commonwealth of Virginia Trauma System Plan.

Their knowledge, time, effort and their vision are what made this plan possible.

Dr. Michel Aboutanos* A Emory Altizer* A Shelly Arnold Jamie Avoub Dr. Sam Bartle Dr. Carol Bernier E **Chad Blosser** Sid Bingley*E Heather Board^B Stephanie Boese D Lisa Bono^c Beth Broering ^C April Brown Gary Brown Kelly Brown Kathy Butler D Dr. Forest Calland* c Melinda Carter^c **Kate Challis** Dr. Bryan Collier Cam Crittenden† Dwight Crews* Gary Critzer* Heather Davis F Mark Day c, G Cheryl Deshaine G Sara Beth Dinwiddie B David Edwards* Rebecca Edwards Tim Erskine* Dr. Jordan Estroff Laura Evans

Margaret Fields Dr. Michael Feldman* **Eddie Ferguson** Angela Pier Ferguson F Dr. Elizabeth Franco ^G Dan Freeman Shirley Gibson Dr. Terrel Goode F Dr. Maggie Griffen* Kelly Guilford^c Dr. Theresa Guins ^E Amy Gulick^B Melissa Hall* B Dr. Richard Hamrick Mike Harmon Dr. Jeffrey Haynes E Dr. Scott Hickey* Dr. John Hyslop* F Scott Johnson Jessica King Valerie Kirby Ann Kuhn **Brent Lafayette** Mark Lawrence Tracey Lee F Dr. George Lindbeck+ Christopher Lindsay F Tiffany Lord F Dr. Raymond Makhoul

Nancy Malhotra

Nick Matthelsen

Robin Manke G

Jake Marshall

Cassie McCallister Dr. Marilyn McLeod*E Lou Ann Miller* Corri Miller-Hobbs^B Anne Mills-Hunt* A Valeria Mitchell* C Patti Montes Dr. Daniel Munn F Jennifer Mund Melinda Myers C, G Dr. T.J. Novosel* E Alan Ottarson^c Carrie Papajohn G **Amy Paratore** Ron Passmore E Robin Pearce • C Wayne Perry E Catherine Peterson ^G Dr. Peter Ploch Dr. Ranjit Pullarkat Courtney Rapp Mark Rath ^G Morris Reece* A Adam Rochman Dynette Rombough Kelley Rumsey F Dr. J. Thomas Ryan* A Dr. Shawn Safford* Paul Sharpe A Karen Shipman^B

Shelia Spencer ^G Greg Stanford^c Sherry Stanley E Joanie Steil^B Dr. Keith Stephenson*A Wanda Street* Lenice Sudds* Brad Taylor ^E Dallas Taylor ^E Tanya Trevilian F Dr. Chris Turnbull E Amanda Turner Will Wagnon Diamond Walton^B Linda Watkins B Susan Watkins Dr. Leonard Weireter Lisa Wells* Dr. Tania White E **Tracey White** Allen Williamson Forrest Winslow^C Scott Winston Lisa Wooten Andi Wright* A Frank Yang Dr. Allen Yee E Dr. Jeff Young F

J. Yow

Anne Zehner* c

Mitchell Farber

R. Macon Sizemore* D

Dr. E. Reed Smith E

Susan Smith

^{*} Trauma System Plan Task Force member

^A Administrative Workgroup member

^B Injury Prevention Workgroup member

^C Data/Education/Research/Syst. Eval. Workgroup member

^D Post-Acute Rehabilitative Workgroup member

^E Pre-Hospital Care Workgroup member

^F Acute Definitive Care Workgroup member

^G Disaster Preparedness Workgroup member

[•] Office of EMS, VA Dept. of Health

Appendix D – Trauma System Plan Task Force and Task Force Workgroup Meetings

Task Force meetings

February 11, 2016

Courtyard by Marriott, 10077 Brook Rd., Glen Allen, VA 23059

March 3, 2016

The Perimeter Center, 9960 Mayland Dr., Henrico, VA 23233

June 2, 2016

Hampton Inn & Suites, 700 E. Main St., Richmond, VA 23219

September 1, 2016

Hampton Inn & Suites, 700 E. Main St., Richmond, VA 23219

December 1, 2016

Hampton Inn & Suites, 700 E. Main St., Richmond, VA 23219

March 2, 2017

Virginia Public Safety Training Center, 7093 Broad Neck Rd., Hanover, VA 23069

June 1, 2017

Virginia Public Safety Training Center, 7093 Broad Neck Rd., Hanover, VA 23069

September 7, 2017

Virginia Public Safety Training Center, 7093 Broad Neck Rd., Hanover, VA 23069

December 7, 2017

Hampton Inn & Suites, 700 E. Main St., Richmond, VA 23219

March 1, 2018

The Perimeter Center, 9960 Mayland Dr., Henrico, VA 23233

Workgroup meetings

The Task Force Workgroups held a total of 99 meetings between March 2016 and March 2018:

Administrative: 12 meetings Injury Prevention: 15 meetings

Data/Education/Research/System Evaluation: 11 meetings

Post-Acute Rehabilitative: 18 meetings

Pre-Hospital Care: 19 meetings
Acute Definitive Care: 14 meetings
Disaster Preparedness: 10 meetings

<u>Appendix E – American College of Surgeons Trauma System Consultation, September 1-4, 2015</u> Participant List

Consultation Team Members

Robert J. Winchell, MD, FACS, Surgeon, New York, NY – Team Leader

Alasdair K. T. Conn, MD, FACS, Surgeon, Boston, MA

Heidi A. Hotz, RN, Trauma Program Manager, Los Angeles, CA

Kathy J. Rinnert, MPH, FACEP, ED Physician, Dallas, TX

Brian R. Moore, MD, FAAP, Pediatric Specialty Consultant, Albuquerque, NM

Drexdal Pratt, State EMS Director, Raleigh, NC

Jane Ball, RN, DrPH, Technical Advisor TSC, Gaithersburg, MD

Nels D. Sanddal, PhD, REMT-B, ACS Staff Reviewer, Chicago, IL

Trauma System Consultation Participants

Name		Title	Organization
Lindley	Aberbathy	Trauma Program Manager	Johnston-Willis Hospital
Michel	Aboutanos	Chief of Acute Care Surgery/ COT Trauma Medical Director	VCU Health Systems
Marcus	Almorode	Director of Emergency Services	Rockingham Memorial Medical Center
Emory	Altizer	Trauma Program Manager	Lewis Gale Hospital Montgomery
Sheldon	Barr	VP of Emergency & Cardiovascular Services	HCO Corporate
Samuel	Bartle	Advisory Board Member/ EMS for Children Chair/ Pediatric EM Physician	VCU Health Systems
Sid	Bingley	Captain	Blacksburg Vol. Rescue Squad
Heather	Board	Office of Fam Health Srvs, Inj Viol Prev Program Admin Manager III	Virginia Department of Health
Thomas	Boro	General Surgeon	Danville Regional Medical Center
Beth	Broering	Trauma Program Manager	VCU Health Systems
Gary	Brown	Gen Admin Manager/ State EMS Director	Virginia Office of EMS
Vicki	Burton	Trauma Registrar	Mary Washington Hospital
Kathy	Butler	Trauma Program Manager	University of VA Medical Center
J. Forrest	Calland	Trauma Medical Director	University of VA Medical Center
Bryan	Collier	Trauma Medical Director/ Director of Surgical Nutrition	Carilion Roanoke Memorial Hospital
Jay	Collins	Trauma Surgeon	Sentara Norfolk General Hospital
Sonia	Cooper	Trauma Coordinator	Sentara VA Beach General Hospital
Gary	Critzer	Regional EMS Director/ EMS Advisory Board Chair	Waynesboro Dept of Emergency Management
John	DaVanzo	Rehabilitation Director	Bon Secours Maryview Medical Center
Mark	Day	Trauma Program Manager	Sentara VA Beach General Hospital
Richard	Decker	Member of ODEMSA Board of Directors	Old Dominion EMS Alliance
			•

DRAFT DRAFT

Todd	Dickerson	Emergency Department Director	Augusta Health
John	Duval	CEO	VCU Health Systems
David	Edwards	EMS for Children Program Manager/ Pediatric Emergency Care Coordinator	Virginia Office of EMS
Michael	Elliot	Trauma Center Administrator	Centra Health Lynchburg General Hospital
Michael	Feldman	Assistant Professor/ Burn Medical Director	VCU Health Systems
Jason	Fowlkes	Trauma Medical Director	Lewis Gale Hospital Montgomery
Carol	Gilbert	General Surgeon	Carilion Roanoke Memorial Hospital
Aaron	Glenn	Director of Nursing	Carilion Stonewall Jackson Hospital
Margaret	Griffen	Trauma Acute Care Surgeon	Inova Fairfax Hospital
Kelly	Guilford	Trauma Performance Improvement Manager	Chippenham Medical Center
Melissa	Hall	Trauma Program Manager	Mary Washington Hospital
Branden	Haushalter	CEO	Johnston-Willis Hospital
Barbara	Hawkins	Retired Nurse	n/a
Scott	Hickey	ACEP/ Advisory Board Committee/ Emergency Medical Director	Chippenham Medical Center
Marian	Hunter	Public Information Officer	Virginia Department of Health
Sudha	Jayaraman	Assistant Professor of Acute Care Surgical Services/ Advisory Board Member	VCU Health System
Elizabeth	Johnson	RN, Trauma Registrar	Southside Regional Medical Center
Donald	Kauder	Trauma Medical Director	Mary Washington Hospital
Gary	Kavit	System Medical Director, ED	Riverside Regional Medical Center
Marcia Ann	Kuhn	Medical Director of Trauma and Burns	Children's Hospital of the King's Daughters
Amanda	Lavin	Asst Attorney General, Health Services Section	Office of the Attorney General
George	Lindbeck	State EMS & Trauma Systems Medical Director	Virginia Office of EMS
Raymond	Makhoul	Trauma Medical Director	Chippenham Medical Center
Nancy	Malhotra	Director of Trauma Services	Chippenham Medical Center
Ajai	Malhotra	Former COT Chair/ Former Chair, Trauma System Oversight Committee Chief/ Division of Acute Care Surgical Services	University of Vermont
Matt	Mathias	C00	Lewis Gale Hospital Montgomery
Genemarie	McGee	CNO	Sentara Norfolk General Hospital
Marilyn	McLeod	Operational Medical Director	Lynchburg General Hospital
Tim	McManus	CEO	Chippenham Medical Center
Lou Ann	Miller	Trauma Program Manager	Riverside Regional Medical Center
Charles	Miller	Neuro Surgery	Chippenham Medical Center
Corri	Miller-Hobbs	Safe Kids Virginia Program Coordinator	Children's Hospital of Richmond at VCU

DRAFT DRAFT

Anne	Mills	Director of Emergency Department	Danville Regional Medical Center
Valeria	Mitchell	Trauma Program Manager	Sentara Norfolk General Hospital
Sherry	Mosteller	Trauma Program Manager	Carilion New River Valley Medical Center
Daniel	Munn	Director, Trauma & Acute Care Surgery	Riverside Regional Medical Center
Melinda	Myers	Trauma Division Director	Inova Fairfax Hospital
Timothy J.	Novosel	Assistant Professor / General Surgery/ Trauma	Sentara Norfolk General Hospital
Martin	O'Grady	General And Vascular Surgeon	Sentara VA Beach General Hospital
Kelly	Parker	Hospital Preparedness Intern / Disaster	Virginia Department of Health
Christopher	Parker	RN / Paramedic	Lynchburg General Hospital/ Centra One
Robin	Pearce	Trauma Critical Care Coordinator	Virginia Office of EMS
Debra	Perina	ED Physician	University of Virginia Health System
Anita	Perry	Director of Flight Services	Wellmont One
Peter	Ploch	Trauma Medical Director, General Surgery	Lynchburg General Hospital/ Centra Health
Melissa	Porrey	Trauma Survivors Network Coordinator	Inova Fairfax Hospital
Dynette	Rombough	Corporate Vice President and President of Sentara	Sentara Northern Virginia Medical Center
John	Potter	Medical Director, Emergency Department	Winchester Medical Center
Faiqa	Qureshi	Division Director, Pediatric Emergency Medicine	Children's Hospital of the King's Daughters
Bob	Ramsey	Executive Director	Virginia College of Emergency Physicians
Robert	Rasmussen	Program Admin Manager III/ Traffic Engineering	Virginia Department of Transportation
Morris	Reece	Disaster Coordinator / Technical Advisor	Virginia Hospital and Healthcare Association/ WVEMS Regional Council
Karen	Rice	Admin & Office Specialist III	Virginia Office of EMS
Kelly	Rumsey	Nurse Clinician/ Program Manager	Children's Hospital of Richmond at VCU
Shawn	Safford	Section Chief, Pediatric Surgery	Carilion Clinic Children's Hospital
Gary	Scott	Vice President	Carilion Roanoke Memorial Hospital
Paul	Sharpe	Trauma/ Critical Care Manager	Virginia Office of EMS
Macon	Sizemore	Director of Rehabilitation Services	VCU Health Systems
Kelly	Southard	Chief/ REMS Board of Director President	Orange County Volunteer Rescue Squad
Greg	Stanford	Trauma Medical Director/ General Surgery	Winchester Medical Center
Keith	Stephenson	Trauma Medical Director/ General Surgery	Carilion New River Valley Medical Center

DRAFT DRAFT

Adam	Stevens	Co-director for Trauma Services	Lynchburg General Hospital/ Centra Health
Eric	Stone	Associate Administrator/ VP of Clinical Operations	Riverside Regional Medical Center
Marcus	Stone	Director of Emergency Services and Business Health Services	Memorial Hospital of Martinsville
Wanda	Street	Administrative & Office Specialist II	Virginia Office of EMS
Lynn	Taylor	Curriculum Development Instructor	United Network for Organ Sharing
Dallas	Taylor	Director of Trauma Services	Lewis Gale Medical Center Salem
Robert	Teaster	Administrator for Transplant Services	University of Virginia Medical Center
Sadie	Thurman	System Director of Emergency Services	Riverside Regional Medical Center
David	Trump	Chief Deputy Commissioner for Public Health and Preparedness	Virginia Department of Health
Amanda	Turner	Trauma Coordinator	Lynchburg General Hospital/ Centra Health
Linda	Watkins	Injury Prevention Coordinator	Inova Fairfax Hospital
Leonard	Weireter	Professor of Surgery	Eastern Virginia Medical School
Lisa	Wells	Trauma Program Manager	Winchester Medical Center
Scott	Winston	Program Admin Manager III	Virginia Office of EMS
Greg	Woods	Executive Director	Southwest EMS Regional Council
Andrea	Wright	Director, Trauma Services	Carilion Roanoke Memorial Hospital
Jeffery	Young	Director, Trauma Center/ Professor of Surgery/ Chief Patient Safety Officer	University of Virginia Medical Center
Anne	Zehner	Program Admin Specialist II	Virginia Department of Health/ Office of Family Health Services