Virginia Department of Health

Office of Emergency Medical Services

Quarterly Report to the

State EMS Advisory Board

August 4, 2017

Executive Management, Administration & Finance

Office of Emergency Medical Services
Report to The
State EMS Advisory Board
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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 4, 2017

At the time of finishing this report there are three action items from a Standing Committee:

Motion from the Training and Certification Committee – See Appendix C:

With the initial activity performed by the Training and Certification Committee workgroup and in review of the available information from the Intermediate 99 Town Hall meetings and public comments received, the Training and Certification Committee supports the finding that Virginia does not have the resources to develop and maintain valid, reliable and legally defensible certification exams. The workgroup further recommends that when the National Registry of EMTs no longer offers an Intermediate 99 examination, Virginia will cease issuing initial Intermediate certification and that existing Intermediates in Virginia will be able to maintain their Intermediate certification indefinitely through continuing education, with no reentry mechanism.

Motion from the Medical Direction Committee – See Appendix E:

Resolution for Compliance with the National Scope of Practice Model and Standardized EMS Certification Levels

Whereas the Virginia EMT-I/99 certification level is a legacy certification with a diminishing and limited future;

Whereas the initial certification of the Virginia EMT-I/99 is provided by an external organization and will exist only as long as financially viable for this certifying entity and not under the proactive control of the Commonwealth;

Whereas the existence of the Virginia EMT-I/99 certifications has inhibited the development of the nationally recognized AEMT certification level, the bedrock certification for future EMS system maturity;

Whereas the existence of the EMT-I/99 certification level has inhibited the professional growth and maturity of the Nationally Registered Paramedic in Virginia; and

Whereas the existence of the EMT-I/99 certification level, has, very importantly, inhibited the professional growth and career opportunity of EMT-I/99 providers themselves; now, therefore, be it Resolved, the Medical Direction Committee (MDC) of the Governor's Advisory Board (GAB):

1. Supports the recommendation from the Training and Certification Committee approved on July 5, 2017.

2. Supports the recommendation from various sources that the Virginia EMT-I/99 certification be maintained by providers through fulfillment of continuing education requirements after loss of the initial certification process, but without a re-entry option for failure to maintain certification.

3. Recommends the GAB support a moratorium on new EMT-I/99 classes starting on or after July 1, 2018.

4. Recommends the GAB to request the OEMS to plan for EMT-I/99 providers to facilitate transition to either NRP status or AEMT status.

5. Recommends the GAB to request the OEMS to facilitate EMS systems development in the Commonwealth specific to their utilization of the AEMT certification level.

6. Offers its expertise as EMS Physicians and subject matter experts to support these actions and to offer consultation to the various stakeholders.

Motion from the Medical Direction Committee – See Appendix F:

The Medical Direction Committee (MDC) requests that the EMS Advisory Board adopt the Prehospital and Inter-hospital State Stroke Triage Plan as approved by MDC on July 6, 2017. Please see **Appendix G**.

b) McAuliffe Names Gary P. Critzer to State Board of Health

On Friday, July 21, 2017 Governor Terry McAuliffe announced appointments to his Administration. Of the many qualified people in EMS and Fire Departments around the state, Governor McAuliffe has selected the Director of the Department of Emergency Management and EMS for the City of Waynesboro and president of the Central Shenandoah EMS Council Board of Directors, Gary P. Critzer, NRP, CCEMTP to serve a four-year term on the State Board of Health.

The 2009 Virginia General Assembly legislated a new position on the State Board of Health to represent the EMS community. The legislation states:

> "The EMS Community Representative shall be a representative of the Emergency Medical Services community . . . and will provide the State Board of Health with leadership and technical assistance regarding all matters related to EMS. The individual will work cooperatively as a member of the Board of Health to enhance EMS system coordination, planning and response to ensure the provision of the highest quality Emergency Medical Care to citizens and visitors of the Commonwealth."

Upon learning of the appointment, Director Critzer said: "I am honored to be selected by the Governor for this distinguished position. The ability to represent Virginia's EMS system on the State Board of Health is an honor and a privilege. The addition of a seat on the Board of Health to represent Virginia's EMS community demonstrates the importance of EMS as a key participant in Virginia's public health system."

c) Virginia becomes First State to Opt-In to FirstNet's National Public Safety Broadband Network

Governor McAuliffe signed a letter of intent on July 10, 2017 declaring that the Commonwealth of Virginia will allow the First Responder Network Authority (FirstNet) and AT&T to proceed with the deployment of the of the Nationwide Public Safety Broadband Network in Virginia. The Governor McAuliffe held a ceremonial letter signing on July 11, 2017 at FirstNet Headquarters, 12201 Sunrise Valley Drive Reston, Virginia. at 1:30 p.m.

FirstNet is the result of the 9/11 Commission's recommendation that a dedicated public safety interoperable, nationwide mobile broadband network be created to enable continued communication during a disaster or other large-scale event. The Governor's decision marks a significant step in the realization of this recommendation.

"I am proud that Virginia is the first state in the nation to opt in to this program that will help our first responders communicate during times of emergency," said Governor Terry McAuliffe. "While this is only the beginning of the process, I look forward to the continued coordinated efforts among Virginia, FirstNet, and AT&T to provide public safety officials with innovative new technologies that will help them keep Virginians safe."

"Public safety has spent years advocating for a nationwide network following the September 11, 2001 terrorist attacks, and today, Governor McAuliffe is helping to answer that call by joining the FirstNet network," said FirstNet CEO Mike Poth**.** "FirstNet will be able to put the technology citizens use every day—like smartphones and apps—into the hands of Virginia's first responders, modernizing how they help save lives and protect residents while creating a single, interoperable system across the Commonwealth and across the country."

Public safety subscribers to AT&T will be able to take advantage of priority service on AT&T's existing LTE network nationwide. Localities will have full local control to identify their responders and assign priority as needed based on the circumstances. By the end of 2017, public safety subscribers will also have preemption capability on the network, helping to further ensure their ability to communicate.

"Allowing FirstNet and AT&T to move forward with the deployment of the Nationwide Public Safety Broadband Network in Virginia moves public safety closer to the reliable, mission-critical broadband service that is needed for evolving threats," said Secretary of Public Safety and Homeland Security Brian Moran.

"I am extremely pleased that Virginia is choosing to opt into the network**,"** said Fairfax County Fire Chief Richard Bowers "Access to the network will provide us with additional tools to help ensure we can do our job when the time comes."

The Commonwealth will continue to work with FirstNet and AT&T and our local partners to provide feedback in order to ensure a viable network that will enhance public safety communications throughout Virginia.

d) Public Safety Wreath Laying & Roll Call and Virginia Fallen Firefighters and EMS Memorial Service

The 2017 Virginia Fallen Firefighters and Emergency Medical Services (EMS) Memorial Service was held on Saturday, June 3 at 12 p.m. at the Richmond International Raceway Complex's Main Exhibition Hall. This annual event honors firefighters and EMS personnel who have died in the line of duty or have been recognized by the Virginia Line of Duty Act within the last year.

This years' service paid tribute to Battalion Chief Louis Stark of City of Newport News Fire Department, Firefighter/Paramedic Timothy Killian of James City County Fire Department and

Fire Chief Robert Baber of Crozet Volunteer Fire Department. Here is a link to more information about this service: http://www.vafire.com/content/uploads/2017/03/2017-Memorial-Service-Flyer.pdf

In addition to this event, the Public Safety Wreath Laying and Roll Call was held at the Virginia Public Safety Memorial at Capital Square in Richmond on Friday, June 2, 2017. Dr. Marissa Levine, State Health Commissioner, Gary R. Brown, Office of EMS (OEMS) Director and Scott Winston, OEMS Assistant Director attended both events and Dr. Levine also assisted in honoring the firefighters and EMS personnel who died in the line of duty at the Memorial Service on Saturday, June 3, 2017.

e) Ambulance Safety and Innovation

Sprinters are spreading, side-facing bench seats saying sayonara. Slowly and fitfully, belatedly for sure but now indubitably, we're sprucing up the safety of the ambulance environment.

Of course that covers many aspects, and in many there remains ground to make up. There's always resistance; the next big battle will concern remounts. But the participants in a recent EMS World Roundtable largely see things getting better in the ambulance world, driven by better science.

"I think we have an opportunity that wasn't available to us before," says Mike Berg, BS, NRP, manager of regulation and compliance for Virginia's Office of EMS. "Historically we've bought and used what was out there because that's the way we'd always done it. If research and data now show us what we're doing isn't appropriate, we should embrace that and implement change."

With remounts Berg's office may have inadvertently triggered a big one. As detailed elsewhere in this issue (and at www.emsworld.com/12313412), some OEMS field staff wondered why remounted ambulances in the state weren't held to the same standards as new ones. The state attorney general's office reviewed state law—which doesn't distinguish between new trucks and remounts in requiring compliance with GSA's KKK-A-1822F specification—and decided they should be.

The impact of this interpretation could be big. It spurred some pushback among secondary remounters, but original manufacturers have been largely supportive. "In fact," says Berg, "we heard from several that this is an area we need to address as an industry." Taking the cue, both CAAS and NFPA will now start developing remount standards.

While these four experts were not interviewed simultaneously, their questions were similar and responses are therefore presented roundtable-style. Please see **Appendix A**.

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

REPLICA has been enacted in eleven states and it is awaiting signature in a twelfth state. The states that have enacted REPLICA are CO, TX, VA, ID, KS, TN, UT, WY, MS, GA, and AL. REPLICA is awaiting signature by the Governor in Delaware.

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 a privilege to practice in other compact states, a national coordinated EMS licensure database, expedited processing of veteran and spouse applications for certification and 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 Commission will be held in Oklahoma City on October 7 and 8. During this meeting the Commission will begin the business of electing officers, adopting By-Laws and establishing committees, and approving rules on rulemaking. Each state that has enacted REPLICA will have one delegate that is a member of the Commission.

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

g) Regional Meetings to Contribute to EMS Agenda 2050

The EMS Agenda 2050 team will host four public meetings throughout the U.S. where attendees will meet and discuss the future of EMS with the project's Technical Expert Panel, a group of 10 individuals with wide-ranging and diverse experiences within EMS systems and healthcare organizations.

During the meetings, participants will actively engage in conversations and critical thinking

exercises to ensure that EMS Agenda 2050 establishes a vision that incorporates a wide range of perspectives. Prior to the first regional meeting, EMS Agenda 2050 will release a strawman document as a conversation starter to spark thinking and dialogue about the future of EMS.

"If you've wanted to have a voice in shaping the future of EMS systems, EMS providers' role in the health and safety of patients, and more, this is your chance," said Jon Krohmer, MD, Director of the Office of EMS at the National Highway Traffic Safety Administration (NHTSA). "The federal agencies supporting this effort hope these meetings generate great conversations that will drive the development of a new vision for the future of EMS."

The regional meeting dates and locations are:

Silver Spring, Maryland
September 25, 2017

Minneapolis, Minnesota
November 7, 2017

Los Angeles, California
January 17, 2018

Dallas, Texas
March 1, 2018

Pre-registration for the meetings is required. Visit the website to register and for more detailed information, including meeting locations, times and hotel options: http://emsagenda2050.org/regional-public-meetings/?utm_source=EMS+Agenda+2050+News+%26+Updates&utm_campaign=a10968dda8-EMAIL_CAMPAIGN_2017_01_10&utm_medium=email&utm_term=0_78f01a40dd-a10968dda8-139479009

In addition to the four regional meetings, many other opportunities exist to provide input and feedback. Suggestions and comments are always welcome via the project website. In addition, EMS Agenda 2050 will host webinars and conference listening sessions, and anyone is encouraged to reach out to members of the TEP:

http://emsagenda2050.org/whosinvolved/?utm_source=EMS+Agenda+2050+News+%26+Updates&utm_campaign=a10968dda8-
or organizational liaisons:

http://emsagenda2050.org/organization-liaisons/?utm_source=EMS+Agenda+2050+News+%26+Updates&utm_campaign=a10968dda8-EMAIL_CAMPAIGN_2017_01_10&utm_medium=email&utm_term=0_78f01a40dd-a10968dda8-139479009.

A timeline of opportunities for collaboration and input is available at the above web site.

Questions about meeting logistics and travel should be directed to:
EMSAgenda2050@redhorsecorp.com

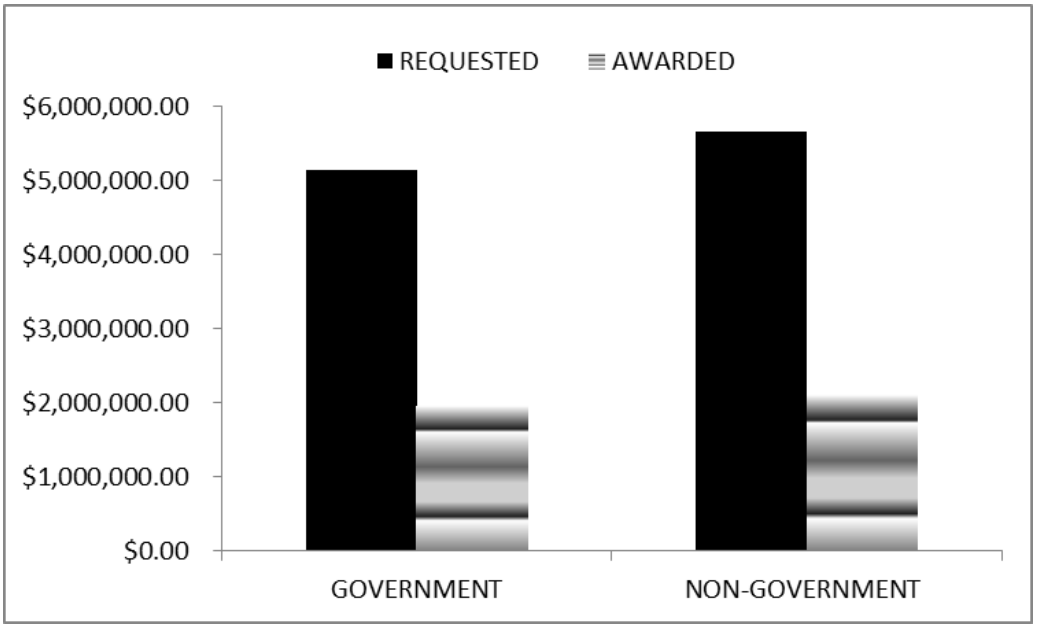
h) Financial Assistance for Emergency Medical Services (FAEMS) Grant Program, known as the Rescue Squad Assistance Fund (RSAF)

The RSAF grant deadline for the Spring grant cycle was March 15, 2017. OEMS received 134 grant applications requesting $10,800,277.00 in funding. OEMS awarded 86 agencies funding in the amount of $4,086,454.00, 38% of RSAF requests were awarded.

Funding was awarded in the following agency categories:

- 64 Non-Government Agencies awarded $2,113,348.00
- 22 Government Agencies awarded $1,973,106.00

Figure 1: Requested vs Amount Awarded by Agency Category

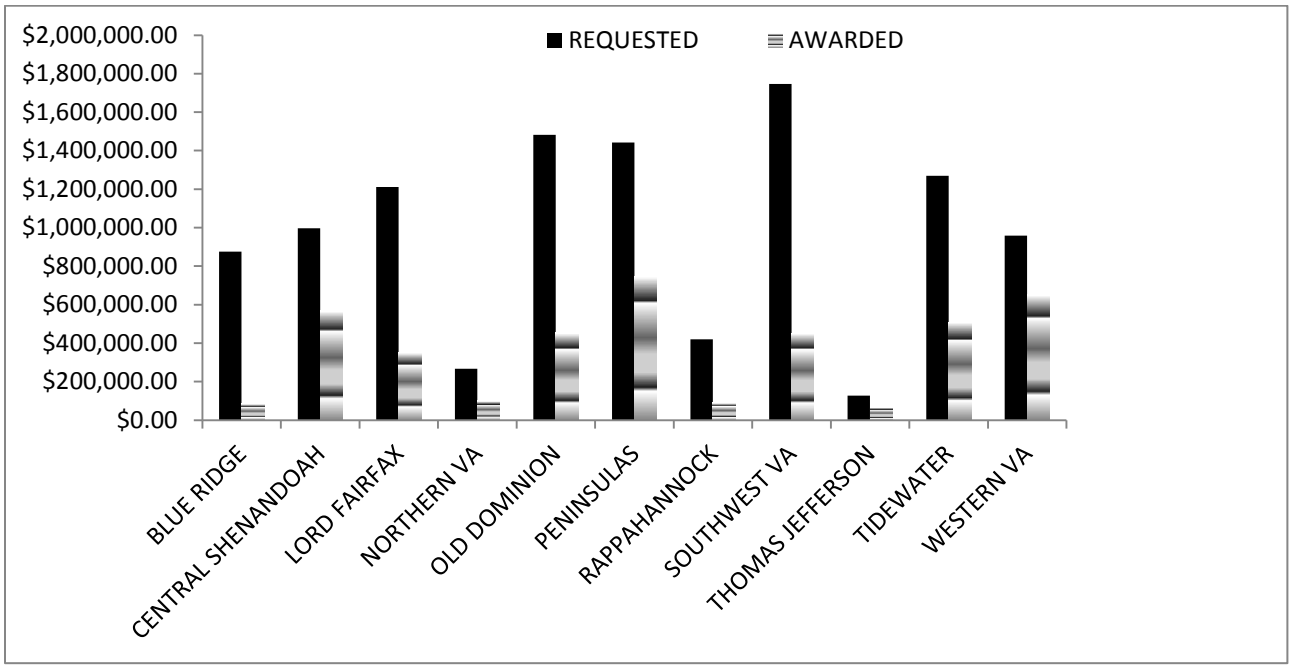


The following EMS regional areas were awarded funding in the following amounts:

- Blue Ridge – Awarded funding of $86,632.00
- Central Shenandoah – Awarded funding of $568,769.00
- Lord Fairfax – Awarded funding of $352,878.00

- Northern Virginia – Awarded funding of $101,317.00
- Old Dominion – Awarded funding of $453,941.00
- Peninsulas – Awarded funding of $747,525.00
- Rappahannock – Awarded funding of $91,729.00
- Southwestern Virginia – Awarded funding of $452,408.00
- Thomas Jefferson – Awarded funding of $69,250.00
- Tidewater – Awarded funding of $510,555.00
- Western Virginia – Awarded funding of $651,448.00

Figure 2: Requested vs Amount Awarded by EMS Regions

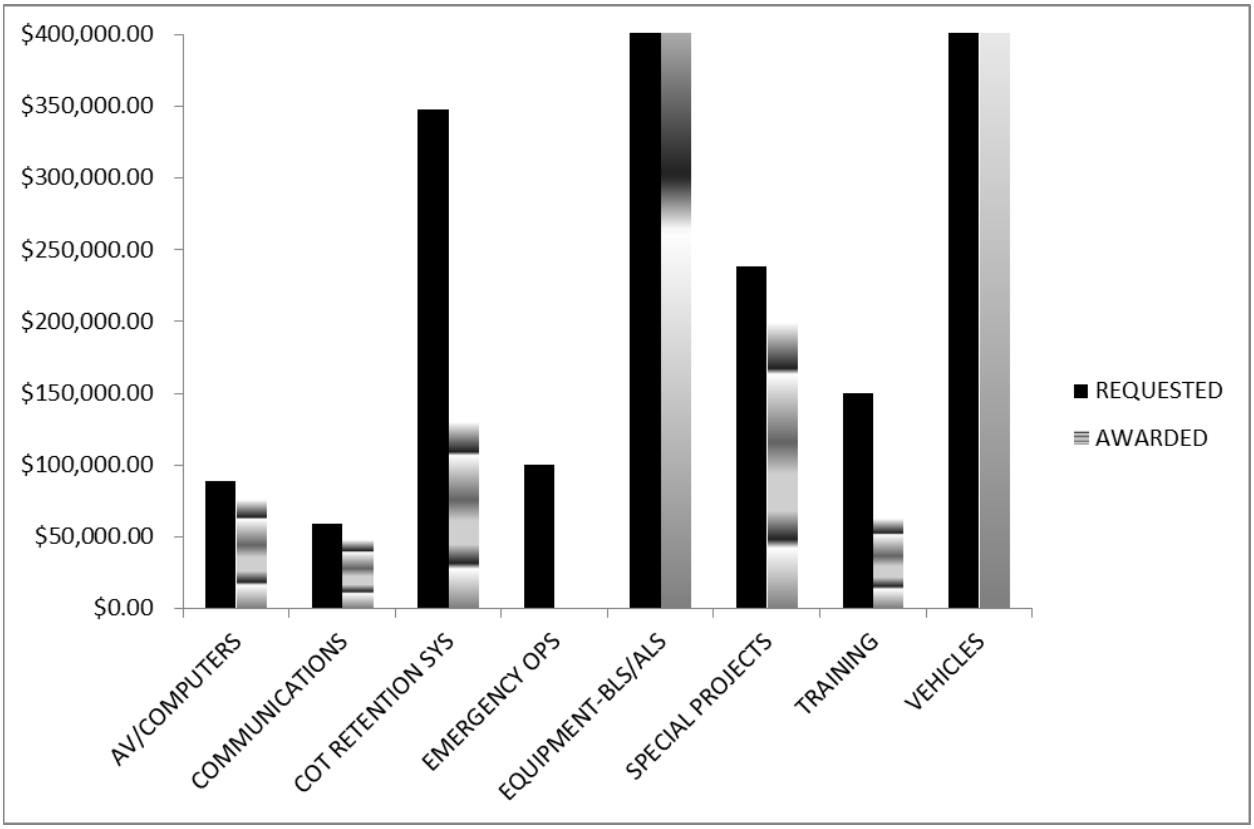


RSAF Grants Awarded by item categories:

- Audio Visual/Computer Hardware - $75,249.00
  - Includes projectors, computer hardware/software, toughbooks, and other audio visual equipment.
- Communications - $47,477.00
  - Includes items for mobile/portable radios, pagers and other communications system technology.
- Emergency Operations - $600.00
  - 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 emergency situations.

- Equipment - Basic and Advanced Life Support Equipment - $1,252,559.00
    - Includes any medical care equipment for sustaining life, airway management, and supplies, including 12-Lead Defibrillators.
- Cot Retention Systems - $129,843.00
    - Includes all power load systems and/or installation fees, not including power cots.
- Special Projects - $198,421.00
    - Includes projects such as Special Project material, Emergency Medical Dispatch (EMD), Virginia Pre-Hospital Information Bridge (VPHIB) projects, non-affiliated agency programs and other innovative programs.
- Training - $62,483.00
    - This category includes all training courses and training equipment such as manikins, simulators, skill-trainers and any other equipment or courses needed to teach EMS practices.
- Vehicles - $2,319,821.00
    - This category includes ambulances, rechassis, QRV's and specialty vehicles.

Figure 3: Requested vs Amount Awarded by Item

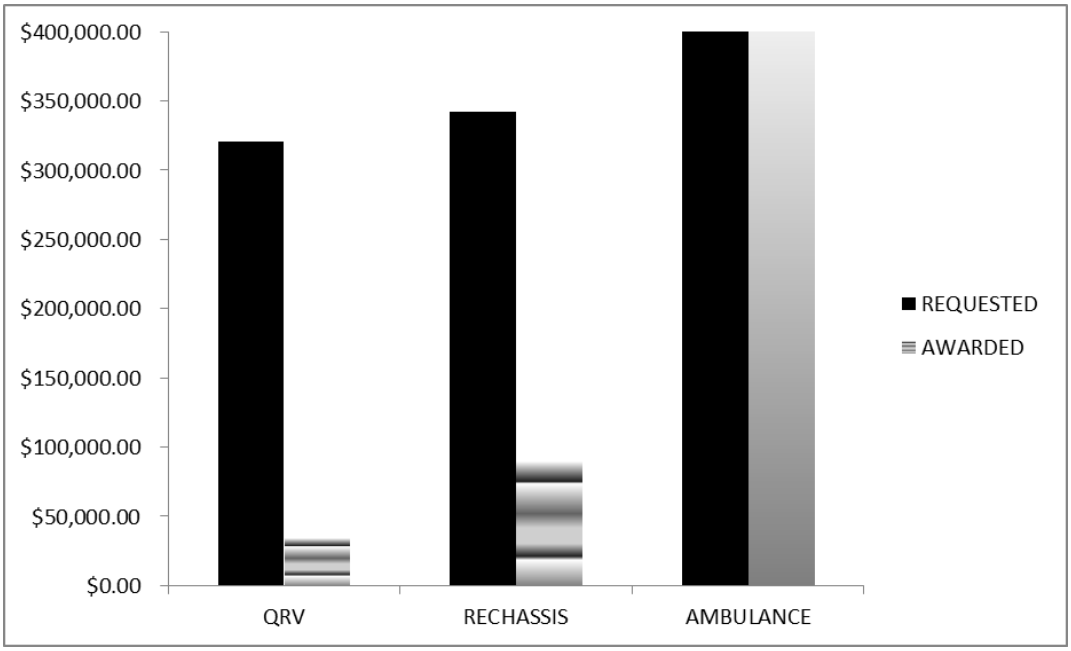


Note: The EQUIPMENT – BLS/ALS had a requested amount of $2,544,338.00 with an award amount of $1,252,559.00 . The VEHICLES had a requested amount of $7,272,504.00 with an award amount of $2,319,821.00. The figure represents categories up to00,000.00 to give a clearer picture of the data.

The Vehicles category was broken into the following categories:

- 17 Ambulances were awarded in the amount of $2,194,843.00
- 1 QRV was awarded in the amount of $35,018
- 1 Rechassis was awarded in the amount of $89,960.00

Figure 4: Requested vs Amount Awarded by Type of Vehicle



NOTE: The figure represents categories up to $400,000.00 to give a clearer picture of the data.

The Fall 2017 grant cycle will begin on August 1, 2017 with a deadline of September 15, 2017; grants will be awarded January 1, 2018.

Special Initiative Grants

Enrollment Costs for Initial EMS Certification

The Virginia Office of Emergency Medical Services (OEMS) awarded a NO MATCH grant funding opportunity on May 1, 2017 that was available to reimburse non-profit EMS agencies for enrollment costs for initial EMS certification programs. The funding is for programs that start on or after July 1, 2017 and before December 31, 2017 and is based on the OEMS pricing structure. OEMS awarded 28 agencies funding in the amount of $502,350.00 for the following courses:

- 3 Emergency Medical Responder courses in the amount of $4,896.00
- 26 Emergency Medical Technician courses in the amount of $195,717.00

- 1 Advanced Emergency Medical Technician course in the amount of $2,856.00
- 3 Intermediate courses in the amount of $28,107.00
- 9 Paramedic courses in the amount of $271,320.00

Nasal Naloxone for EMS Agencies

The Virginia Office of Emergency Medical Services (OEMS) announced a NO COST grant opportunity on June 23, 2017 to licensed EMS agencies for nasal naloxone to be administered by EMS personnel. The EMS agency applying for this grant opportunity must either have a controlled substance registration (CSR) OR the operational medical director (OMD) must provide authorization for shipment of naloxone, their drug enforcement agency (DEA) number and an address for the medication to be shipped to on behalf of the awarded agency. Applications can be found on the OEMS website and must be received through the EMS-Grant Information Funding Tool (E-GIFT); application deadline is September 29, 2017.

Summary of the 7th (VDH) Grade in the July 1, 2017 RSAF Cycle:

Review of Scoring criteria:

- Health Professional Shortage Area
    - § Scored 0-25 by HRSA
        - HPSA score from 25-20 = 1
        - HPSA score from 19-14 = 2
        - HPSA score from 13-8 = 3
        - HPSA score from 7-2 = 4
        - HPSA score under 2 = 5

- Medically Underserved Area/Population
    - o Scored 0-100 by HRSA (only 62 and under is MUA)
        - 44 and under = 1
        - 49 – 45 = 2
        - 55 – 50 = 3
        - 61 – 56 = 4
        - Above 62 = 5

- Fiscal Stress Index
    - § Scored 1 – 34 by Commission on Local Government
    - § Ranked from Highest Stress (1) to Lowest Stress (134)

- High (above 104) = 1
- Above Average (100.9-103.9) = 2
- Average (100) = 3
- Below Average (96.35-99.99) = 4
- Low (Scores below 96.25) = 5

- Return to Localities

  - Carry over balances from the prior year

    - No balance = 1
    - $1 - $25,000 = 2
    - $25,001 - $50,000 = 3
    - $50,001 - $100,000 = 4
    - $100,001 and above = 5

Please see **Appendix B**

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 leading 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 Activities

a) Fatigue in EMS

The team is heading down the home stretch with final evidence tables, guidelines, and performance measures expected this summer. Next up: experimental study on the effect of a fatigue management program on an EMS agency AND a free scheduling tool based on a biomathematical model of fatigue for EMS personnel!

b) National EMS Scope of Practice Model Revision

The Expert Panel met in Washington, DC on June 1-2, 2017. A systematic review of literature was discussed related to 5 important metrics: the use of opioid antagonists by all BLS personnel, hemorrhage control, targeted temperature management following cardiac arrest, the use of CPAP by EMTs, and pharmacological pain management. The Panel's input is being incorporated into the first draft and a broader public engagement is anticipated in August 2017.

c) REPLICA

REPLICA member states have EXCEEDED the threshold needed to activate! Congratulations and thank you to Colorado, Texas, Virginia, Idaho, Kansas, Tennessee, Utah, Wyoming, Mississippi, Georgia, and Alabama!! Eight more states have introduced legislation that could bring the total to 38% of the nation. Advocate Sue Prentiss is still available to work with states that are supportive of or filing compact legislation to provide resources and informational needs.

The member states are in the process of forming a REPLICA Commission to handle the day-to-day needs of the compact.

d) NASEMSO Interim Guidance Calls for Crash-Testing Research for Pediatric Ambulance Transport

The National Association of State EMS Officials (NASEMSO) recently announced the release of ***Safe Transport of Children by EMS: Interim Guidance***. The guidance is a result of the work of NASEMSO's Safe Transport of Children Ad Hoc Committee, which is focused on establishing evidence-based standards for safely transporting children by ground ambulance. Until such research can be completed and standards developed, NASEMSO has issued Interim Guidance based on what is known at present to maximize the safety of children in ambulances. The guidance should not be interpreted in any way as an endorsement of any EMS product. The full text of the Interim Guidance is available at:
https://www.nasemso.org/Committees/STC/Resources.asp

e) NASEMSO Celebrates Successful Annual Meeting and Several Milestones

At its Spring meeting in New Orleans, NASEMSO members received up-to-date information on various projects and a full range of current topics. The Colorado EMSC Program was recognized with 1st Place honors in the Abstract Competition, which highlighted its efforts on child abuse recognition training in EMS. Susan McHenry received a standing ovation from friends and colleagues for her lifetime achievements in EMS in a special ceremony. Other resolutions approved by the membership supported state trauma programs, the Crisis Event Response Recovery and Access (CERRA) Program, and including state identifiers in the National EMS Database. Bylaw changes that effectively reorganize NASEMSO's Councils and Committees were also approved. Two new Councils include Health & Medical Preparedness and Personnel Licensure will be formed. Council members will be rostered by state, and will vote for their own Chair, Chair Elect, and Secretary at an inaugural meeting. The interests of EMS education will be represented at the committee level and an "Emerging Systems of Care" Committee is also being formed. More information is available at:
https://www.nasemso.org/Meetings/Spring/2017-Spring-Meeting.asp.

f) NASEMSO Offers New Monograph on State Licensure Practices

NASEMSO is pleased to announce the release of a new report, Home State Regulatory Practices of Out-of-State EMS Agencies (Ground and Helicopter), which summarizes the findings from a 2016 survey of state EMS offices on licensure requirements, exemptions, and special conditions for ground and helicopter EMS agencies that are based out-of-state. Through the work of the NASEMSO Agency and Vehicle Licensure (AVL) Committee, issues with out-of-state agencies (OOS) performing regulated services in their states were identified. Within the charge of the committee, NASEMSO leadership approved a proposal to develop and execute a survey to further identify and verify the issues and challenges in order to, when appropriate, develop model language for rules or laws and/or policy solutions to effect more standardization among states on their approach to agency licensure.

g) NASEMSO Announces Final Military to Civilian EMS Transition Project Resources

A new report available from NASEMSO summarizes the key components of the Military to Civilian EMS Integration Transition project. The project was conducted by NASEMSO with funding support from the Office of EMS of the National Highway Traffic Safety Administration (NHTSA) of the U.S. Department of Transportation (USDOT) and the EMS for Children Program at the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS). The project comprised several distinct military-to-civilian integration components and deliverables. Download the individual components or the summary document at: http://nasemso.org/Projects/Military-to-Civilian-EMS-Transition/index.asp.

h) NASEMSO Offers Comment to AHRQ Naloxone Guideline

The Agency for Healthcare Research and Quality (AHRQ) recently conducted a systematic review of literature to compare different routes, doses, and dosing strategies of naloxone administration for suspected opioid overdose by EMS personnel in field settings; and to compare effects of transport to a healthcare facility versus non-transport following successful reversal of opioid overdose with naloxone. A public comment period was provided to review the draft document available at https://effectivehealthcare.ahrq.gov/ehc/products/656/2447/EMT-naloxone-draft-report-170316.pdf.

NASEMSO submitted comments to AHRQ indicating the majority of states have implemented authorizing legislation for the use of naloxone, an opioid antagonist, at all EMS levels while noting that there is currently insufficient research or evidence to support a recommended dosing regimen.

i) NASEMSO Joins National EMS Organizations to Oppose Elimination of EMS-C Program

The federal Emergency Medical Services for Children, or EMSC, Program has been the only federal program dedicated to improving emergency medical care for children. The following organizations have issued a joint statement, opposing President Donald Trump's proposal to eliminate funding for the EMSC program in his fiscal year (FY) 2018 budget: the American Ambulance Association, American Academy of Pediatrics, American College of Emergency Physicians, Association of Maternal & Child Health Programs, Children's Health Fund, Emergency Nurses Association, National Association of Emergency Medical Technicians, National Association of State EMS Officials, National Center for Disaster Preparedness at the Earth Institute, National EMS Management Association and Save the Children. Read more at https://www.nasemso.org/Advocacy/Supported/documents/Press-Release-EMSC-Funding-Budget-Proposal-Statement-24May2017.pdf.

j) H.R. 817 Proposes to Prevent "Surprise Billing Practices"

A bill introduced in the 115th Congress by Rep Lloyd Doggett (TX) with 34 Democratic co-sponsors seeks to end practices of balanced billing of health benefits for patients from out of network providers. While the bill does not specifically mention EMS as a source of concern, advocates for the bill are hoping for a successful "first step" to support state insurance laws that are currently preempted by the Airline Deregulation Act (ADA.) Read more: https://www.congress.gov/bill/115th-congress/house-bill/817/

In related news, S. 471 – Isla Rose Life Flight Act is a bill, introduced by Sen Jon Tester (MT) in the 115th Session of Congress on Feb. 28, 2017, that seeks to preserve state authority "relating to network participation, reimbursement and balance billing, or transparency for an air carrier that provides air ambulance service."

Air Ambulance Billing Practices Result in Federal Class Action Complaint

Several individuals have initiated a Federal Class-Action Complaint against the Air Methods Corporation and Rocky Mountain Holdings related to billing practices. The lawsuit seeks a jury trial, permanent injunction on the practice of charging patients in excess of uniform rates, and restitution. Read more here.

k) Current Air Medical Resources Recently Added to the NASEMSO Website

- Air Ambulances: Taking Patients for a Ride (Consumer Reports, May 2017).

  This article provides background on the concerns of out-of-network billing expenses from the perspective of consumers.

- AAMS Air Medical Cost Study (Apr. 10, 2017). The Association of Air Medical Services (AAMS) announces the publication of the Air Medical Services Cost Study Report, conducted by the independent research firm Xcenda LLC. AAMS commissioned the study in response to an evident need for reputable, independent research, specific to air medical transport, to quantify the costs associated with providing emergent air medical transports. Further, the study examines the appropriateness of the 2002 Medicare rate-setting methodology for air medical services and current payment adequacy. The resulting report provides independent substantiation of actual costs to the Centers for Medicare and Medicaid Services (CMS) and Members of Congress.

- Up in the Air: Inadequate Regulation for Emergency Air Ambulance Transportation (March 2017).

  Consumers Union has released this health policy paper, which provides background on the market shifts in the provision of air ambulance services in the United States, consumers concerns, regulatory gaps, and recommendations for Congress and the states to take action.

Additional EMS Actions on the National Scene

l) "You Are The Help Until Help Arrives"

According to a recent National Academies of Science study, trauma is the leading cause of death for Americans under age 46. Life-threatening injuries require immediate action to prevent an injured person from dying. Those nearest to someone with life threatening injuries are best positioned to provide first care. The Federal Emergency Management Agency (FEMA), the Centers for Disease Control, the U.S. Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response, and Medical Reserve Corps have partnered to offer free web-based training program and program materials to any community agency that wishes to train its citizens to provide assistance in an emergency situation. The training introduces skills beyond everyday first aid, like how to control bleeding and how to safely move the injured. Learn more about the initiative, You Are The Help Until Help Arrives, at https://community.fema.gov/until-help-arrives?lang=en_US.

m) NAEMT Releases Report on Level of EMS Preparedness for Disasters and Mass Casualty Incidents

The National Association of Emergency Medical Technicians (NAEMT) recently released a report, National Survey on EMS Preparedness for Disaster and Mass Casualty Incident Response, based on the results of a 2016 national survey of EMS practitioners and managers. The findings offer insight into the level of proficiency and training of EMS practitioners who provide the medical response expected by communities during disasters and mass casualty incidents.

n) GAO Offers Suggestions for Coordination of Pandemic Preparedness

The U.S. Army estimates that if a severe infectious disease pandemic were to occur today, the number of U.S. fatalities could be almost twice the total number of battlefield fatalities in all of America's wars since the American Revolution in 1776. A pandemic occurs when an infectious agent emerges that can be efficiently transmitted between humans and has crossed international borders. The Department of Defense's (DOD) day-to-day functioning and the military's readiness and operations abroad could be impaired if a large percentage of its personnel are sick or absent, and DOD's assistance to civil authorities might be limited.

House Report 114-102 included a provision for the Government Accountability Office (GAO) to assess DOD's planning and coordination to support civil authorities during a pandemic. A new GAO report assesses the extent to which (1) DOD has guidance and plans for supporting civil authorities in the event of a domestic outbreak of a pandemic disease and (2) HHS and DHS have plans to respond to a pandemic if DOD support capabilities are limited, and they have mechanisms to coordinate their pandemic preparedness and response. GAO reviewed agency pandemic guidance and plans, interagency coordination mechanisms, and pandemic-related exercises and after-action reports. Read more: http://www.gao.gov/products/GAO-17-150.

o) BARDA Highlights Next Generation Burn Care

According to the Biomedical Advanced Research and Development Authority (BARDA), novel products under development are being designed to find uses in routine clinical burn care and would also help in response to a mass casualty incident. When fully integrated, the new products and their enhancements in burn care have the potential to eliminate resource-intensive steps, shorten hospital stays, and improve patient outcomes; bringing value in day to day routine care as well as in a mass casualty event. The ASPR Blog describes these potential new therapies, including impregnated gauzes, topical gels to reduce the need for wound debridement, full thickness skin substitutes and more in a recent blog on the PHE web site. Read more: https://www.phe.gov/ASPRBlog/pages/BlogArticlePage.aspx?PostID=237

p) Pre-Disaster Recovery Planning Guide for States

The "Pre-Disaster Recovery Planning Guide for State Governments," recently finalized and released by the Federal Emergency Management Agency (FEMA), provides information to support state agencies in emergency preparation, helping them more easily adapt to post-disaster response rolls and requirements. FEMA designed these planning guides to help states and territories develop pre-disaster recovery plans by engaging members of the whole community, developing recovery capabilities across state government and nongovernmental partners, and creating an organizational framework for comprehensive state recovery efforts. Such a plan, and the inclusive process recommended to develop it, strengthens partnerships and resilience. This guide is the first in a series of three to be released in the next year. The two forthcoming will include a guide for local governments and a guide for tribal governments. Read more at: https://www.fema.gov/media-library/assets/documents/128572.

q) Legal Liability Protections for Emergency Medical and Public Health Responses

Liability protections have been put in place at both the state and local levels for different types of actors and entities involved in emergency response efforts. A new table available from The Network for Public Health Law (NPHL) highlights those potential liability protections for individuals, including healthcare workers, volunteers and private sector employees, and entities, including government agencies, hospitals or healthcare facilities, non-profit organizations and for-profit organizations. Read more...

r) Report Available from NASEM Workshop on Federal Regulation of N95's

The Food and Drug Administration (FDA) and the National Institute for Occupational Safety and Health (NIOSH) have responsibilities for evaluating and regulating respiratory protective devices (RPDs) for health care workers. To provide input to NIOSH and FDA and to discuss potential next steps to integrate the two agencies' processes to certify and approve N95 respirators for use in health care settings, a workshop was held by the National Academies of Sciences, Engineering, and Medicine (the National Academies). The workshop was focused on exploring the strengths and limitations of several current test methods for N95 respirators as well as identifying ongoing research and research needs. The workshop resulted from discussions

between FDA and NIOSH and from discussions of the National Academies' Standing Committee on Personal Protective Equipment for Workplace Safety and Health. This workshop provided the opportunity to exchange knowledge and ideas between health care professionals, policy makers, and manufacturers involved in the field of personal protective equipment for health care workers. This proceedings of a workshop is a factual summary of what occurred at the workshop. Read more: https://www.nap.edu/download/23679

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In related news, according to a separate commentary now available on the NASEM web site, the regulation of N95 filtering facepiece respirators (FFRs) by two federal agencies causes enormous confusion, increases risks to healthcare workers, and results in overregulation. The National Academies workshop examined the scientific issues critical to these efforts (NASEM, 2017). Currently, efforts are under way by the two agencies to streamline the regulatory oversight and approval processes, and this commentary offers support for those efforts. Specifically, several panelists recommend that:

- FDA discontinue the surgical N95 designation and its oversight of FFRs, and
- NIOSH have the sole responsibility to certify all FFRs using science-based methods as is consistent with its mission for respirators used in the United States.
-

s) "You Are The Help Until Help Arrives"

According to a recent National Academies of Science study, trauma is the leading cause of death for Americans under age 46. Life-threatening injuries require immediate action to prevent an injured person from dying. Those nearest to someone with life threatening injuries are best positioned to provide first care. The Federal Emergency Management Agency (FEMA), the Centers for Disease Control, the U.S. Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response, and Medical Reserve Corps have partnered to offer free web-based training program and program materials to any community agency that wishes to train its citizens to provide assistance in an emergency situation. The training introduces skills beyond everyday first aid, like how to control bleeding and how to safely move the injured. Learn more about the initiative, You Are The Help Until Help Arrives, at https://community.fema.gov/until-help-arrives?lang=en_US.

t) USUHS Emergency Legal Preparedness Summit

Public health preparedness leaders, officials, and experts examined critical challenges in emergency legal preparedness and policy including federal social distancing powers, emergency use authorizations, SNS distributions, emergency vaccine development and access, and federal-state implications for the next emerging threat at a recent event sponsored by the Uniformed Services University of the Heath Sciences. The event is available for viewing in its entirety at https://youtu.be/n6HV9bAoC3c?t=3354.

NAEMT Releases Report on Level of EMS Preparedness for Disasters and Mass Casualty Incidents

The National Association of Emergency Medical Technicians (NAEMT) recently released a report, National Survey on EMS Preparedness for Disaster and Mass Casualty Incident Response, based on the results of a 2016 national survey of EMS practitioners and managers.

The findings offer insight into the level of proficiency and training of EMS practitioners who provide the medical response expected by communities during disasters and mass casualty incidents.

u) USDOJ Offers Fentanyl Guide for First Responders

The US Department of Justice (DOJ) warns, "There is a significant threat to law enforcement personnel, and other first responders, who may come in contact with fentanyl and other fentanyl-related substances through routine law enforcement, emergency or life-saving activities. Since fentanyl can be ingested orally, inhaled through the nose or mouth, or absorbed through the skin or eyes, any substance suspected to contain fentanyl should be treated with extreme caution as exposure to a small amount can lead to significant health-related complications, respiratory depression, or death." The image below shows a photo illustration of 2 milligrams of fentanyl, **a lethal dose** in most people, which reflects a quantity that EMS personnel could be inadvertently exposed to in a 9-1-1 response to an opioid overdose. DOJ has issued a very informative primer on its web site as well as a recent "Roll Call" video at https://www.dea.gov/druginfo/fentanyl.shtml.

Photo illustration of 2 milligrams of fentanyl, a lethal dose in most people. Image from dea.gov.

v) NTSB Hosts 2nd Roundtable to End Deadly Distractions

Distracted driving kills, on average, nine people every day on our highways and injures even more. Drivers and operators in all modes of transportation must keep their hands, eyes, and minds on operating the vehicle. In commercial operations, all safety-critical personnel must minimize distractions, and companies must develop policies to ensure employees are not distracted. Nearly ten percent of traffic fatalities involve distracted drivers—deaths that are completely preventable. To reduce crashes, injuries and fatalities, drivers must completely disconnect from deadly distractions. The National Transportation Safety Board (NTSB) recently hosted a 2nd Roundtable on roadway distractions. This informative broadcast is now available for viewing at http://ntsb.capitolconnection.org/042617/ntsb_archive_flv.htm.

w) NASEM Highlights Biggest Road Hazard

The National Academies of Science, Engineering, and Medicine (NASEM) recently highlighted human behavioral studies as a key factor in progress towards greater highway safety. In a new report the NASEM suggests, "An ordinary car has about 30,000 separate parts, but only one component is persistently prone to catastrophic failure: the driver. Whereas 2 percent of accidents are caused by equipment malfunction, 94 percent are the driver's fault." A recent large-scale study found that "potentially 36%, or 4 million, of the nearly 11 million crashes occurring in the United States annually could be avoided if no distraction was present." Compared to an attentive, undistracted driver, the data shows that operating the car's radio roughly doubles the risk of a crash, while using touch-screen menus increase it by a factor of 4.6. Texting makes an accident 6.1 times more likely, reaching for an object or reading/writing raises the risk by a factor of 9, and dialing a cell phone by a factor of 12.2—the highest of any distraction observed. *From Research to Rewards: Social Science Studies the Most Hazardous Thing on the Road: You* is available for free download at https://www.nap.edu/download/23673.

x) NEW!! NIOSH Video Series on Ambulance Design and Testing

A new 7-part video series, jointly funded by the National Institute for Occupational Safety and Health (NIOSH) and the Department of Homeland Security's Science and Technology Directorate, covers new crash test methods to improve worker and patient safety in an ambulance patient compartment. The series also provides viewers with an overview of the many changes impacting ambulance design, testing, and manufacture. These changes impact the:

- layout of the ambulance patient compartment
- contents housed in the ambulance patient compartment (seating, patient cot, equipment mounts, storage devices)
- the outside or body of the ambulance

Ambulance builders, major ambulance component suppliers, and those responsible for designing and purchasing ambulances will benefit from viewing this video series, which aims to keep EMS workers and their patients safe during ambulance transport. Go to https://www.cdc.gov/niosh/topics/ems/videos.html.

y) CDC Data Suggests TBI/Falls in Older Adults Increasing

Traumatic brain injury (TBI) has short- and long-term adverse clinical outcomes, including death and disability. TBI can be caused by a number of principal mechanisms, including motor-vehicle

crashes, falls, and assaults. A new report from the Centers of Disease Control and Prevention (CDC) describes the estimated incidence of TBI-related emergency department (ED) visits, hospitalizations, and deaths during 2013 and makes comparisons to similar estimates from 2007. In summary, progress has been made to prevent motor-vehicle crashes, resulting in a decrease in the number of TBI-related hospitalizations and deaths from 2007 to 2013. However, during the same time, the number and rate of older adult fall-related TBIs have increased substantially. Although considerable public interest has focused on sports-related concussion in youth, the findings in this report suggest that TBIs attributable to older adult falls, many of which result in hospitalization and death, should receive public health attention. For more information go to: https://www.cdc.gov/mmwr/volumes/66/ss/ss6609a1.htm?s_cid=ss6609a1_w.

z) AHA Offers Severity Based Stroke Algorithm for EMS

The American Heart Association recently released its algorithm for severity-based stroke triage for EMS. AHA and the American Stroke Association requested that its Mission: Lifeline Stroke Committee create a consensus algorithm. The algorithm was created based on a thorough review of current stroke care guidelines and studies. The algorithm seeks to balance the benefits of rapid, early access to endovascular thrombectomy for patients with suspected large vessel occlusion with the potential harm of delayed initiation of IV alteplase. The algorithm may require tailoring to the needs of the communities that implement it. However, it does offer EMS providers a step-by-step guide to providing care for stroke patients. AHA noted that as with any algorithm, it should not replace, but augment clinician judgment. Read more at http://tinyurl.com/hucoeg6.

aa) Surface Microbials in Ambulances

Ambulances may be a source of multidrug-resistant microorganisms (MDROs) because patient microbiota may colonize health care personnel and an ambulance's environment during their assistance. Contaminated hands are main sources of microbial transmission causing health care-associated infections. Basic life support ambulances (BLSAs) link the community and health care facilities and a lack of basic infection control measures could promote the exchange of MDROs. This study aimed to analyze microbial contamination and antimicrobial resistance profiles of clinically relevant microorganisms isolated from BLSAs. Read the article at American Journal of Infection Control: http://www.ajicjournal.org/article/S0196-6553(16)30618-6/fulltext.

Educational Development

III. Educational Development

Committees

A. **The Training and Certification Committee** (TCC): The Training and Certification Committee met on Wednesday, July 5, 2017. There is one action item for consideration.

1. For the motion see (**Appendix C** 08-2017 TCC motion)
2. For Town Hall presentation see (**Appendix D**)
3. For Town Hall minutes and web comments: http://www.vdh.virginia.gov/emergency-medical-services/town-hall-meetings-to-discuss-the-future-of-intermediate-99/

Copies of past minutes are available on the Office of EMS Web page here:

http://www.vdh.virginia.gov/emergency-medical-services/education-certification/2016-training-certification-committee-standing/

B. **The Medical Direction Committee (MDC)** The Medical Direction Committee met on Thursday, July 6, 2017. There is one action item. (See **Appendix E** Motion on I-99, **Appendix F** Motion on the State Stroke Triage Plan and **Appendix G** that is the State Stroke Triage Plan,)

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. Virginia I-99 students who have maintained their National Registry certification continue the transition process that allows them to gain certification at the Paramedic level after completion of a Virginia approved Paramedic program. The National Registry transition process will end in 2018/2019 when their last certification cycle with National Registry expires as referenced in B below.

B. All National Registry I-99 certified providers must complete the transition process to Paramedic level by 2018/2019 or their certification level with National Registry will become AEMT. This will NOT affect their Virginia certification level which will remain Intermediate 99.

C. ALS Coordinator re-endorsement requires an update every two years and the submission of a re-endorsement application. The application must be signed by an EMS Physician. Additionally, it must contain the signature of the regional EMS council director if courses are to be offered in their region.

D. Paramedic candidate testing requirements changed effective January 1, 2017 with the implementation of the integrated out-of-hospital scenario station. Candidates are evaluated in a 20-minute scenario that would be similar to what may be encountered in an actual EMS call. Additionally, they are still completing a trauma assessment, two oral stations and dynamic and static cardiology.

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 be allowed participation 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. To align with the 2016 National Continued Competency program implemented by National Registry in October, 2016, continuing education will now be tracked utilizing both the 2012 and 2016 NCCP requirements. Providers with a certification or recertification date beginning on or after October 1, 2016 have had their continuing education hours adjusted to the new distribution of hours for the 2016 NCCP. Notifications were sent to all EMS providers in Virginia and updated information has been posted on the OEMS Division of Educational Development webpage. This information is being shared at all Education Coordinator updates and will be published in the upcoming OEMS Newsletter.

G. Auxiliary program continuing education hours were redesigned to match the 2016 NCCP requirements for courses announced to our office on or after July 1, 2017.

Basic Life Support Program

A. Education Coordinator (EC) Institute

1. Final Institute under the old process was held in Chesterfield County, VA June 24-28, 2017.
2. Twenty-four (24) EC Candidates completed the process and were certified.
3. EMS Providers interested in becoming an Education Coordinator please contact Mr. Greg Neiman, BLS Training Specialist by e-mail at Gregory.Neiman@vdh.virginia.gov
4. The new process is on track to begin in Fall 2017.

B. EMS Educator Updates:

1. For 2017, the Division of Educational Development will continue to provide in-person Educator Updates in the various EMS Council regions.
2. Updates were held in the REMS Council Region in Stafford Cunty VA on Saturday, May 20th, and the WVEMS Council Region in conjunction with the VAVRS Rescue College in Blacksburg, VA on Saturday, June 10th.
3. Fall Updates will begin on Friday, September 15th and Saturday, September 16th in the CSEMS Region and Saturday, September 30th in the TEMS Region in conjunction with the VAVRS Annual Conference. In Virginia Beach.
   The schedule of future updates can be found on the OEMS web at: http://www.vdh.virginia.gov/emergency-medical-services/2016-ems-educator-update-schedule/

EMS Training Funds

FY 17*

	Commit $	Payment $	Balance $
BLS Initial Course Funding	$0.00	$69,061.25	($69,061.25)
Category 1 CE Course	$0.00	$19,617.50	($19,617.50)
Auxiliary Programs	$0.00	$38,320.00	($38,320.00)
ALS Initial Course Funding	$0.00	$137,093.27	($137,093.27)
Totals	**$0.00**	**$264,092.02**	**($264,092.02)**

Special Initiative Grants

- A special grant initiative for funding of Initial Programs that start on or between July 1, 2016 and December 31, 2016 was announced with a Grant Request Period of 09/21/2016 through 10/05/2016.

  - A total of $703,647 was approved through the Special Initiative Grant for any initial certification program with a start date between 07/01/16 and 12/31/16. This was available to any non-profit licensed EMS agencies or other EMS organization operating on a nonprofit basis exclusively for the benefit of the general public and was distributed to 47 (78 courses) applicants.

- The OEMS announced additional Special Initiative grant opportunities for non-profit, EMS education initial certification and continuing education programs on April 4, 2017. There will be two special initiative grant cycles administered. One cycle is open to programs with start dates between January 1, 2017 and June 30, 2017. The other cycle will be open to programs with start dates between July 1, 2017 and December 31, 2017. The deadline for the Spring cycle was April 25. No funding match is required for eligible applicants. Notice about the Fall grant will follow a similar format, with details to come.

Upcoming Changes to the EMS Training Funds Program

- Initial Certification Funding. Effective January 1, 2018, the EMS Training Funds program (EMSTF) will transition to a scholarship program. The OEMS scholarship program will mirror the Office of Health Equity's (OHE) Nursing scholarship program. OEMS entered into a Memorandum of Understanding (MOU) with OHE under which OHE will manage the administrative functions of the program. OEMS personnel will oversee the program to include, but not limited to, establishing and determining priorities, scoring, and other awarding criteria. There are three application/funding cycles per year, scheduled to correspond with Spring, Summer, and Fall academic calendars. Eligible students will apply directly using the OHE's online application system. Funds will be distributed to awarded students prior to the start of their qualifying EMS certification program. Awardees will be required to report successful completion of their programs and affiliate with volunteer or career agencies within the Commonwealth.

- Continuing Education and Auxiliary Programs. Effective August 1, 2017, OEMS will execute contractual agreements with the regional councils in support of the use of EMSTF funds for the provision of continuing education and auxiliary training programs. The design is planned to support two full CE programs for each entity identified with a FIPS code (independent cities and counties).

- The Division of Educational Development hosted a meeting amongst Program Directors on April 26 at the Virginia Public Safety Training Center. The purpose of the meeting was to facilitate a collaborative discussion and effectively address program needs under the new scholarship model.

EMS Education Program Accreditation

A. EMS accreditation program.
    1. Emergency Medical Technician (EMT)
        a) John Tyler Community College has added EMT accreditation after successfully demonstrating the components required

2. Advanced Emergency Medical Technician (AEMT)
   a) No changes

3. Intermediate – Reaccreditation
   a) The WVEMS New River Valley Training Center re-accreditation visit was conducted and they have received a new five-year accreditation
   b) Dabney S Lancaster Community College has partnered with Central Virginia Community College as a satellite location and will allow their independent accreditation to lapse on July 31, 2017.

4. Intermediate – Initial
   a) No new accreditation packets have been received.

5. Paramedic – Initial
   a) John Tyler Community College has been granted a Letter of Review from CoAEMSP. They have completed their first cohort and work has begun on completion of the Self Study report to be submitted to CoAEMSP.
   b) Rappahannock Community College had their site visit from CoAEMSP in November, 2016. Awaiting accreditation findings report.
   c) ECPI has been granted a Letter of Review from CoAEMSP.

6. 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 their CoAEMSP re-accreditation visit scheduled for December 15 & 16. Awaiting accreditation findings report.
   c) Northern VA Community College has submitted their 5 year reaccreditation self-study to CoAEMSP. Their program director James Rucks has relocated to Florida and the new program director is Gary Sargent.

B. 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

C. All students must enroll in a nationally accredited paramedic program to qualify for National Registry certification. National accreditation is offered through the *Committee on Accreditation of Educational Programs for the EMS Professions* (CoAEMSP – www.coaemsp.org).

National Registry

NREMT Initial Certification Fees effective January 1, 2017

NREMT Level	Current Fees	Fees Effective 1/1/17	Change
EMR	$65	$75	$10
EMT	$70	$80	$10
AEMT	$100	$115	$15
Intermediate/99	$100	$125	$25
Paramedic	$110	$125	$15

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:

http://www.vdh.virginia.gov/emergency-medical-services/emsat/

EMSAT

Aug. 16	E-Cigarettes: Not as Innocent as You Think
	Cat. 1 ALS, Area 18, Cat. 1 BLS, Area 13
Sept. 20	Myocardial Infarction Imitators
	Cat.1 ALS, Area 17, Cat. 1 BLS, Area 12
Oct. 18	Pre-Hospital Ethics and Professionalism
	Cat. 1 ALS, Area 20, Cat. 1 BLS, Area 15

Psychomotor Test Site Activity

A. 52- CTS, - EMT 4- accredited course and 27- ALS psychomotor test sites were conducted from April 19, 2017 through July 18, 2017.

B. Open positions in Northern, Western/Southwestern and ODEMSA regions will be advertised in the near future.

C. Current Psychomotor Examination scenarios are being reviewed for revision.

D. The office recently received new webinar software to conduct webinars including training for National Registry of EMTs and OEMS psychomotor examinations. Webinar participants will include accredited paramedic programs, National Registry test representatives, and OEMS Examiners.

E. The Psychomotor Examination Guide has been updated and is available on the OEMS website. It can be found at the web link: http://www.vdh.virginia.gov/emergency-medical-services/education-certification/student-resources/certification-testing/

Changes in the July 2017 Psychomotor Examination Guide:

1. Updated to allow watches except "smart watches" at psychomotor examinations. This matches the National Registry policy.

2. Clocks in the testing stations are now preferred verses required.

3. Added to Candidate Orientation information regarding the National Registry cognitive examination.

4. Trauma essay to evaluators updated to clarify that EMR candidates are not required to apply cervical collars and backboards.

5. Medical essay to evaluators updated to no longer require the non-rebreather mask as the only method for oxygen administration.

6. Education Coordinator candidate testing changed from cognitive to psychomotor examination. The EC candidates have the same testing requirements as EMT candidates. Special handling of paperwork for EC candidates is no longer required.

7. TR-CTS-007 Test Package Form updated.

Other Activities

- Debbie Akers continues to participate in the NASEMSO webinars Community Paramedicine Insights Forum.

- Debbie Akers is serving as the staff liaison to a Mobile Integrated Healthcare workgroup. The workgroup has representation from the following: Fire based EMS, EMS OMD, ED Physician, EMS Administrator, EMS Provider, Regional EMS Councils, Hospital Accountable Care Organizations, Pediatrics, Commercial EMS, VDH Licensure, Primary Care Physician, VHHA, DMAS, VA Association for Home Care and Hospice and the VA Association for Hospices and Palliative Care. The workgroup is being chaired by Dr. Allen Yee.

- Debbie Akers has been selected to serve as the volunteer coordinator for the National Association of EMS Educators at their annual conference in Washington, DC where greater than 250 educators from throughout the country will attend. Numerous Virginia Education Coordinators have been recruited to participate in the event, allowing them the opportunity to collaborate with their peers from across the country as well as attend training sessions to gain knowledge on the latest trends in EMS education.

- Greg Neiman continues to participate on the Autism Public Safety Workgroup working toward improving EMS and Fire interface when responding to a patient with autism.

- Greg Neiman spoke with High School EMT Education Coordinators at the 2017 Virginia Health and Medical Sciences Educators Association Summer Conference in Williamsburg.

- Warren participated in the Tidewater Community College Paramedic Advisory Board Meeting.

Emergency Operations

IV. Emergency Operations

Operations

- **Virginia-1 DMAT**

Frank Cheatham, HMERT Coordinator, continued to attend meetings for the Virginia-1 DMAT during this quarter. He continued to assist in the coordination of facilities for meetings in the Richmond area.

- **Rider Alert**

Ken Crumpler represented Rider Alert at the MotoAmerica motorcycle race at Virginia International Raceway in Alton, Va. on May 13, 2017.

- **Virginia Emergency Support Team (VEST) Meetings**

Throughout the quarter the Division of Emergency Operations Staff attended various trainings for VEST members held at the Virginia Emergency Operations Center (EOC). These trainings, which are held monthly provide an opportunity for personnel to come together to discuss changes to systems, updates to policies, and prepare for potential future events.

- **Virginia Operational Planning Exercise (VOPEX)**

On July 25, 2017 Winnie Pennington participated in the VOPEX exercise at the Virginia EOC. During the exercise, which focused on a radiological emergency, Winnie represented Emergency Support Function (ESF) 8.

- **Exercise Planning Sessions**

On May 16-17, 2017, the Emergency Services Coordinator and Emergency Operations Manager participated in a planning session for a full-scale exercise scheduled for Fall 2017. The exercise will involve a coordinated response between local, state, and federal partners.

- **Planning and Preparedness**

Winnie Pennington, Emergency Planner, reviewed information from CDC, ASPR, FEMA, and other sources for information on Fentanyl and infectious disease threat to EMS providers and develop information sheets for website and other distribution.

Committees/Meetings

- **Statewide Interoperability Executive Committee (SIEC)**

Karen Owens and Sam Burnette attended a meeting of the Statewide Interoperability Executive Committee on May 22, 2017 held at the Virginia Emergency Operations Center (VEOC). The meeting focused on the awarding of the FirstNet contract to AT&T and the need for the Commonwealth of Virginia to determine its participation in the program.

Karen Owens, Emergency Operations Manager, also participated in weekly phone calls regarding the FirstNet State Plan release and the Governor's decision to opt-in or opt-out. Additionally Mrs. Owens participated in a SIEC Grant review committee to look at applications submitted for DHS funds.

- **EMS Communications Committee**

The EMS Communications Committee met on May 5, 2017 in accordance with the quarterly Advisory Board meeting. Ken Crumpler, Communications Coordinator, reported on the NENA/APCO Conference and the work of the Virginia Chapter of APCO Professional Communications Human Resources Committee (ProCHRT), where he serves as an advisor for the committees continued outreach to Public Safety Answering Points (PSAP's) not providing Emergency Medical Dispatch (EMD) protocols for citizens contacting local 9-1-1 for a medical emergency. Additional information was shared regarding the state of FirstNet and the potential actions of the Governor once the state plan is released.

- **EMS Emergency Management Committee**

Winnie Pennington, Emergency Planner, Karen Owens, Emergency Operations Manager, and Sam Burnette, Emergency Services Coordinator, attended the EMS Emergency Management Committee Meeting on May 4, 2017. The meeting included discussion regarding a patient tracking program for mass casualty incidents and updates on committee member activities.

- **Healthcare Practitioner Monitoring Program**

Sam Burnette, Emergency Services Coordinator, and Karen Owens, Emergency Operations Manager, attended an informational session on the Healthcare Practitioner Monitoring Program (HPMP) managed by the VCU Health System. The meeting, which was also attended by other OEMS staff members, provided information to the attendees on the current program in place and allowed for discussion on the actions that would be required to develop a similar program for EMS providers.

- **Counter-Terrorism Awareness Workshop**

Sam Burnette, Emergency Services Coordinator, attended a two-day Hampton Roads Planning District Commission (HRPDC) counter terrorism awareness workshop in Chesapeake. This workshop included representatives from local and state police, fire, EMS, public health, and government leaders.

- **Strategic Highway Safety Plan (SHSP)**

HMERT Coordinator, Frank Cheatham, continues to serve on the SHSP Steering Committee and attended the DMV Safety Summit where the new Strategic Highway Safety Plan was presented and signed.

- **Traffic Incident Management Committees**

Frank Cheatham, HMERT Coordinator, continued to represent the Office of EMS at TIM Committee meetings, including Training Oversight, Best Practices, the Statewide TIM Committee, and the Richmond TIM Committee Executive Group.

Frank continued his work with the new training program to make the federal program Virginia specific for the course participants. The final plan was delivered in early July. From that point Frank worked with Virginia State Police and others to get the necessary materials together to plan and present the necessary meetings around the state to rollout the new program.

- **Provider Health and Safety Committee**

Karen Owens, Emergency Operations Manager attended the Provider Health and Safety Committee on May 5, 2017. During the meeting discussion were held about creating competencies associated with an EMS Safety Officer program. Additionally Karen discussed a mental health project that the division was working on.

- **UAV Meeting**

Karen Owens, Emergency Operations Manager, attended a meeting of state agencies to discuss the impact of Unmanned Arial Vehicles (UAV) in Virginia. Presentations covered legal issues, appropriate use, and examples of successful deployment.

- **VDH Addiction Activities**

Various members of Emergency Operations Division staff continue to assist in support VDH activities in response to the opioid crisis in the Commonwealth.

- **Domestic Preparedness Conference Calls**

The Emergency Operations continued to participate in the National Association of State EMS Officials (NASEMSO) Domestic Preparedness Conference calls.

Training

- **Peer Support Training**

Karen Owens attended a presentation on developing a peer support team on July 14, 2017. The training provided information on the benefits of peer support as well as presented information on the Illinois program.

- **VDH Public Health and Healthcare Preparedness Academy**

Sam Burnette, Emergency Services Coordinator, and Winnie Pennington, Emergency Planner, attended the VDH Health Summit May 31-June 1. During the event they attended training on various health topics and both served as evaluators in the health emergency exercise.

- **Firefighter Cancer Prevention**

On June 20, 2017, Karen Owens attended a seminar on firefighter cancer prevention hosted by Richmond Fire Department. Presenters provided information on the cancer presumption laws, cancer incident rates, and a personal story of cancer impact on a firefighter and their family.

- **Rider Alert**

Ken Crumpler taught the OEMS class "A Field Responders Guide to Motorcycle Crash Response" to Hanover Fire/EMS on April 24, 25, and 27 in Hanover County. He also taught the course at Richlands Police Department in Tazewell County on June 9 and represented Rider Alert at the Back of the Dragon Motorcycle Rally at Tazewell County Fairgrounds on June 10, 2017.

Communications

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

Communications Coordinator Ken Crumpler presented OEMS PSAP Accreditation to Powhatan County Public Safety Communications before the Powhatan County Board of Supervisors on June 28, 2017 at the Powhatan County Court House. Emergency Services Coordinator Sam Burnette also attended.

- **APCO/NENA**

Ken Crumpler attended the Virginia NENA/APCO Spring conference in Virginia Beach May 3-4, 2017. During that time he met with the APCO Pro-Chart Committee to expand EMD deployment in Virginia to centers not providing the service.

On June 30, 2017, Ken Crumpler and Sam Burnette met in New Kent County with local officials to discuss Emergency Medical Dispatch deployment to assist the APCO ProCHRT committee. Committee members Jeff Flournoy (Eastern Shore of Virginia 9-1-1) and Curtis Schaffer (Hanover County Emergency Communications) represented the APCO ProCHRT committee.

Critical Incident Stress Management (CISM)

- **CISM Regional Council Reports**

During this reporting quarter Regional Council CISM teams reported 19 events, including education sessions, training classes, meetings, and debriefings (both group and one-on-one).

Planning and Regional Coordination

V. Planning and Regional Coordination

Regional EMS Councils

Regional EMS Councils

The Regional EMS Councils have submitted their Fourth Quarter contract reports throughout 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. OEMS is working to enter into a Memorandum of Understanding (MOU) with all of the Regional EMS Councils through June 30, 2018.

The EMS Systems Planner attended the awards programs of the Blue Ridge, Central Shenandoah, Lord Fairfax, Peninsulas, Southwest Virginia, and Tidewater EMS Councils during the quarter.

Medevac Program

The Medevac Committee is scheduled to meet on August 4, 2017. The minutes of the May 4, 2017 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 grow in the amount of data submitted. In terms of weather turndowns, there were 578 entries into the Helicopter EMS system in the second quarter of the 2017 calendar year. 63% of those entries (365 entries) were for interfacility transports, which is consistent with information from previous quarters. The total number of turndowns is an increase from 527 entries in the second quarter of 2016. Additionally, there have been 1,174 entries for the 2017 calendar year, which is a slight increase from the 1,050 entries for the 2016 calendar year. 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 work on an evaluation to determine whether or not there is an opportunity for the ST Segment Elevation Myocardial Infarction (STEMI) scene patient to have been transported by air to a specialty facility from the initial scene, versus being transported 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 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 impacts 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 1728 was also introduced into the 2017 General Assembly. The language of the Bill is as follows:

> *"That the Department of Health (the Department) shall convene a work group composed of stakeholders, including representatives of law enforcement, emergency medical services providers, health insurance providers, and other interested stakeholders, to review the rules, regulations, and protocols governing use of air transportation services, also known as air ambulances, in emergency medical situations. The Department shall also review the rules, regulations, and protocols governing dispatch of air transportation services providers in response to emergency medical situations and develop recommendations for changes to such rules, regulations, and protocols that will address differences in procedures governing dispatch of air transportation services providers in emergency medical situations, differences in billing that may affect individuals involved in emergency medical situations during which air transportation services providers are dispatched for the provision of air transportation, and other issues related to the use of air transportation services in emergency medical situations. The Department shall report its findings and recommendations to the Governor and the General Assembly by December 1, 2017."*

More information on House Bill 1728 can be found at the link below:
http://leg1.state.va.us/cgi-bin/legp504.exe?171+sum+HB1728

The workgroup mentioned in the budget bill language is made up of the following representatives:

Law Enforcement: Virginia State Police – Lt. Jay Cullen (Unit Commander – VSP Aviation)

EMS Providers:

> Deputy Chief Eddie Ferguson - Goochland County Dept. of Fire-Rescue & Emergency Services, Past President – Virginia Association of Governmental Administrators
>
> Derrick S. Ruble – Director of 911 & Emergency Communications, Tazewell County, VA

Health Insurance Providers:

Virginia State Corporation Commission, Bureau of Insurance – Jim Young, Insurance Policy Advisor – Policy, Compliance and Administration Division

Virginia Department of Medical Assistance Services – Bill Zeiser, Transportation Unit Supervisor

Virginia Association of Health Plans – Kyle Shreve, Director of Policy

Medevac Committee:

Anita Perry – Medevac Committee Chair

Julia Marsden – Vice Chair (Facilitator)

Emergency Physicians: George Lindbeck, MD, State Medical Director

Interested Stakeholders:

Rob Hamilton, President, Med-Trans Air Medical Transport (representing medevac operators)

T.C. Jones, Director, VDH Office of Licensure and Certification

Paul Davenport, Vice President – Emergency Services, Carilion Clinic (representing VHHA)

Paul Sharpe, Director of Trauma Services, Henrico Doctors' Hospital (representing VHHA)

Ed Rhodes – Rhodes Consulting

The workgroup held meetings on June 8, June 29, and July 20.

Information related to the HB1728 Workgroup can be found on the OEMS website at the link below:
http://www.vdh.virginia.gov/emergency-medical-services/other-ems-programs-and-links/medevac-system/house-bill-1728-workgroup/

The EMS Systems Planner also participates on the NASEMSO Air Medical Committee.

OEMS and Medevac stakeholders continue to monitor 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.

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/

Public Information and Education

VI. Public Information and Education

Public Relations

Public Outreach 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 –**National Public Health Week and Virginia Public Health Week, EMS Portal maintenance, RSAF grant funding opportunity to reimburse non-profit EMS agencies for enrollment costs for initial EMS certification programs, Fiscal Technician position, Federal Vehicle Standards comment collection period for Light-Duty Vehicles only, National Public Safety Telecommunicators Week, Management Lead Analyst position, system and application outages/scheduled maintenance, Virginia Retirement System is accepting applications for a Line of Duty Act (LODA) Coordinator position, Emergency Vehicle Operators Course equivalents have been update, Designated Infection Control Officer approved training programs have been updated and Patient Care Reports and data submission requirements revised policy.

- **May –**POLST Paradigm to Honor Patient Treatment Wishes Across the Care Continuum course, Behavioral Health in the Fire and Emergency Services course, Hurricane Preparedness Week, Public Service Recognition Week, National Nurses Week, Philips Healthcare HeartStart MRx Monitor/Defibrillator recall, National EMS Week, EMS week in Virginia proclamation, EMS week events and activities in Virginia, National EMS Memorial Bike Ride to tour Richmond, EMS Strong essay contest, EMS week press release, EMS for Children day, OEMS staff celebrate EMS week in Marion, Va., National EMS week presidential proclamation, Save a Life Day, EMS Recognition Day, Memorial Day office closure, Fire and EMS Memorial Service and system maintenance outage.

- **June –** Va. Fallen Firefighters & EMS Memorial Service will be live stream link, Annual Virginia Fallen Firefighters and EMS Memorial Service event info, Fire and EMS Memorial Week, OEMS system outage to replace and update servers, New Fentanyl Briefing Guide for First Responders from the U.S. Department of Justice DEA, Improving EMS Worker Safety Through Ambulance Design and Testing 7-part video series, OEMS Office Services Specialist position for Regulation & Compliance, Alexa provides instructions for CPR, heart attack and stroke warning signs, RSAF grant opportunity to licensed EMS agencies for nasal naloxone to be administered by EMS personnel and Fourth of July holiday office closures.

Public Outreach via GovDelivery Email Listserv (April - June)

- 4/27/17 - PCR Documentation and Data Submission - Revised Policy
- 5/16/17 - Philips Healthcare Recalls HeartStart MRx Monitor/Defibrillator
- 5/22/17 - National EMS Week 2017
- 6/02/17 - 2017 Fire and EMS Memorial Week
- 6/05/17 - OEMS System Maintenance

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 20, 2017, the OEMS Facebook page had 5,278 likes, which is an increase of 222 new likes since April 18, 2017. As of July 20, 2017, the OEMS Twitter page had 4,138 followers, which is an increase of 101 followers since April 18, 2017.

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 14,865 total organic reach and 146 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.*

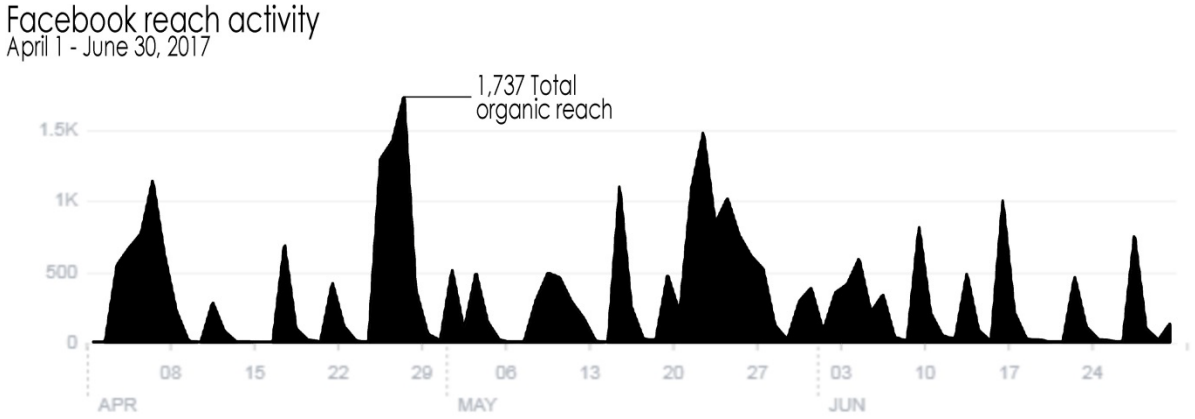


Figure 2: This graph shows the total organic impressions* over a 91-day period on the OEMS Twitter page, April - June. **During this 91-day period our tweets earned a total of 55.8k**

impressions and 613 impressions per day. The most popular tweet received 9,721 organic impressions.

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

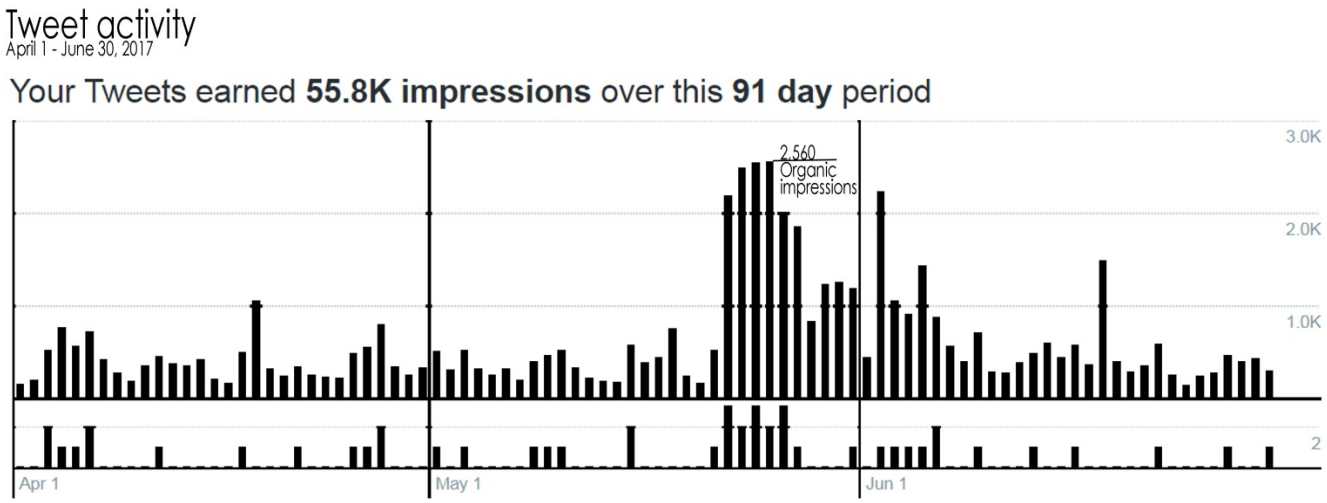


Figure 3: Due to the transition to the new WordPress platform in January 2017 and utilization of Google Analytics, the top five downloaded items data from January - March was not tracked and unable to be recaptured. From April – May, it was discovered that there was a glitch in the Google Analytics system so data was only partially captured April - May, and not captured at all for the month of June. The partial data below reflects the time period April 19 – May 22, 2017. I will continue to share this data in the quarterly report as I receive it.

April (partial data)	1. Authorized Durable DNR Form (143) 2. Centrelearn Instructions (89) 3. Quick Guide Completing National Registry Recertification Application (84) 4. VA EMSAT Announcement (75) 5. Transport Vehicle Checklist Sheet (69)
May (partial data)	1. AuthorizedDurableDNRForm.pdf (274) 2. Quick Guide Completing National Registry Recertification Application (168) 3. Centrelearn Instructions (142) 4. 2012 EMS Regulations Air Medical (140) 5. EMT Compentency Tracking Form (129)
June	*Data unavailable*

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.

	Unique Pageviews	Average Time on Page (Minutes)	Bounce Rate (Average for view)
April	14,234	00:49	29.26%
May	14,769	00:35	19.80%
June	13,667	00:23	0.14%

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 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

- The Public Information and Education unit coordinated social media promotion and an EMS Strong essay contest during EMS Week, May 21-27, in order to show appreciation and recognize the EMS agencies and providers in Virginia. During that week, our promotions and social media interaction garnered the following engagement:

Facebook – During EMS Week, OEMS garnered 27,631 in total reach* on the Facebook page. One of our Facebook posts had an especially high post reach*, the Governor's proclamation for EMS Week had an estimated reach of 14,865 people reached and 142 shares. **Total Reach - The number of people who were served any activity from your page, including posts, post to your page by other people, mentions, etc. Post Reach - The number of people your post was served to.*

Twitter – During EMS Week, OEMS tweets earned **14.2K impressions** over the 7-day period. During this 7-day period, OEMS earned **2.0K impressions** per day. **Impressions are defined as the number of times a user saw a tweet on Twitter.*

- PR assistant coordinated the mailing of the EMS Week planning guides to all affiliated EMS agencies in Virginia.
- PR assistant obtained proclamation from the Governor's Office recognizing EMS Week in Virginia.
- PR assistant coordinated EMS Week info for listserv email. Information that was shared in the email included the press release, Governor's proclamation and EMS Week webpage on the OEMS website.
- PR coordinator and PR assistant created the EMS Strong essay contest, which asked providers to highlight the defining moment in their life that made them decide to serve in the EMS field. The winner received a free registration to the 2017 Va. EMS Symposium. Three additional runner-up winners were selected to receive a full-sized medical jump bag.
- PR coordinator prepared and distributed press release for EMS Week to media statewide.
- 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 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.

Fire and EMS Memorial Week

- PR coordinator worked with the VDFP to promote Fire and EMS Memorial Week via the following plan:
    - Promoted the date of the event in the EMS Week press release.
    - Created a special webpage on the OEMS website to promote this event.
    - Shared event info as a trending topic on the VDH homepage.
    - Shared VDFP posts on the OEMS social media sites.
    - Sent out email through our listserv to inform providers about this event.

EMS Symposium

- PR assistant submitted a Symposium ad to the July edition of the Commonwealth Chief magazine.
- PR coordinator updated the Symposium Sponsorship Guide.
- PR coordinator drafted Symposium Catalog, scheduled for posting online when registration opens in July.
- PR coordinator and PR assistant reviewed and edited EMS symposium course descriptions for the Web version and paper version of the Symposium catalog.
- PR coordinator started working symposium webpage.

Governor's EMS Awards Program

- PR assistant helped to coordinate EMS staff attendance at the Regional EMS Council Award ceremonies.
    - PR coordinator attended the NOVA and the REMS Regional EMS Council Awards ceremony.
    - PR assistant attended the TJEMS Regional EMS Council Awards ceremony.
- PR assistant drafted press releases for the 11 Regional EMS Councils' award ceremonies.
    - Press releases were posted to the VDH regional press release webpage and sent out to local media.

Media Coverage

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

- April 11 – Reporter from NBC News requested follow-up info regarding free-standing EDs.
- May 8 – Reporter from the News and Advance requested information regarding Altavista EMS Agency's license.
- May 9 – Reporter from the News and Advance had follow-up questions regarding Altavista EMS and if they were currently under investigation by the OEMS.
- May 15 – Reporter from the News and Advance had follow-up questions regarding when the investigation was opened and estimated date of conclusion for Altavista EMS.
- May 23 – Reporter from WVEC 13 wanted updated numbers re: paramedics and EMS providers in the Commonwealth.
- May 30 – Reporter from the News and Advance followed up on Altavista EMS investigation.
- June 1 – Reporter from the News and Advance requested data re: the number of calls Altavista EMS ran in Campbell County during the months of April and May 2015 compared to the numbers of calls ran in 2016 during the same time period.
- June 5 – Reporter from the News and Advance requested status update on Altavista EMS investigation.
- June 6 – Reporter from the News and Advance had follow-up questions regarding details from the concluded Altavista EMS investigation.
- June 8 – Reporter from WSLS 10 inquired about citations for Altavista EMS.
- June 20 - Reporter from the Rappahannock Times requested a copy of the press release for the Peninsulas EMS Councils Regional EMS Awards.

OEMS Communications

The PR coordinator and PR assistant are responsible for the following internal and external communications at OEMS:

- In June, PR coordinator met with the manager of the Division of Emergency Operations to discuss a public health awareness campaign.
- In June, PR coordinator and PR assistant met with staff from the Division of Educational Development to discuss promotion of the EMS scholarship program.
- On June 7, the PR coordinator and PR assistant participated in the OEMS VEST Training.
- On a daily basis, the PR assistant monitors and provides assistance to 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 sends out weekly CommonHealth Wellnotes to the OEMS staff. From April – June, the PR assistant completed the following tasks:
    - In April, prepared and submitted the OEMS application to be awarded as a CommonHealth Worksite Certified agency for the wellness initiatives practiced within OEMS.
    - In April, coordinated an OEMS Walks event during Virginia Public Health Week.
    - In May, coordinated an OEMS Walk and Scavenger Hunt during Employee Health and Fitness Week.
    - In June, the OEMS received official recognition as a CommonHealth Worksite certified agency. After receiving that official recognition, she submitted a write-up to the CommonHealth Regional Coordinators Team recognizing the OEMS' best wellness practices so that it may inspire other state agencies to work towards their certification.
    - Coordinated an OEMS Lunch and Learn session through the CommonHealth Program. Regional CommonHealth Coordinator, Rose O'Toole came to OEMS to present the current campaign, "Focus on Fiber".

- 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 requests from the community 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.
- 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.

VDH Communications

VDH Communications Tasks – The PR coordinator was responsible for covering the following VDH communications tasks from April – June:

- **April - June** – Responsible for providing back-up for the PR team, including coverage for media alerts, VDH in the News, media assistance and other duties as assigned.
    - May 31 – June 1, PR coordinator attended the 2017 Virginia Public Health and Healthcare Preparedness Academy in Fredericksburg, Va. Assisted with the Spokesperson Bootcamp class and attended other sessions.

- **VDH Communications Conference Calls (Ongoing) -** The PR coordinator participates in bi-weekly conference calls and polycoms for the VDH Communications team.
    - PR coordinator participates in monthly Agencywide Communications Committee meetings.
    - PR coordinator assigned to work on the VDH website/social media subcommittee.

Commissioner's Weekly Email – The PR coordinator submitted the following OEMS stories to the commissioner's weekly email, from April - June. Included a submission from March that was not included in the last quarterly report. Submissions that were recognized appear as follows:

- **May 22 - OEMS Honors Providers' Lifesaving Efforts**
  National Emergency Medical Services Week, May 21 – 27, honors EMS responders' commitment to providing lifesaving services. EMS for Children Day, May 24, focuses on the pediatric patient and the specialized care necessary for them. The Office of EMS' Public Relations Coordinator and Public Relations Assistant coordinated multiple events, activities and messages ahead of this important week. Included among the many items are the submission of an event proclamation to the Governor's Office, an EMS Week planning guide sent to 633 EMS agencies in Virginia, a statewide press release, numerous tweets and messages for both VDH and OEMS social media pages and websites. They also organized the annual essay contest for providers on the OEMS Facebook page. For this year's essays, participants are asked to describe the defining moment when they knew EMS was something they had to do. On behalf of the Office of EMS, we thank all EMS providers for their dedicated service and lifesaving efforts.

- **March 7 - OEMS Staff Presents at the Tennessee Ambulance Service Conference**
  On February 24, Office of Emergency Medical Services (OEMS) Regulation and Compliance Manager Michael Berg participated as a presenter at the Tennessee Ambulance Service Association's Mid-Winter Conference in Gatlinburg. His presentation on the "Culture of Safety" focused on safety in EMS, including such topics as ambulance safety, health and technology. Approximately 175 attendees registered for the event. This training event is the only statewide conference in Tennessee that targets emergency service providers and it's designed to offer attendees educational and networking opportunities to build and improve their leadership skills within EMS.

Regulation and Compliance

VII. Regulation and Compliance

The Division of Regulation and Compliance performs the following tasks:

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

The following is a summary of the Division's activities for the second quarter, 2017:

EMS Agency/Provider Compliance

Enforcement	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	CY2014	CY2015	CY2016	CY2017 YTD
Citations	**25**	**26**			**40**	**55**	**53**	**51**
EMS Agency	14	13			22	23	23	27
EMS Provider	11	13			18	32	30	24

Verbal Warning	**0**	**1**			**21**	**6**	**7**	**1**
EMS Agency	0	0			11	5	3	0
EMS Provider	0	1			10	1	4	1
Correction Order	**11**	**13**			**59**	**64**	**62**	**24**
EMS Agency	11	13			59	64	62	24
EMS Provider	0	0			0	0	0	0
Temp. Suspension	**7**	**2**			**20**	**26**	**25**	**9**
EMS Agency	1	0			0	0	0	1
EMS Provider	6	2			12	26	25	8
Suspension	**3**	**0**			**11**	**15**	**11**	**3**

EMS Agency	0	0			1	0	0	0
EMS Provider	3	0			5	15	11	3
Revocation	3	1			**7**	**8**	**4**	**4**
EMS Agency	0	0			0	0	0	0
EMS Provider	3	1			4	8	4	4
Compliance Cases	**55**	**45**			**202**	**166**	**121**	100
EMS Opened	37	15			140	112	71	52
EMS Closed	18	15			62	54	48	33
Drug Diversions	**3**	**5**			**21**	**15**	**16**	8
Variances	**2**	**2**			**29**	**23**	**16**	4
Approved	2	1			16	14		

							13	3
Denied	0	1			13	9	3	1

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

April 25 – Houston; Hall

June 15 – Munoz

June 29 – Cromer; Valentine; Moss; Iddings

Licensure

Licensure	**1st Quarter**	**2nd Quarter**	**3rd Quarter**	**4th Quarter**	**CY2014**	**CY2015**	**CY2016**	**CY2017**
EMS Agency	633	626			669	646	638	626
New	2	1					6	3
Vehicles	4,217	4,256			4,137	4,568	4,227	4,256
Inspection	754	976			2,997	2,854	3,400	1,730
Agency	108	85			289	319	222	193
Vehicles	516	756			2,261	1,964	2,564	1,272
Spot	130	135			447	571	563	265

Background Check Unit

The Office of EMS began the process of conducting criminal history records utilizing the FBI fingerprinting process through the Virginia State Police on July 1, 2014. There is a dedicated section on the OEMS website with relevant information on this new process that can be found at the following URL: http://www.vdh.virginia.gov/emergency-medical-services/regulations-compliance/criminal-history-record/ .

Interviews were held on July 12, 2017 for a vacant wage position within this unit. An offer has been made and OEMS is awaiting confirmation of acceptance by the candidate of choice. Anticipate a start date of August 10, 2017.

Background Checks	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	CY2014	CY2015	CY2016	CY2017 YTD
Processed	2,366	1883			3,488	6,773	8,157	4,249
Eligible	2,120	1181			2,683	5,415	5,916	3,301
Non-Eligible	8	6			19	50	46	14
Outstanding	13	78			546	1,091	1,362	91
Jurisdiction Ordinance	246	351				189	1,167	597

Regulatory

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

- A Notice of Intended Regulatory Action (NOIRA) closed without any public comments submitted. OEMS Staff will be working to complete the required documentation for the next step for the "Proposed" EMS Regulations.

- Documentation has been submitted for review and approval for a "Final Exempt" regulatory package reflecting the changes from HB 2153 regarding reciprocity for valid out-of-state Durable Do not Resuscitate (DDNR) orders for EMS personnel. http://leg1.state.va.us/cgi-bin/legp504.exe?171+ful+CHAP0179.

EMS Physician Endorsement

Endorsed EMS Physicians: As of July 14, 2017: 225

The regional OMD workshops have concluded for this time period. Courses will restart with the November 2017 EMS Symposium.

Interested OMD's can contact the Office to register for the upcoming workshops. OEMS staff is also reviewing and updating the on-line OMD training program that is utilized as a pre-requisite for anyone interested in becoming an endorsed EMS Physician in Virginia.

Additional Division Work Activity

The Regulation and Compliance staff held their quarterly staff meeting on May 31-June 2, 2017 in Glen Allen, Virginia. The next quarterly staff meeting is scheduled for September 6-8, 2017 in Lynchburg, Virginia.

During the second quarter of CY2017 OEMS staff have provided technical assistance and conducted educational presentations to EMS agencies, entities and local governments as requested:

April 4 OMD Workshop – REMS, Fredericksburg

April 11-14 Fire/EMS Study - Grayson County, VA

April 12 OMD Workshop SWVA/WVEMS – Abingdon

April 24 Transportation Committee meeting, Glen Allen

April 27 OMD Workshop TJEMS/CSEMS – Charlottesville

May 1, May 30 HB1426 Meeting – Alternate Transportation of Mental Health Patients

May 11 OMD Workshop ODEMSA – Richmond

June 5 Fire Service Council Legislative Summit, Oilville

June 7, CAAS GVS Remount Forum, Charlotte, NC

June 12 Presentation for Bedford County Board of Supervisors, Bedford

June 13 Chapter 747, Training for Lay Instructor for Advanced Directives, VHHA

June 20 Virginia Fire Chiefs Association Board meeting, Henrico

June 26, Education Coordinator Institute, Chesterfield

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

OEMS staff, in conjunction with the VDH, Office of Information Management (OIM), has initiated the process of converting data, files and processes from the existing Lotus Notes database to a new Oracle database for the Division of Regulation and Compliance. It is estimated to be completed in summer 2017.

Staff participated in a forum on June 7, 2017 in Charlotte, NC aimed at soliciting concerns and relevant information from ambulance manufacturers, ambulance remounters, NHTSA, and other interested parties on what standards should be developed for the ambulance remount industry. This effort is being coordinated by the GVS v1of CAAS. Mr. Michael Berg representedNASEMSO, NFPA and Virginia at this event.

Staff will be attending a meeting in Nashville, TN August 15-16, 2017 as part of the NFPA 1917 version 3 processes. Michael Berg has been appointed chair of a workgroup of the NFPA 1917 committee to develop standards for remounts and refurbished ambulances.

The General Services Administration (oversees KKK-1822) will be issuing Change Notice 10 on July1, 2017, https://vehiclestd.fas.gsa.gov/CommentCollector/Home.

Technical Assistance

VIII. Technical Assistance

EMS Workforce Development Committee

The EMS Workforce Development Committee met on May 4, 2017. The meeting minutes 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 Sub-committee met on July 27 to continue working on developing an EMS Officer I course based on the Fire Officer I course material in the Jones and Bartlett Fire Officer Principles and Practice (Third Edition).

A pilot of the EMS Officer I program was offered as a session at the 2017 VAVRS Rescue College, with 14 students completing the class. The workgroup has been making adjustments to the program based on feedback received from that course. A course is scheduled to be offered as a preconference session at the 2017 Virginia EMS Symposium in November.

Standards of Excellence (SoE) Sub-Committee

The SoE Assessment program is a voluntary self-evaluation process for EMS agencies in Virginia based on eight Areas of Excellence – or areas of critical importance to successful EMS agency management.

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:
http://www.vdh.virginia.gov/emergency-medical-services/virginia-standards-of-excellence-program/

OEMS continues to receive communications from EMS agencies interested in participating in the SoE process.

The Virginia Recruitment and Retention Network

The Virginia Recruitment and Retention Network met on June 15, 2017 at the Inn at Virginia Tech, in conjunction with VAVRS Rescue College.

The next meeting is scheduled to be held on August 4, 2017, in conjunction with the Virginia State Firefighter's Association Annual Conference in Hampton, at the Hampton Roads Convention Center.

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.

Trauma and Critical Care

IX. Trauma and Critical Care

Patient Care Informatics

- While the migration of data from ImageTrend servers is complete, staff is working with VITA/NG/IT to address ongoing data storage issues. On Wednesday, July 26th, the computer environment the Virginia Elite system resides in will be taken offline to increase the storage capabilities of the system. Due to the volume of data that must be moved and all of the steps required to ensure a smooth transition, this maintenance cycle is expected to last approximately 24 hours. The system will be taken offline at 2:00 PM on Wednesday, the 26th. The system will be back online by 2:00 PM Thursday, the 27th.

  During this time:

- EMS users – No agency will be able to access the online version of the Virginia Elite system. For those EMS agencies using the Virginia Elite system exclusively, the Elite Field version will still work in the offline mode and all records created can be posted once the maintenance cycle has been completed. For those agencies using a 3rd party vendor (which includes any agency that has their own ImageTrend system), any records submitted via Web Services will process into the Virginia Elite system once the maintenance cycle has been completed.

- Hospital Hub users – Hospital Hub users will not have access to any records in the Virginia Elite system. Hospital Hub will still work but the information available will be limited until the maintenance cycle has been completed.

NEMSIS

- NEMSIS discontinued collection of Version 2 data on 12/31/2016. To date only one agency in Virginia is submitting Version 2 (VPHIB) data standard. The VPHIB system will be disabled in July 2017.

- The NEMSIS TAC team released NHTSA / NEMSIS Version 3.4.0 Build 150302. This is a major release with the addition of nine elements to the standard and two retired. Staff is preparing to deploy the update in July 2017.

OEMS Data in Use

- With the V2/V3 transition and internal server migration completed the Division's focus has shifted to data quality and validation

- Staff is working with EMS agencies and the Regulation and Compliance Division to improve the quality of the data that is being submitted to the Elite system.

- Of particular focus is the data being submitted to the State by 3rd party vendors. The Code of Virginia requires that licensed EMS agencies make available to the Commissioner or his designees the minimum data set in the format prescribed by the Board. We have encountered issues with 3rd party data not being mapped to the elements as described in the current Data Dictionary (V3.3). These vendors/agencies are being notified of their deficiencies.

We will continue to monitor data quality and will adjust validation rules if needed to improve the data in our database.

The latest Data Quality Report and Data Submission Compliance Reports can be found on the Knowledgebase:

VAv3 Compliance and Data Quality Reports (June 2017) - Powered by Kayako Help Desk Software

EMS Data Submission Compliance Summary By EMS Council Region, Feb-May 2017

EMS Council Region	Full Reporting (FR)	Behind Reporting (BR)	Not Reporting (NR)	Grand Total	Percent Full Reporting
Blue Ridge	20	8	4	32	62.5%
Central Shenandoah	43	8	5	56	76.8%
Lord Fairfax	12	3	1	16	75.0%
Northern Virginia	28	7	1	36	77.8%
Old Dominion	68	17	5	90	75.6%
Peninsulas	36	6	3	45	80.0%
Rappahannock	29	3	5	37	78.4%
Southwest Virginia	68	8	7	83	81.9%
Thomas Jefferson	22	4	2	28	78.6%
Tidewater	37	10	4	51	72.5%
Western Virginia	74	12	3	89	83.1%
Out of State	8	2	0	10	80.0%
Grand Total	445	88	40	573	77.7%

Full Reporting (FR) - EMS Agencies Reporting All 4 Months
Behind Reporting (BR) - EMS Agencies Missing 1-2 Months
Not Reporting (NR) - EMS Agencies Missing 3-4 Months

Data Validation

- OEMS has added 911 dispatch volumes to the annual Return to Localities report. We will use this as an independent measure of the number of calls submitted to the Elite system by EMS agencies.
- OEMS is also using hospital discharge data supplied by the Virginia Health Information Network to compare with the number of Trauma Registry submissions to ensure complete reporting.

- The VDH Addiction Work Group is tasked with developing strategies to combat opiate related drug overdose deaths in the Commonwealth. EMS data is playing a key role in the prevention process and we provide monthly Narcan usage reports to Dr. Melton, the Health District Managers and Regional Council Directors as a part of the ongoing surveillance efforts. The most recent quarterly report can be found on the Virginia Department of Health website at Opioid Addiction – Data.

Narcan Surveillance Report Weekly Summary - June 2017

VDH Health District	Week 1 6/1-7	Week 2 6/8-14	Week 3 6/15-21	Week 4 6/22-28	Week 5 6/29-30	Grand Total
Alexandria	0	2	0	0	1	3
Alleghany	6	4	3	6	0	19
Arlington	6	1	2	5	0	14
Central Shenandoah	2	3	0	1	0	6
Central Virginia	3	0	1	3	1	8
Chesapeake	2	2	3	0	1	8
Chesterfield	3	2	5	5	2	17
Chickahominy	0	0	0	1	0	1
Crater	4	5	4	2	2	17
Cumberland Plateau	0	3	0	1	1	5
Eastern Shore	0	0	0	0	0	0
Fairfax	8	10	3	6	0	27
Hampton	1	0	0	0	0	1
Henrico	4	2	6	6	1	19
Lenowisco	0	0	0	0	0	0
Lord Fairfax	1	1	1	1	0	4
Loudoun	1	1	1	1	1	5
Mount Rogers	1	1	1	0	0	3
New River	2	2	0	0	0	4
Norfolk	2	3	4	4	1	14
Peninsula	2	2	2	1	1	8
Piedmont	2	1	0	1	2	6
Pittsylvania/Danville	2	0	0	0	0	2
Portsmouth	2	3	5	3	1	14
Prince William	2	2	0	0	2	6
Rappahannock	7	3	4	9	2	25
Rappahannock/Rapidan	2	5	1	4	2	14
Richmond	10	20	15	6	4	55
Roanoke	8	8	8	13	1	38
Southside	2	1	0	0	0	3
Thomas Jefferson	1	1	1	5	3	11
Three Rivers	1	3	1	1	2	8
Virginia Beach	4	9	3	8	1	25
West Piedmont	3	1	0	2	1	7
Western Tidewater	1	0	1	3	0	5
Grand Total	95	101	75	98	33	402

Note: Data is compiled from patient medical records submitted to the Virginia Pre-Hospital Information Bridge (VPHIB) program (v2, v3) with the Virginia Department of Health, Office of Emergency Medical Services (OEMS), Division of Trauma/Critical Care for June 2017 as of 7/10/2017. Also, the locality of the patient is based on the locality of the EMS agency.

Trauma System

- 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 charged with 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 are examining key aspects and components of the current trauma system in Virginia. The Trauma System Plan Taskforce and the workgroups meet quarterly with their most recent meeting June 1, 2017 in Richmond. The workgroups are continuing work on their draft strategic plans for submission to the Trauma System & Oversight Committee's approval prior to submission to this Board.

    - The membership rosters, meeting dates, locations and meeting minutes can be found on the new OEMS web site at Trauma System – Emergency Medical Services.

Trauma Center Designations

- Verification Visits

    - Carilion New River Valley underwent a successful triennial verification visit.
    - Henrico Doctors' Forest one year provisional period follow up site visit was June 7, 2017 and the site review team recommended designation. The Commissioner granted them full designation on June 30, 2017.
    - Johnston Willis triennial site visit was June 27, 2017. The site review team is compiling their report for submission to the Commissioner.
    - Southside Regional Medical Center underwent a six month conditional designation site visit on July 12, 2017 and the team is compiling their report.

- Designation Visits

    - Inova Loudon Hospital submitted a Letter of Intent to seek Level III Trauma Designation and their site visit was conducted April 18, 2017. The site review team recommended designation and the Commissioner granted them a one year provisional designation.

- Upcoming

    - Children's Hospital of the Kings Daughters has submitted a Letter of Intent to seek Level I Pediatric Trauma Center Designation. Their site visit has been scheduled for July 25, 2017.

EMS for Children

National EMSC Program in Review - What is the EMSC Program?

Administered by the Department of Health and Human |Services, Health Resources and Services Administration, Maternal and Child Health Bureau, the Emergency Medical Services for Children (EMSC) Program is designed to ensure that all children and adolescents—no matter where they live, attend school, or travel—receive appropriate care in a health emergency.

Since its establishment in 1984, all 50 states, the District of Columbia, five U.S. territories, and three freely associated states have received funding from the Federal Program. The Program administers several types of grants:

- **EMSC State Partnership (SP)** grants (like we have in Virginia) fund activities that improve, refine, and integrate pediatric care within the state Emergency Medical Services (EMS) system. State Partnerships also collaborate with key stakeholders to enhance prehospital and hospital-based emergency care. All State Partnership grantees are required to collect and report data on performance measures to assess progress toward improvement goals in the prehospital and hospital-based settings.

- **State Partnership Regionalization of Care (SPROC)** grants focus on establishing pediatric medical recognition programs. Specific aims are to implement components of a regionalized system of care to (1) demonstrate feasibility and generalizability to other regional and state systems and (2) expand the inclusion of communities most dependent on regionalized systems of care (i.e., tribal, territorial, insular or rural communities).

- **Targeted Issues (TI)** grants support innovative, cross-cutting projects focused on improving outcomes across the continuum of pediatric emergency care. Proposed project must be of national significance, translatable into practice, meet a demonstrable need, and relate directly to improving the quality of care of pediatric emergency care services,

The federal EMSC Program also funds the **Pediatric Emergency Care Applied Research Network (PECARN)**, the first and only federally-funded, multi-institutional network for research in pediatric emergency medicine. PECARN consists of six research node centers, each of which is comprised of three hospital emergency department (ED) affiliates and one EMS agency affiliate. PECARN also includes a separate EMS research node with three EMS affiliates, funded through a Targeted Issues grant. Together, these entities conduct high priority, multi-institutional research on the prevention and management of acute illnesses and injuries in

children and youth of all ages. The 18 EDs (representing academic children's hospitals) and the nine EMS agencies serve approximately 1.1 million pediatric patients and conduct more than 68,000 pediatric EMS runs annually.

In addition, the Program funds the **EMSC Innovation and Improvement Center (EIIC)** and **the EMSC Data Coordinating Center (DCC)**. The EIIC uses quality improvement science as the basis for collaborative efforts to address known gaps in the US healthcare systems. The DCC, which includes the **National EMSC Data Analysis Resource Center (NEDARC)**, provides technical assistance to EMSC grantees to collect, analyze and use performance measures and other data sets and ensures data quality across multiple PECARN studies.

How is EMSC Making a Difference?

EMSC grant funds have supported: the integration of pediatrics in prehospital and acute care provider training; EMS and hospital-based guidelines and protocols, equipment requirements in ambulance, and other clinical care resources; and the formation of advisory committees and national/federal partnerships. EMSC has also supported efforts to improve pediatric systems of care; networks to advance pediatric prehospital and hospital patient care; and targeted issues to advance the quality of care in pediatrics nationally.

EMSC grantees along with partners within each state and territory have worked to ensure structural capacity for treating pediatric patients in the prehospital and hospital setting. Recent data indicates that the majority (90%) of EMS agencies in the US have consistent availability to online medical direction when treating a pediatric patient and 85% have off line medical direction that includes protocols inclusive of pediatric patients. In addition, while many agencies carry most, less than a third carry all of the recommended equipment needed for treating children. In the hospital setting, almost two thirds (67%) of hospitals have inter-facility transfer agreements and 50% have inter-facility transfer guidelines that incorporate recommended pediatric components.

EMSC Targeted Issues grantees have educated thousands of healthcare professionals through the development of more than 50 online educational modules on everything from best practices in clinical treatment to the safe transport of children in EMS vehicles and responding to disasters involving large numbers of children. Since its inception in 2001, PECARN has published 112 peer-reviewed manuscripts and 107 abstracts. Findings from two recent, widely known PECARN studies show (1) the use of steroids do not help infants with bronchiolitis, and (2) children identified at low risk for a traumatic brain injury (using PECARN developed decision rules) do not need a computed tomography (CT) scan.

Looking forward to the future, EMSC aims to ensure all EDs are ready to care for children through the implementation of the **National Pediatric Readiness Project (Peds Ready)**, a national quality improvement initiative to ensure EDs have the essential guidelines and resources in place to provide effective emergency care to children. A heightened focus will be placed on systems of care that share resources and improve access to health care services for children in tribal, territorial, insular and rural areas of the United States. In addition, EMSC's funding of multicenter pediatric emergency research in both the prehospital and acute care settings is

expected to reveal new knowledge and produce evidence-based findings that will impact clinical practice and ensure standardized care in diverse health care settings that serve children.

Who Partners with EMSC Nationally?

The federal EMSC Program currently works with more than 20 national and professional organizations to identify and address the key issues affecting EMSC, including, but not limited to: disaster preparedness; mental health; family-centered care; quality improvement; hospital medical and trauma recognition; and cultural diversity. The Program also has established the **Family Advisory Network (FAN)** to ensure inclusion of the family perspective in all activities.

Federal partners include: the Department of Transportation (DOT), National Highway Traffic Safety Administration (NHTSA); the Department of Health and Human Services (HHS): Centers for Disease Control (CDC) and Prevention; the Assistance Secretary for Preparedness and Response (ASPR); the Agency for Healthcare Research and Quality (AHRQ) and the National Institutes of Health (NIH). These partnerships provide support to assure that pediatric considerations are fully integrated and addressed within each agency.

The Program is also involved with several Federal collaboratives, including the Federal Interagency Committee on EMS (FICEMS) and the Interagency Committee on EMSC Research.

NASEMSO's "Interim Guidance" on Safe Transport of Children by EMS (now *including the new document "Pediatric Product Comparison for Emergency Ground Ambulances")*

NASEMSO (National Association of State EMS Officials) recently announced the release of Safe Transport of Children by EMS: Interim Guidance. The guidance is a result of the work of NASEMSO's Safe Transport of Children Ad Hoc Committee, a multidisciplinary group which is focused on reviewing the existing scientific evidence and to suggest best practices to utilize in transporting children until true evidence-based standards can be established for ground ambulances and ambulance equipment.
While there are a variety of products available to secure children being transported in ambulances, the EMS provider (and the children being transported) must depend on the manufacturer for determining if the restraint would operate as intended in an ambulance crash. Unlike the child restraints (car seats) used in passenger vehicles, which must meet the crash standards defined by the Federal Motor Vehicle Safety Standard (FMVSS) 213, there are no required crash-testing standards for these devices in the United States.

This Safe Transport of Children Ad Hoc Committee was a direct result of previous efforts of the Pediatric Emergency Care Council (PECC) of NASEMSO urging federal agencies and industry experts to meet with NASEMSO and conduct this kind of review, and to prioritize federal funding in the future to help establish a scientific evidence base for ambulance and equipment standards (especially pediatric).
NASEMSO is working with its partners now to obtain funding to conduct the necessary crash-testing research to develop standards to be met by manufacturers. Until such research can be completed and standards developed, NASEMSO has issued Interim Guidance to maximize the safety of children in ambulances. This also now includes a document called the "**Pediatric**

Product Comparison for Emergency Ground Ambulances" that lists all currently available pediatric restraint devices with a list of their evidence base. If not on the NAEMSO website, a copy can be obtained from David Edwards (david.edwards@vdh.virginia.gov).

Virginia EMSC State Partnership Grant Notes

- **Virginia EMSC Returns to Full Funding—For This Year**

  The Virginia EMSC program's federal allocation (for the current EMSC budget year) was recently restored to full funding after four months at a severely reduced level. Beyond this budget year questions still remain, as the President's proposed budget would eliminate federal EMSC funding completely. The American Association of Pediatrics (AAP) and many other organizations have urged that EMSC funding not be cut, and a bill still alive in the House would restore EMSC funding for FY 18. Only time will tell.

- **NEDARC Video Series Explains Performance Measures**

  NEDARC (National EMSC Data Analysis Resource Center) is producing a video series to assist with understanding the three new EMSC Performance Measures, and will include interview, information about each new measure, as well as performance measure goals and more. The first two in this series are available on the NEDARC YouTube channel at https://outu.be/n9sK-5SoDDU.

  --EMSC 01: NEMSIS
  --EMSC 02: Pediatric Emergency Care Coordinator (PECC)
  --EMSC 03: *(still in production)*

- **EIIC Webinar**

  The **EMS for Children Innovation and Improvement Center** hosted a webinar on to **introduce the next EMSC QI Collaborative** focused on implementing quality improvement efforts in the ED setting. The webinar was intended to introduce the upcoming QI Collaborative from the EIIC. A Train-the-Trainer model will be used to provide regional networks with tools to improve pediatric readiness, and twenty teams composed of training and affiliate sites will be guided to develop local quality improvement efforts to foster pediatric readiness. Project timeline, planned activities, application process, and anticipated outcomes were discussed, and a recording of the webinar should soon be available on this site.

- **Bi-yearly All-grantee EMSC Gathering**

  The 2017 EMSC All Program Meeting will be held in Arlington VA August 14-17. Titled **"EMSC Quality Transformation Meeting: Moving Forward with the Mission"**, this event pulls together grantees from the different components of the national EMSC program for collaboration:

- SPROC (State Partnership Regionalization of Care) grantees.
- TI (Targeted Issues) grantees.
- PECARN (Pediatric Emergency Care Applied Research Network) grantees. PECARN consists of six research node centers, each of which is comprised of three hospital emergency department (ED) affiliates and one EMS agency affiliate. PECARN also includes a separate EMS research node with three EMS affiliates, funded through a Targeted Issues grant.
- State EMSC State Partnership Grantees (like Virginia).

Some of the topics scheduled for the meetings include:

- Transforming healthcare—how quality improvement affects the EMSC work they do in a changing healthcare landscape.
- How measurement is essential in quality improvement.
- Engaging social media (to advocate for emergency care needs of children).
- Utilizing quality improvement to address disparities in the equitability of care.
- Human factors in system design and its impact on patient safety.
- Strategies in knowledge translation and implementation science (from studies to practice)
- QI collaboratives to accelerate change.
- Educating, informing and volunteering.
- Trends in grantee technical assistance.
- Development and implementation of prehospital evidence-based guidelines (EBGs).
- Data and technology update.
- Top 10 papers that affect pediatric care.
- Navigating EIIC electronic assets.
- EMSC strategic planning.
- PECARN updates.
- Utilizing national data sets to conduct research in pediatric emergency care (PECARN data registry, NEMSIS, HCUP…).

- Lessons from the past (practical lessons learned about family reunification from Hurricanes' Katrina/Rita and how to apply that to future disasters).
- Blueprint for the future (to inform the EMSC program about the AAPs Blueprint for the Future and how that relates to the EMSC program).

- Guidance for the **2018-2022 EMSC State Partnership Grant** cycle application was slated to arrive in late July or sometime in August, but the Virginia EMSC program was recently informed by federal officials that there will be further delay in receiving the guidance (likely this fall). From date of receipt, Virginia will have 60 days to complete the application for competitive renewal. Any and all ideas for programmatic and/or budget-related items that EMSC Committee members (or other stake-holders) would like to see included in that application need to be forwarded (or discussed in concrete fashion) with the EMSC grant manager as soon as possible. Please contact David Edwards by email (david.edwards@vdh.virginia.gov) or phone (804-888-9144) with ideas and/or proposed items.

- **CPS Refresher Course on Track -- August 17 in Ruckersville**

  Virginia EMSC and Safe Kids Virginia are co-sponsoring a Child Passenger Safety (CPS) Refresher Course August 17, 2017 (8 am-4:30 pm) in Ruckersville, VA, at the Insurance Institute for Highway Safety (IIHS). Six education credits can be earned, and participants are scheduled to witness a live crash simulation during the day. Qualified students (currently CPS certified) will be offered the course free of charge, and those interested should email Corri Miller-Hobbs (corri.millerhobbs@vcuhealth.org) to register (space is limited).

- **Pediatric Sheltering During Disasters**

  The EMSC Committee of the EMS Advisory Board was treated to a special presentation on "sheltering" in Virginia at their July 6th meeting. Virginia Sheltering Coordinator Dawn Brantley from the Office of Emergency Management led a lively discussion during which we explored the special needs of children in a sheltering environment (storms, natural disasters). We have been offered participation going forward in work groups specifically targeting the needs of children during the redevelopment of Virginia's sheltering program, which is currently underway.

- **Suggestions/Questions**

  Suggestions or questions related to the Virginia EMS for Children program in the Virginia Department of Health should be submitted to David Edwards via email , or by calling 804-888-9144 (direct line).

  The EMS for Children Program is hosted by the Office of EMS, and is a function of the Division of Trauma/Critical Care.

Funding for programmatic support is provided by the Virginia EMSC State Partnership Grant.

Respectfully Submitted

OEMS Staff

Appendix

A

EMS World Roundtable:

Ambulance Safety and Innovation

The Panel:

Michael D. Berg, BS, NRP, is manager of regulation and compliance for the Virginia Department of Health's Office of EMS. He chairs NASEMSO's Agency & Vehicle Licensure Committee and represented NASEMSO on CAAS' GVS steering committee. He is also a member of NFPA's technical committee on ambulances.

Chad Brown has been vice president of sales and marketing for Braun Ambulances since 2012. He previously served as a regional and executive sales manager for the company. He is an alternate member of NFPA's technical committee on ambulances.

Ron Thackery, BA, JD, is senior vice president of professional services and integration for American Medical Response, overseeing safety, fleet administration and risk management. He represented the American Ambulance Association on CAAS' GVS steering committee and is a member of NFPA's technical committee on ambulances.

Mark Van Arnam is the administrator of the Commission on Accreditation of Ambulance Services' Ground Vehicle Standard (GVS v.1.0). He was the founder of American Emergency Vehicles and served as its CEO from 1991–2016.

1. **What do you see as the implications of the Virginia remount interpretation?**

Van Arnam: The remount business is growing. Part of the reason is economic; modular ambulances have been sold since the beginning as vehicles that could be remounted on new chassis. It allows you to have a new ambulance, so to speak, without spending 100% of the price.

The problem is that these remounted ambulances, as they increase in popularity, are exempt from standards! There are basically no specific standards for remounters or remounts. Contrast that to the new-vehicle side, where both the final-stage ambulance manufacturers and their products require credentials, certifications and compliance to various standards. So in that respect I think it's very timely to ask what can happen here and how we can bring everyone under the umbrella and say there is a need for some standards for remounters and remounted vehicles.

Brown: The implication of the Virginia ruling could be rather drastic. I think you won't see Virginia vehicles being remounted, in my opinion, just because of the testing that has to go into it. It's impossible to do. Some of the dynamic testing that's required in the new builds, you can't duplicate that in an existing box and then remount it. You physically damage the box—you just would not be able to do it. So I think you'll see new truck sales go up and remount sales go down.

Berg: Some of the secondary manufacturers have called and complained. One said I was trying to put them out of business. They couldn't afford to take the truck out of state to do a roof crush test in order to meet the standards. But in talking to people, I've found the original manufacturers don't have an issue with it. If you're an authorized vendor or dealer for them, they're willing to stand behind their product. But if you're not affiliated or an authorized dealer, there's some hesitancy from a liability standpoint.

2. **What other big trends are influencing ambulance purchasing and design today?**

Brown: I think safety is No. 1. With the new SAE testing requirements in all three industry specifications [KKK-A-1822F, NFPA 1917 and CAAS GVS], that's going on at the manufacturing level, and they're building more safety and regulation into the ambulances. That's the biggest driver as we talk to people: design layout and ergonomics.

Thackery: One is whether there is knowledge on the part of the buyer or the ambulance upfitter of advances that have been made in construction of the patient compartment with respect to seat restraints, cot restraints, patient restraints, equipment mounting and cabinetry. And instrumental in that decision is the cost of the advances being made as a result of the science that's out there. I don't know that people fully appreciated the cost impacts of those improvements in safety.

Van Arnam: We know the ambulance is a very difficult work environment and historically a very dangerous place to be for the crew, so the focus on safety is timely and very much needed. The work that's been done by NIOSH to develop the SAE standards is nothing short of revolutionary. It's some of the only real science our industry has ever had.

Berg: I do think some people are having a hard time letting go of tradition. I spoke at a conference in another state last week, and I noticed the ambulances being displayed there still had CPR seats in them. The majority still had bench seats. A lot of people are still married to that bench seat—they're not quite used to having the forward-facing seat and work station. I guess it's just hard to let go of tradition.

3. **With the CAAS GVS and NFPA 1917 standards for ground ambulances and the Star of Life specification not gone yet, we don't seem any closer to having a single defining standard for ambulances. Do we need one? Or can the multiple efforts we have today successfully coexist?**

Thackery: I think the Triple-K, GVS and 1917 all recognize the importance of safety and means to incorporate features that would improve it. There are a few that may be experimental, but they're aimed in the right direction. And really, it's remarkable how consistent those standards are, rather than being divergent. I think that's driven in large part by the scientific work done by Jim Green and NIOSH.

Van Arnam: I think the NFPA developed an excellent standard. EMS is a very broad industry with multiple market segments. We had some organizations with an interest in a standard that wasn't developed by the fire service that came to us in 2013 about developing a standard for the rest of the industry, so to speak—the non-fire segment. That's the private providers and nonemergency side, the hospital side, the air medical side—there are quite a few segments to the market besides the fire side. CAAS developed our standard in response to requests from these other segments of the EMS market.

Having said that, on a go-forward basis, I think it's likely and reasonable that the standards coexist. We're already seeing states considering accepting both. Alabama is the first to accept the Triple-K, CAAS-GVS and NFPA, and you as a user can decide which to use! So EMS providers can decide whether they want one standard or another based on individual need.

Brown: Can all three of them coexist? Absolutely—they're coexisting as we speak, and we're building to all three specs. Selfishly, from a manufacturer's position, having a unified specification that all builders build to and all customers buy off would be tremendously more efficient for us—with regards to testing, with regards to documentation and reporting. Ultimately maintaining three specs, with little differences between them, requires additional administrative work, which adds cost and time to the vehicle.

4. **Several jurisdictions are fielding stroke ambulances now, and more commonly specialized units like critical care trucks, bariatric trucks, etc. What's the future for these more specialized vehicles?**

Brown: We're starting to see an increase in requests to build specialty vehicles. The challenge is that the state EMS directors need to work with the manufacturers through NASEMSO to define specifications for them. Right now we don't have those, and I think that's a loophole in some cases. If you have a specification, we're all building to the same requirements, so that's the best of all worlds.

Berg: In rural and frontier areas, I don't know you'll necessarily see the value of those types of vehicles from a cost and utilization standpoint. There will be a growing trend for the availability of critical care transportation, where they'll have some more effective diagnostic tools and drugs and therapies and will be reaching out to community-based facilities to bring those patients into the high-level services.

Thackery: A stroke unit is pretty specialized compared to what is a relatively small number of highly critical patients. Developing a particular ambulance for a low-volume activity is hard to sustain in EMS. Some communities are doing it, though, and I think we'll continue to experience development in regard to patient care and what can be done to most effectively improve the condition of the patient.

5. **Among those emerging needs could be greater use of telemedicine technologies as part of mobile integrated healthcare and community paramedicine, among other reasons. How will this impact our trucks? Is mobile technology sufficient for what we'll need?**

Thackery: It's going to become much more common. Most ambulances today are already hotspots, so they have Internet connectivity and can transmit a variety of information. We have the ability to utilize a cell phone camera and video, to utilize a GoPro or even a mounted camera in the back of a unit, although you have to deal with some HIPAA issues there. But the technology is available. Exactly what the process should be is probably still in the developmental stages. But we partner with one of our sister companies, Evolution Health, which has two medical command centers, one in Dallas and one in South Florida, that are essentially licensed practices of medicine. They use telemedicine to assess and diagnose and prescribe medications for patients. So as far away as that might sound, I think it's relatively close.

Van Arnam: I think for the most part the technology will be add-on technology. Because it varies from area to area and provider to provider, people are bringing their own technology to the vehicle, rather than the vehicle delivering the technology. The good part of that is that it allows change. An average ambulance is going to operate for 8–10 years, and technology changes at light speed compared to that.

Brown: We're evolving with regards to electronics installs, integration of the different electronics across silos of information in the vehicles, and how we get that to where it needs to go. That means long preconstruction meetings, where you're now bringing in IT personnel from the hospitals to be part of the conversation. It's a different type of installation. You have to bring all the right people to the table who know their systems inside and out.

6. **A few years ago NHTSA published some recommendations, but there remains lots of concern about the transport of pediatrics. What are the most important steps we can take to make ambulances safer for children?**

Thackery: I know there's quite an interest there, and we should expect something to occur. I do think there are probably better ways to transport pediatrics. Because to say pediatrics is to use one term to describe what may be up to 10, or maybe more, types of patients, based on size or weight or age or height or any of those factors. Regardless, I do believe, and I think NHTSA understands, that there is a good bit of research that needs to be done so any guidance provided is based on science.

Berg: I know NIOSH was asked if they could do some testing like they'd done with the ambulance cots, but NIOSH's focus is worker safety. We've struggled with this for years. Even today, when we have a precipitous delivery in the field, where do we put the newborn? We put the newborn with the mother on the cot! Our state law says they have to be in an infant carrier, but many services don't carry infant carriers. So it becomes a challenge of space and practice and culture. We need to have somebody step up and provide the funding so the testing can be done and a national standard developed.

Van Arnam: We've seen providers buying a variety of child seats at WalMart and strapping them in; we've seen neonatal transport devices secured with bungee cords, cargo straps and everything from A to Z. I think there's little doubt the next wave is for someone to fund projects on safety standards for transportation of peds, both as patients and as passengers. That will require a lot of money and time, but some minimum standards are sorely needed.

You need to let the market run with it. But particularly the neonate side is a small market, so it's hard to get a broad interest from manufacturers. That's a big part of research and product development: getting the manufacturers interested, getting them to come across with R&D dollars and develop effective and competitive products the industry needs. That's a shortfall.

7. **What other changes, improvements, technologies or innovations do you see coming to the ambulance environment in the next few years?**

Berg: I think the use of the large boxes will continue to decrease. If services look at their call data and the services they're providing, I think they'll find a large percentage of the work they're

doing can be handled in the traditional Type II ambulance. And with the science that's out there now, I think we'll see smaller, more sophisticated equipment that's able to be housed safely in the vehicle.

Brown: I think you'll see some different interior configurations and the specialty vehicle market grow. The mobile stroke units, critical care transports, neonate transports—all of those things will be defined as specialized so we have a standardization across the board. And from an innovation standpoint, there are some driving technologies with regards to how we prevent accidents—the "guardian angel" [advanced driver assistance system] stuff we can explore as it's becoming available. Vehicle diagnostics, being able to communicate back to a fleet manager or chief that a vehicle that has low tire pressure—all that is coming relatively soon. You'll see something from us at FDIC this year with regards to that.

Thackery: I think we'll see many of the technologies that have been incorporated in passenger vehicles make their way into the commercial van and truck space, where they're standard instead of options. With operations like lane changes, following other vehicles, determining spaces in front of or behind your vehicle, we'll have the benefit of that automation, which will improve safety.

8. Who's Up Next? Possibly Peds

It's not news that the safe transport of pediatric patients is on the radar of EMS leaders. NHTSA published its Working Group Best-Practice Recommendations for the Safe Transportation of Children in Emergency Ground Ambulances back in 2012. NASEMSO has a Safe Transport of Children committee that meets monthly. The EMS for Children Innovation & Improvement Center offers a number of resources for safer movement of our littlest patients.

"Aside from the remounts, I think pediatrics is the next big wave of things that need to be addressed in EMS," says Mark Van Arnam, administrator of CAAS' Ground Vehicle Standard. "Right now we're transporting a wide range of ages and sizes, both as patients and passengers, with no standards per se. I think there's great interest in developing those."

NHTSA's recommendations cover five areas: kids who

1) are uninjured and not sick;

2) are injured or ill but don't require continuous or intensive monitoring/interventions;

3) require continuous or intensive monitoring/interventions;

4) require spinal immobilization/lying flat; and

5) are part of a multipatient transport (multiple children, newborn with mother, etc.).

Each group has an "ideal" recommendation, with some next-best steps suggested if that isn't practical or possible.

•NHTSA document: www.ems.gov/pdf/811677.pdf;

•NASEMSO committee: www.nasemso.org/Committees/STC/index.asp;

•EMSC IIC: https://emscimprovement.center/.

The Smart Ambulance Project

Unnecessary ambulance transports aren't just a problem in America. In Europe they're a prime reason behind the Smart Ambulance project.

The Smart Ambulance: European Procurers Platform (SAEPP) consists of various European ambulance services, research groups, hospitals and other healthcare organizations working to create an upgraded emergency ambulance that will let prehospital providers provide more high-level patient care on-scene, avoiding some transports.

Their goals in designing the truck include maximizing space, minimizing infection risk, streamlining hospital admissions and handovers, reducing costs and, most important, providing a safer environment for providers and patients both. The project is still in its early consultation stages.

“There are many problems with the design of existing ambulances that impact negatively on patients and frontline ambulance clinicians alike,” project leaders note. “Some of the most pressing issues concern the treatment space in the back of the emergency ambulance. This environment is difficult to keep clean, given the frequency of use, and the resultant lack of opportunity to scrub the vehicle down can lead to hygiene and infection control problems. Ambulance crews also suffer from poorly thought-out ergonomics, badly laid out equipment and difficult-to-access storage spaces, all of which can affect performance in critical, life-threatening situations.”

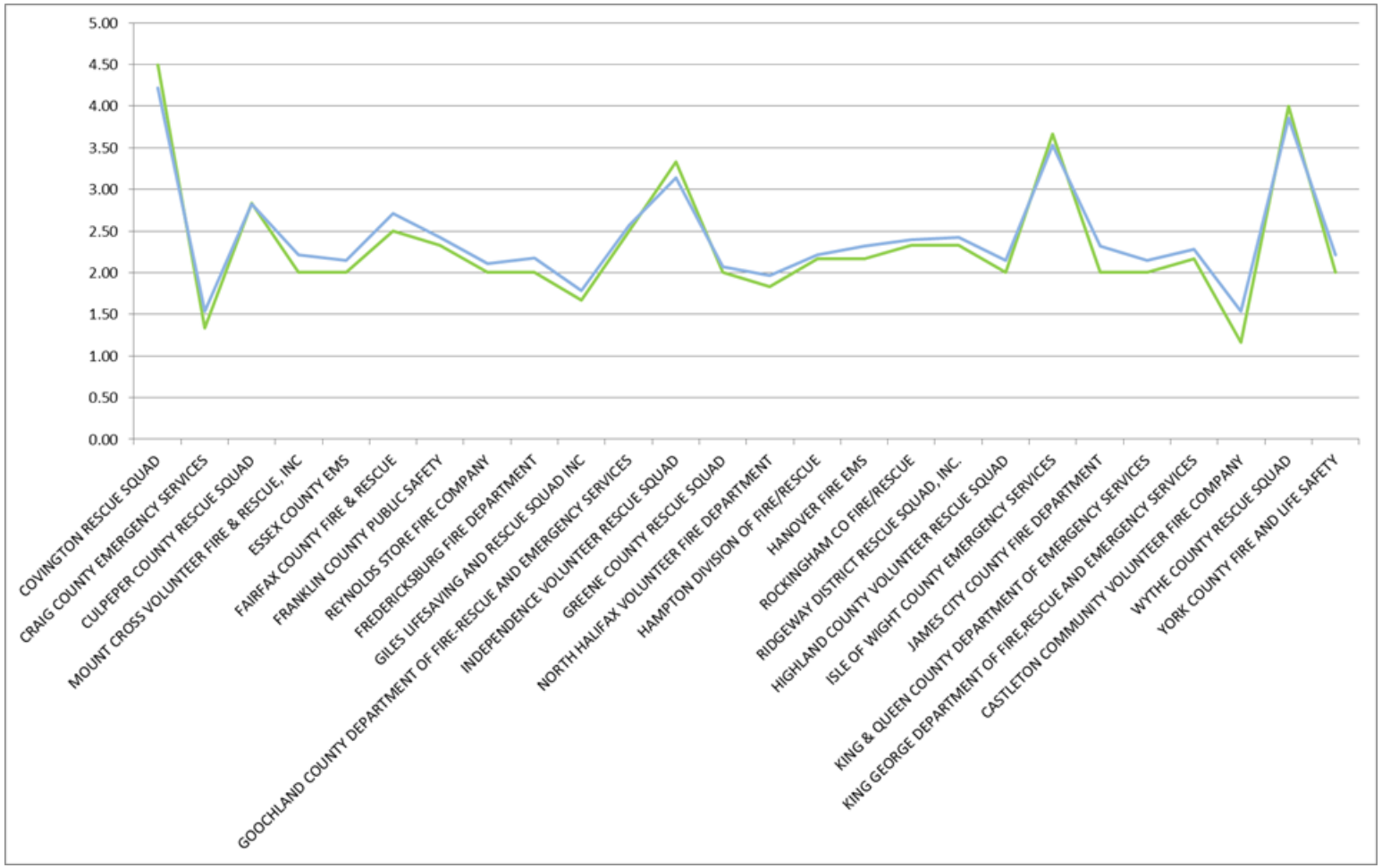
For more: http://www.smartambulanceproject.eu/.

Appendix

B

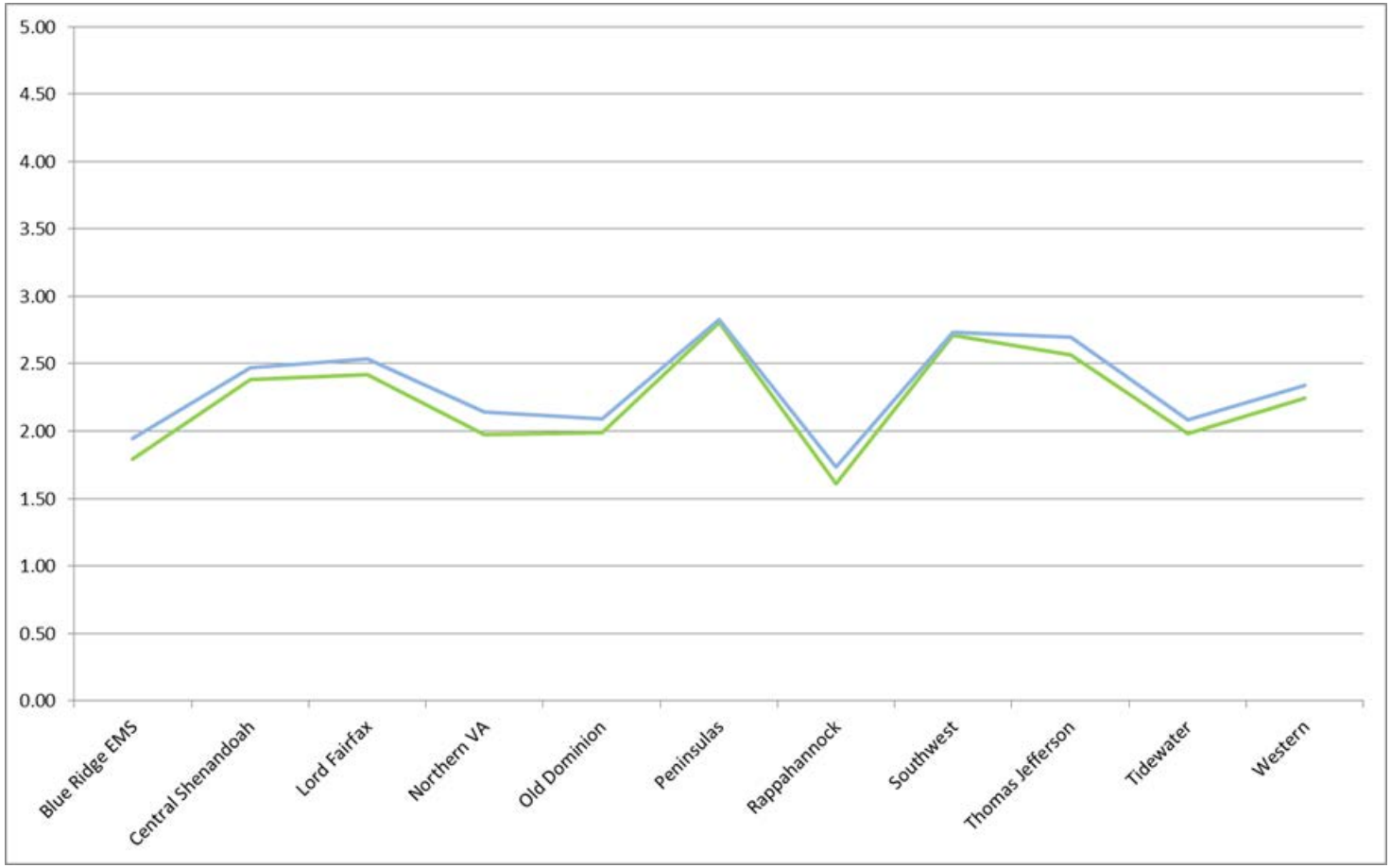
RSAF Scores by Agency

FARC Scores vs FARC/VDH Scores



- RSAF Scores by Region

FARC Scores vs. FARC/VDH Scores



Appendix

C

State EMS Advisory Board
Motion Submission Form

☒ **Committee Motion:**	**Name:**	Training and Certification Committee
☐ **Individual Motion:**	**Name:**	

Motion:

With the initial activity performed by the Training and Certification Committee workgroup and in review of the available information from the Intermediate 99 Town Hall meetings and public comments received, the Training and Certification Committee supports the finding that Virginia does not have the resources to develop and maintain valid, reliable and legally defensible certification exams. The workgroup further recommends that when the National Registry of EMTs no longer offers an Intermediate 99 examination, Virginia will cease issuing initial Intermediate certification and that existing Intermediates in Virginia will be able to maintain their Intermediate certification indefinitely through continuing education, with no reentry mechanism.

EMS Plan Reference (include section number):

4.2.1 Update the certification process to assure certification examinations continue to be valid, psychometrically sound, and legally defensible.

Committeee Minority Opinion (as needed):

For Board's secretary Use only:

Motion Seconded by:

Vote:	**By Acclamation:**	☐ **Approved**	☐ **Not Approved**	
	By Count	**Yea:** ☐	**Nay:** ☐	**Abstain:** ☐

Board's Minority Opinion:

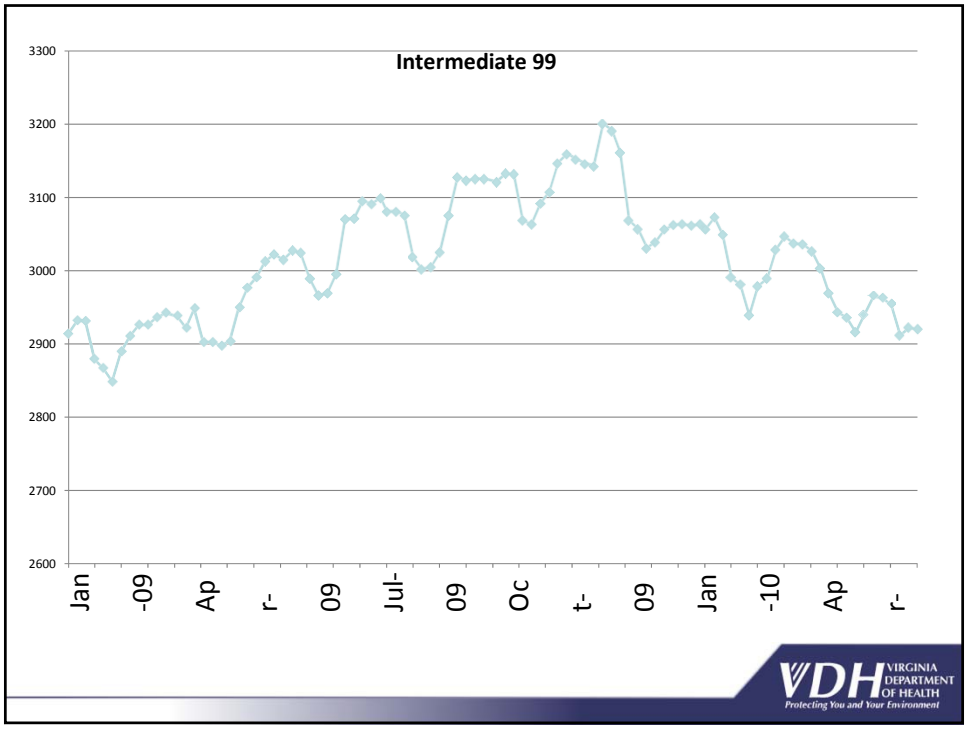
Appendix

D

Intermediate 99 One Sheet

History

- I-99 developed Nationally in the very late 1990s
- Piloted in VA 1999 through 2001
- Cardiac transition to I-99 2002 through December 2008
- January 2009 - 2,914 I-99s certified in VA
- National Registry ended initial I-99 certification December 31, 2013.
- National Registry I-99 will not exist after March 31, 2019
- OEMS initiated review – What to do if NR stops offering the I-99 test
- TCC workgroup formed – met November 23, 2015



History

- It is not the intent of OEMS or TCC to remove the I-99 certification but rather develop a plan if NR no longer offers an assessment exam for I-99.
- Withheld as an action item at the November 9, 2016 EMS Advisory Board meeting

History Continued

- Workgroup proposal –

THIS WORKGROUP FINDS THAT VIRGINIA DOES NOT HAVE THE RESOURCES TO DEVELOP AND MAINTAIN A VALID, RELIABLE AND LEGALLY DEFENSIBLE CERTIFICATION EXAM. THE WORKGROUP FURTHER RECOMMENDS THAT UPON THE LOSS OF THE ABILITY TO GAIN INITIAL INTERMEDIATE CERTIFICATION, EXISTING INTERMEDIATES IN VIRGINIA WILL BE ABLE TO MAINTAIN THEIR INTERMEDIATE CERTIFICATION INDEFINITELY THROUGH CONTINUING EDUCATION, WITH NO REENTRY MECHANISM.

UNANIMOUSLY ENDORSED BY THOSE PRESENT 9/2/16

VDH VIRGINIA DEPARTMENT OF HEALTH Protecting You and Your Environment

Data Points

- There will be no Nationally Registered I-99s after March 31, 2019
- FEMA does not recognize I-99 for DMAT – ALS team
- National I-99 curriculum does not exist
- National Education Standards for I-99 do not exist
- Up-to-Date I-99 textbooks do not exist
- NR has only an assessment examination for I-99 that has only been updated for AHA ECC criteria.
- After March 31, 2019, portability of I-99, both into and out of Va. will be negatively affected.

VDH VIRGINIA DEPARTMENT OF HEALTH Protecting You and Your Environment

Data Points

Virginia EMS Providers by Number and Percent

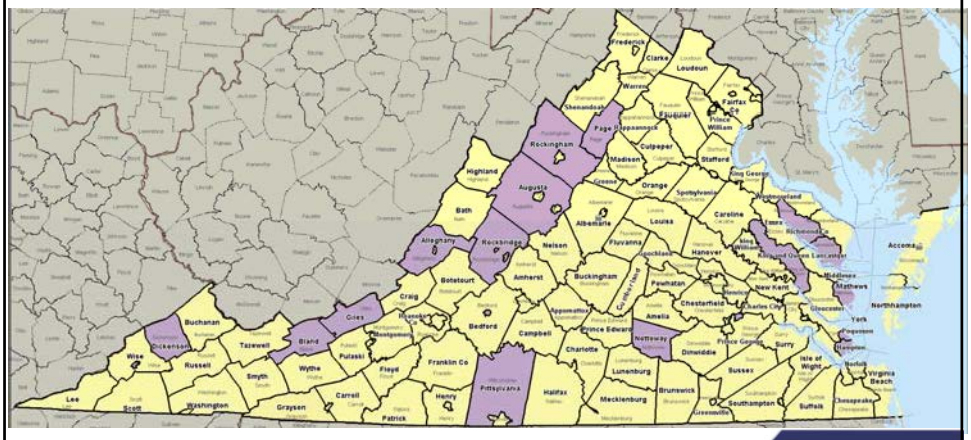
January 6, 2017

Total EMS Providers	**34,672**	**100% (99.98% rounding error)**
EMR	797	2.29%
EMT	22,582	65.13%
AEMT	2,096	6.04%
Intermediate	2,920	8.42%
Paramedic	6,277	18.10%

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

Localities Where I-99s Exceed Paramedics Are In Purple

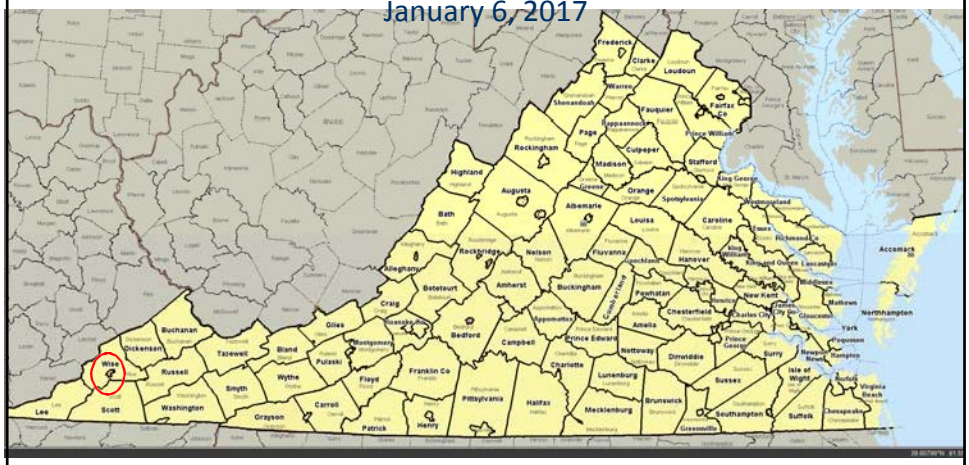
January 6, 2017



VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

Localities With No Paramedics Are In Orange

January 6, 2017



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Protecting You and Your Environment

Test Development and Delivery

NC figures:

- $615,000 annually
  - ✓ Paper based exam
  - ✓ 450 – 500 man hours to create a single exam.

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Protecting You and Your Environment

Test Development and Delivery

NC figures:

- Contract with Castle Worldwide
  - ✓ Psychometrician Services
  - ✓ Item Development
  - ✓ Standard Setting
  - ✓ Maintenance of Practice Analysis
  - ✓ Legal Consultation

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Test Development and Delivery

NC figures:

- Contract with EMS Performance Improvement Center at University of North Carolina
  - ✓ For all IT development
  - ✓ Maintenance of Test Bank
  - ✓ Grading

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Test Development and Delivery

- What does Virginia have in place?
  - ✓ IT component – 60% complete X
  - Psychometrician Services
  - X Item Development X
  - Standard Setting
  - X Maintenance of Practice Analysis X
  - Legal Consultation

AEMS Council States Intermediate Activity

State	Total I-99s	Do you offer Initial I-99	Do you offer Recert for I-99
District of Columbia	21	No	No
Delaware	0	No	No
Maryland	739	Yes	Yes
New Jersey	0	No	No
North Carolina	0	No	No
Pennsylvania	0	No	No
Virginia	2,920	Yes	Yes
West Virginia	56 (ACT's)	Yes	Yes

Where Do We Go From Here

Town hall Meetings

February 2, 2017 – 7:00 p.m. to 9:00 p.m.

Virginia EMS Advisory Board

February 23, 2017 – 3:00 p.m. – 5:00 p.m.

VFCA Fire & Rescue Conference, VA Beach

March 14, 2017 – 10:00 a.m. to 12:00 noon

Manassas Volunteer Fire Company, Manassas

March 21, 2017 – 7:00 p.m. to 9:00 p.m.

Rappahannock Community College, Warsaw

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Where Do We Go From Here

- Virginia EMS Advisory Board Meeting May 4 – 5, 2017
- Determining what to do.

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What are your thoughts?

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Protecting You and Your Environment

Appendix

E

State EMS Advisory Board
Motion Submission Form

☒ **Committee Motion:**	**Name:**	Medical Direction Committee
☐ **Individual Motion:**	**Name:**	

Motion:

Resolution for Compliance with the National Scope of Practice Model and Standardized EMS Certification Levels
Whereas the Virginia EMT-I/99 certification level is a legacy certification with a diminishing and limited future;
Whereas the initial certification of the Virginia EMT-I/99 is provided by an external organization and will exist only as long as financially viable for this certifying entity and not under the proactive control of the Commonwealth;
Whereas the existence of the Virginia EMT-I/99 certifications has inhibited the development of the nationally recognized AEMT certification level, the bedrock certification for future EMS system maturity;
Whereas the existence of the EMT-I/99 certification level has inhibited the professional growth and maturity of the Nationally Registered Paramedic in Virginia; and
Whereas the existence of the EMT-I/99 certification level, has, very importantly, inhibited the professional growth and career opportunity of EMT-I/99 providers themselves; now, therefore, be it
Resolved, the Medical Direction Committee (MDC) of the Governor's Advisory Board (GAB):

1. Supports the recommendation from the Training and Certification Committee approved on July 5, 2017.
2. supports the recommendation from various sources that the Virginia EMT-I/99 certification be maintained by providers through fulfillment of continuing education requirements after loss of the initial certification process, but without a re-entry option for failure to maintain certification.
3. recommends the GAB support a moratorium on new EMT-I/99 classes starting on or after July 1, 2018.
4. recommends the GAB to request the OEMS to plan for EMT-I/99 providers to facilitate transition to either NRP status or AEMT status.
5. recommends the GAB to request the OEMS to facilitate EMS systems development in the Commonwealth specific to their utilization of the AEMT certification level.
6. offers its expertise as EMS Physicians and subject matter experts to support these actions and to offer consultation to the various stakeholders.

EMS Plan Reference (include section number):

4.2.1 Update the certification process to assure certification examinations continue to be valid, psychometrically sound, and legally defensible.

Committeee Minority Opinion (as needed):

For Board's secretary Use only:

Motion Seconded by:

Vote:	**By Acclamation:**	☐ **Approved**	☐ **Not Approved**	
	By Count	**Yea:** ☐	**Nay:** ☐	**Abstain:** ☐

Board's Minority Opinion:

Appendix

F

State EMS Advisory Board

Motion Submission Form

☐ **Committee Motion:** Name: Medical Direction Committee

☐ **Individual Motion**: Name: _____

Motion:

The Medical Direction Committee requests that the EMS Advisory Board adopt the Prehospital and Inter-hospital State Stroke Triage Plan as presented today.

EMS Plan Reference (include section number):

4.1.2 Maintain statewide pre-hospital and inter hospital triage/patient management plans.

Code of Virginia: §32.1-111.3, Section C: The Board shall also develop and maintain as a component of the Statewide Emergency Medical Services Plan a statewide prehospital and interhospital Stroke Triage Plan designed to promote rapid access for stroke patients to appropriate, organized stroke care…

Committee Minority Opinion (as needed):

For Board's secretary use only:

Motion Seconded By:

_____

Vote: _____ YEA _____ NAY _____ ABSTAIN

Board Minority Opinion:

_____

_____

_____

Meeting Date: _____

Appendix

G

Virginia Office of Emergency Medical Services
Division of Trauma/Critical Care
Prehospital and Inter-hospital
State Stroke Triage Plan

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

Index

Executive Summary

Under the *Code of Virginia* **§** *32.1-111.3,* The Office of Emergency Medical Services, acting on behalf of the Virginia Department of Health, has been charged with the responsibility of maintaining a Statewide Stoke Triage Plan. The Statewide Stroke Triage Plan establishes a strategy through formal regional stroke triage plans that incorporate each region's geographic variations and acute stroke care capabilities and resources. The Commonwealth of Virginia recognizes three levels of stroke certification (a Certified Stroke Center) consistent with recommendations of the Brain Attack Coalition. These are Comprehensive Stroke Centers, Primary Stroke Centers, and Acute Stroke Ready Hospitals. There are multiple certifying bodies including the Joint Commission, DNV, and potentially others.

The purpose of the Statewide Stroke Triage Plan is to establish a uniform set of criteria for the prehospital and inter-hospital triage and transport of acute stroke patients. Formal regional or local stroke triage plans may augment the State Stroke Triage Plan to acknowledge and address variations in each region's EMS and hospital resources. This State Stroke Triage Plan, and the related regional plans, addresses patients experiencing an "acute stroke." For the purposes of this document, "acute stroke" is defined as any patient suspected of having an acute cerebral ischemic or hemorrhagic event. The primary focus of the plan is to provide guidelines to facilitate the early recognition of patients suffering from acute stroke and to expedite their transport to a center able to provide definitive care within an appropriate time window.

It is very important to note that because of the continuing evolution of scientific evidence indicating successful management of acute stroke regardless of time of onset, EMS *providers are encouraged to initiate real-time contact with regional or local medical direction to discuss individual cases that may fall outside of their established agency protocol.* The closest hospital may not necessarily be the most appropriate hospital for that patient. In selected cases it may be determined that expeditious transfer or transport directly to a Certified Stroke Center may be of benefit for a specific patient. Some selected acute stroke types may benefit from intervention *for an extended period* following symptom onset. Regardless of time of onset the sooner an acute stroke is treated, the better the potential outcome ("Time is Brain"). Based on an individual patient's time of symptom onset and following discussion with Medical Control, EMS should carefully consider what mode of transport would be most appropriate to transport the patient expeditiously to a Certified Stroke Center.

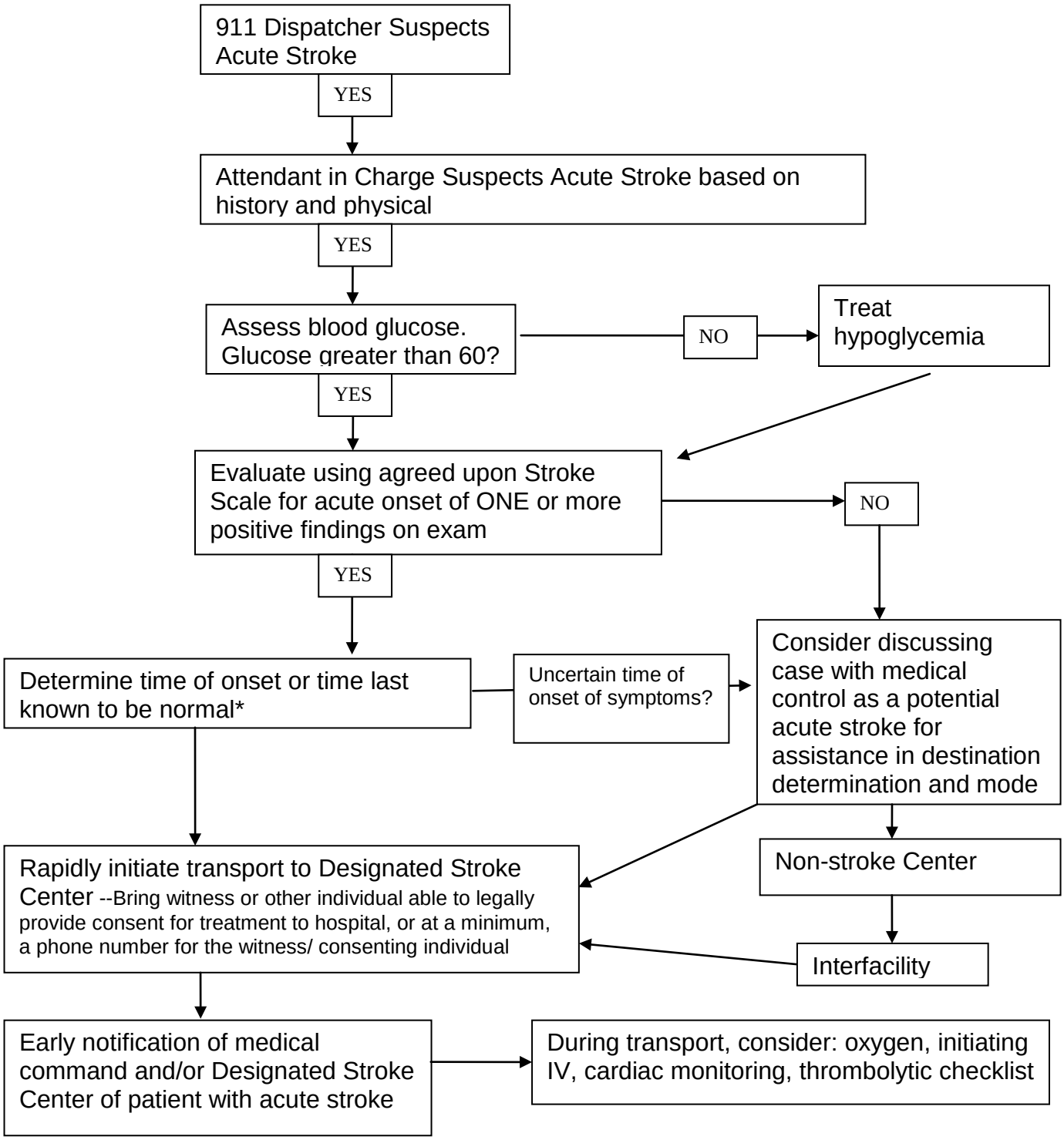
Pre-Hospital and Inter-hospital Triage Criteria

Individual EMS regions are best qualified to assess the capabilities of their EMS and hospital stroke management resources and provide direction to EMS agencies within their regional guidelines. The default destination for acute stroke patients should be a Certified Stroke Center. When acute stroke patients cannot be transported directly to a Certified Stroke Center in a timely manner, consideration may be given to transport to a closer hospital. Various hospitals meet many of the components of a Certified Stroke Center based on national survey results and would be the next logical choice. The closest hospital may not be the most appropriate hospital. Resource information on Certified Stroke Centers can be found on The Joint Commission website (https://www.jointcommission.org/), the DNV website (DNV GL - Healthcare | DNV GL - Healthcare) and The Healthcare Facilities Accreditation Program (HFAP - Primary Stroke Center Certification Program).

These considerations should be addressed specifically within the regional plan in a manner consistent with this state stroke plan, and should be updated as hospital resource availability changes. Regional plans should provide EMS systems with plans for situations where patients would be transported to non-stroke centers, as well as specific guidance for use of HEMS for transport to Certified Stroke Centers. It is recommended that if HEMS is utilized, the destination optimally should be a Comprehensive Stroke Center or center with Comprehensive level capabilities (e.g. 24-7 Neurosurgery and Neuro-intervention). Interfacility transfer plans should address both non-stroke centers and the post thrombolytic transfer of patients for interventional therapy.

Non-stroke center hospitals should have transfer guidelines and agreements in place for the expeditious and appropriate management of acute strokes when the care required exceeds their capabilities. This is especially critical for transfer of patients following thrombolysis since specific protocols must be followed to diminish the risk of cerebral or systemic hemorrhagic complications. If the patient has received, or is receiving thrombolytic therapy, it is the responsibility of the sending facility to ensure that the transporting agency is staffed with providers that have received appropriate training in the monitoring of this patient population. (See Appendix B for a sample post IV tPA EMS transfer checklist)

Acute Field Stroke Triage Decision Scheme



(*)EMS providers are encouraged to initiate real-time contact with regional or local medical direction to discuss individual cases that may fall outside of their established agency protocol onset of symptoms guidelines. Recall that patients with specific acute stroke types may benefit from intervention up to 24 hours, although the sooner an acute stroke is treated, the better the potential outcome. Based on patient time of onset and discussion with Medical Control, consider whether use of helicopter EMS will offer potential benefit to the patient, either in time to Certified Stroke Center, or for critical care management expertise. EMS does not determine whether a patient is excluded from any or all therapeutic options. Final decisions regarding patient eligibility for any given intervention will be determined by the receiving physician(s).

Guidance Materials

Use of Validated Stroke Screening Scale

All patients suspected of having an acute stroke should undergo a formal screening algorithm. Use of stroke algorithms has been shown to improve identification of acute strokes by EMS providers up to as much as 30 percent. The results of the stroke screening must be documented in the electronic prehospital medical record and on any written handoff form left at the receiving hospital. ANY abnormal (positive) finding which is suspected or known to be acute in onset is considered an indicator of potential acute stroke.

It should be recognized that there are numerous scales available for stroke screening (Cincinnati Prehospital Stroke Scale BE FAST, RACE, LAMSS, VAN), some of which are designed to detect any acute stroke, and some of which are designed to identify large vessel occlusion. Since there is not definitive evidence favoring one scale over another, and numerous scales are available, the regional EMS councils should consider which scale to use, and evaluate those in the field for applicability to their region. The Virginia Office of EMS and the Virginia Stroke Systems Taskforce has created a reference document that consists of various stroke scales for use in identifying acute stroke and large vessel occlusions. The document provides references to the use of the scales in the pre-hospital environment. The link to the document can be found on the **Stroke Related Resources** page of this document.

Local/Regional Protocols

Local and regional prehospital patient care protocols for acute stroke should include:

- An initial/primary assessment

- Focused assessment including:
  - Blood glucose level (if authorized to perform skill)
  - Documented time of onset or time last known to be normal
  - Documentation of the agreed upon regional screening tool for acute stroke and large vessel occlusion (e.g. RACE, LAMSS,VAN)
  - Pertinent history to include mention of acute stroke mimics (i.e. seizures, migraines, hypo/hyperglycemia and others as deemed appropriate). Pertinent medical history that might affect thrombolytic administration (i.e. pregnancy, seizure at onset, terminal illness and others as deemed appropriate) is listed on the Sample Acute Stroke Thrombolytic Checklist in Appendix A.

- Appropriate treatment for hypoglycemia. IV access and cardiac monitoring if available, reassessment of neurologic exam and stroke scale. Contact with Medical Control and/or receiving hospital to give pre-alert of potential acute stroke patient.

- Transport criteria that direct acute stroke patients with stable airway and without hypotension to Certified Stroke Centers within the agencies transport geography. Real-time contact with regional or local medical direction may be freely used to discuss the individual patient case to determine whether transport directly to a Certified Comprehensive Stroke Center (if available within the region) would be of benefit to that specific patient.

- EMS Regions incorporate specific strategies appropriate to their area to assure that acute stroke patients are able to access specialty resources for acute stroke intervention and management. There should be recognition that some patients may benefit from stroke interventions well outside of the usual time windows, and rapid evaluation with advanced imaging may be the only way to identify and select those patients. Thus, transfer to stroke centers with advanced imaging capabilities such as CT/CTA, MRI, and Angiography is recommended. Examples may include partnerships with acute stroke specialists at the Certified Stroke Center who can provide input on specific patient cases in a timely manner to either the Medical Control physician or directly to the EMS provider.

- For regions wishing to include a thrombolytic checklist, see Appendix A for Sample Acute Stroke Thrombolytic Checklist. EMS does not determine whether a patient is excluded from any or all therapeutic options. Final decisions regarding patient eligibility for any given intervention will be determined by the receiving physician(s).

Acute Stroke Patient Transport Considerations

MODE OF TRANSPORTATION: EMS Patient Care Protocols should address mode of transport considerations. Each jurisdiction is unique in its availability of EMS and acute stroke care resources. Consideration should be given to the hospital(s) that is/are available in the region and the resources that they have available to acute stroke patients when developing plans and protocols, as well as EMS system capacity.

RAPID TRANSPORTATION: Because stroke is a time-critical illness, time is of the essence, and EMS should rapidly initiate transport once acute stroke is suspected. Consideration should also be given to prehospital resources including use of helicopter EMS (HEMS) available at the time of the incident, and other conditions such as transport time and weather conditions. Use of HEMS can facilitate acute stroke patients reaching Certified Stroke Centers in a timeframe that allows for acute treatment interventions. **The likelihood of benefit of acute stroke therapy decreases with time**, **but there are several therapy options which offer definite benefit *for an extended period* following symptom onset.** Interventions may include any of the following: specialty physician or Neurologic ICU capability, advanced radiologic evaluation, or life-saving emergent procedures.

Field transports of acute stroke patients by helicopter as defined in this plan:

1. Should significantly lessen the time from scene to a Certified Stroke Center compared to ground transport.
2. Should be utilized to expeditiously transport acute stroke patients to the closest appropriate certified stroke center. Given cost and risk of utilization of a HEMS resource, it is recommended that the patient should be transported directly to a Certified Comprehensive Stroke Center if feasible.

Stroke Triage Quality Monitoring

The Virginia Office of EMS (OEMS), acting on behalf of the Commissioner of Health, will report aggregate acute stroke triage findings on an intermittent basis, but no less than annually, to assist EMS systems and the Virginia Stroke Systems Task Force to improve the local, regional and Statewide Stroke Triage Plans. A de-identified version of the report will be available to the public and will include, minimally, as defined in the statewide plan, the use of and the completeness of, the prehospital Stroke assessment, under triage to Certified Stroke Centers in comparison to the total number of acute stroke patients delivered to hospitals and HEMS utilization. The program reports shall be used as a guide and resource for health care providers, EMS agencies, EMS regions, the Virginia Office of EMS and the Virginia Stroke Systems Task Force. Additional specific data points to be collected within the EMS prehospital patient care report (written or electronic) will be established collaboratively between OEMS and VSSTF. Information to be contained in routine reports on both system and patient-level indicators and outcomes will be developed by OEMS in partnership with VSSTF to guide further system development in a patient focused way.

Hospitals, EMS Regions, and EMS agencies are encouraged to utilize their performance improvement programs to perform quality monitoring and improve the delivery of acute stroke care within their regions.

Stroke Related Resources

Certified Stroke Centers

The process of Stroke Certification is entirely voluntary on the part of the hospitals and identifies hospitals that have established and maintain an acute stroke program that provides a specific level of medical, technical, and procedural expertise for acute stroke patients. Certification ensures that the hospital is prepared to provide definitive acute stroke care at all times and has an organized approach to providing clinical care, performance improvement, education etc. Neither the Commonwealth of Virginia government, nor the Virginia State Stroke System Task Force (VSSTF) certifies stroke centers.

Link to Joint Commission Certified Stroke Centers

- Certification Data Download - Data Download | QualityCheck.org

Link to DNV Certified Stroke Centers

- DNV GL - Healthcare | DNV GL - Healthcare

Link to a map of Virginia Stroke Certified Hospitals

- http://www.vdh.virginia.gov/content/uploads/sites/26/2017/01/Stroke_hospital_Map5.pdf

Virginia Stroke System Web page

- Virginia Stroke Systems Task Force – Heart Disease and Stroke

Virginia Office of EMS Stroke Web page

- http://www.vdh.virginia.gov/OEMS/Trauma/Stroke.htm

The Joint Commission

- What is Accreditation? | Joint Commission

American Heart Association

- Stroke Resources for Professionals

National Stroke Association

- Stroke Resources | Stroke.org

Centers for Disease Control and Prevention:

- Stroke Information | cdc.gov

Appendix A: Sample Thrombolytic Checklist

NOTE: Exclusions on this checklist are not absolute. Final decisions regarding patient eligibility for any given intervention will be determined by the receiving physician(s).

Date:_____ **Time:**_____**EMS Unit:** _____

PHOTOCOPY THIS FORM AND LEAVE COPY WITH ED PHYSICIAN OR NEUROLOGIST AT BEDSIDE

Patient Name:_____ Age:_____

Estimated .weight:_____lbs/kg

1. Did patient awaken with symptoms? Yes / No
2. Time last known to be normal: _____
3. Time of symptom onset: _____
4. Onset witnessed or reported by: _____
5. Witness/Family or other individual able to legally provide consent for treatment coming to Emergency Department? _____ [ENCOURAGE TO DO SO].

If not, phone # where such individuals will be immediately available for calls from hospital staff to assist in giving additional patient history and consent.

( ) -

Cincinnati Stroke Scale Score:

Symptoms from **Cincinnati Stroke Scale** (circle abnormal findings)

ANY ONE FINDING = POSSIBLE STROKE=MINIMIZE ON SCENE TIME

FACIAL DROOP:	R	L	**1 2 3**
ARM DRIFT:	R	L	
SPEECH:	slurred	wrong words	mute /unable to speak

Possible Contraindications (check all that apply)

Current use of anticoagulants (e.g., warfarin sodium)	Yes	No	?
Has blood pressure consistently over 180/110 mm Hg	Yes	No	?
Witnessed seizure at symptom onset	Yes	No	?
History of intracranial hemorrhage	Yes	No	?
History of GI or GU bleeding, ulcer, varices	Yes	No	?
Is within 3 months of prior stroke	Yes	No	?
Is within 3 months of serious head trauma	Yes	No	?
Is within 21 days of acute myocardial infarction	Yes	No	?
Is within 21 days of lumbar puncture (spinal tap)	Yes	No	?
Is within 14 days of major surgery or serious trauma	Yes	No	?
Is pregnant	Yes	No	?
Abnormal blood glucose level (<50 or >400): FSBS (if done):	Yes	No	?

Receiving Site/Physician Printed Name: _____Time_____

EMS Provider Name: _____Signature_____

Appendix B: ODEMSA Stroke Post-IV t-PA EMS Transfer Check Sheet

See next two pages

ODEMSA Stroke Post-IV t-PA EMS Transfer Check Sheet

Note: Patient will be transported with minimum of paramedic-level care

All questions regarding patient care must be referred to the receiving physician

Receiving Hospital: _____

Physician: _____

Phone Number: _____

Contact Number for family: _____

Prior to Departure – *to be completed together by ED staff and transferring paramedic*

- ☐ Verify SBP < 180; DBP < 105 – sending hospital must stabilize if above limit
- ☐ Perform and document neurological exam to establish baseline neurological status
- ☐ If t-PA to continue during transport, complete "t-PA Dosing and Administration Communication Form" on back of this sheet
- ☐ If IV pump tubing is not compatible with transport pump:
  - Add extension tubing with a cartridge adaptable to transport pump, if available OR
  - Hold patient in ED until t-PA infusion is completed

During Transport

- ☐ Replace t-PA bottle with 0.9% NS when bottle is empty and before pump alarms "air in line" or "no flow above"
- ☐ Continue infusion at current settings until preset volume is completed
- ☐ Continuous cardiac monitoring
  - Call receiving physician if hemodynamically unstable or symptomatic from tachycardia or bradycardia
- ☐ Continuous pulse oximetry monitoring
  - Apply oxygen to maintain O2 sat > 94%
- ☐ Maintain NPO including medications
- ☐ Perform and record neuro checks every 15 mins
  - Cincinnati Pre-Hospital Scale
  - GCS and pupil exam
  - Include assessment for changes in initial or current symptoms or onset of new stroke-like symptoms
- ☐ Monitor and document vital signs every 15 mins **on opposite arm from t-PA infusion site**
- ☐ Maintain head of bed 30 degrees
- ☐ Avoid venipuncture or other invasive procedures unless absolutely necessary after t-PA start due to risk of bleeding

Blood Pressure Management

- ☐ Keep SBP < 180 and DBP < 105
  - Turn off pump and call receiving physician for further instructions
  - IV Labetalol (10 mg) ***(provided by hospital)*** Increase by 2mg/min every 10 mins (to a max of 8mg/min) until SBP < 180 and/or DBP < 105
  - IV Nicardipine (0.1 mg/mL) infusion ***(provided by hospital)*** Increase dose by 2.5mg/hr every 5 mins (to max of 15mg/hr) until SBP < 180 and DBP < 105

Complication Management

- ☐ Monitor for acute worsening of neurological condition or severe headache, acute hypertension, nausea, or vomiting
  - Stop t-PA infusion if still being administered
  - Call receiving physician for further instructions and to update receiving hospital
  - Continue to monitor vital signs and perform neurological exam every 15 mins
- ☐ Monitor for signs of allergic reaction: mouth or throat edema, difficulty breathing, etc
  - Stop t-PA infusion if still being administered
  - Treat allergic reaction according to agency protocol
  - Notify receiving hospital
- ☐ Monitor for other bleeding or hematomas at infusion/puncture sites or in urine or emesis
  - Apply direct pressure to any sites
  - Notify receiving hospital

Additional Instructions

_____

_____

_____

NOTE: ***Leave copy of MIVT or ePCR, EKG strips, and serial vital signs/neuro checks with RN at receiving hospital***

_____

Transferring Physician Signature Date/Time

Patient Sticker – sending hospital	Patient Sticker – receiving hospital

t-PA Dosing and Administration Communication Form

- This page is to be completed by transferring RN and EMS Transport team
- Verify/confirm the following dosing and pump settings prior to departure:

	ED RN Initials	EMS Transport Initials
Total t-PA dose to be given: _____mg		
Excess t-PA discarded before hanging on pump: _____mg Amount remaining at time of transport: _____mL		
Bolus dose: _____mg Time given:_____		
Continuous Infusion: • Dose: _____mg Time started:_____		
• Rate: _____mg/hr **Estimated** time of completion: _____		
Actual stopped/completed time:_____		
Stopped early due to: _____		
Total amount t-PA received: _____mg EMS administered _____mL in transport **Switch to bag of 0.9% NS KVO after t-PA is finished**		

Signature/Title	Initials	Signature/Title	Initials

EMS Transport Team to hand off this completed medical record to RN at receiving hospital

Patient Sticker – sending hospital	Patient Sticker – receiving hospital

Reference: AHA Guidelines for the Management of the Ischemic Stroke Patient, January 2013

Appendix C: Stroke Triage Tools
See next three pages

Pre-Hospital Stroke Triage Tools

Stroke evaluation/triage tools for EMS providers have been developed to help increase the ability of providers to recognize acute stroke and to improve communication between EMS providers and receiving hospitals. As stroke care has evolved, efforts to increase sensitivity for stroke continue while increasing attention is being given to identifying acute stroke patients who might benefit from interventional stroke care, including endovascular clot retrieval systems, typically provided at Comprehensive stroke centers. Newer stroke triage tools have incorporated components designed to identify these “large vessel obstructions” (LVO’s).

Initial stroke triage tools focused on clearly recognized components such as facial droop, speech abnormalities, and upper extremity weakness. These tools paralleled community education programs such as the FAST campaign: Facial droop, Arm weakness, Speech abnormalities, and Time. While it is recognized that the National Institutes of Health Stroke Scale (NIHSS) may represent the “gold standard” in acute stroke evaluation, the scale is time consuming and complicated for routine use in the field. Newer pre-hospital stroke triage tools have included components based on the NIHSS such as lower extremity weakness in addition to upper extremity weakness, the presence of confusion or inability to follow commands, abnormal gaze, visual field abnormalities, neglect syndromes, abnormal coordination, and abnormal sensation. EMS systems should work with their receiving stroke centers toward incorporating validated stroke triage tools into their field guidelines that improve recognition of large vessel strokes. Triage guidelines can then be developed based on local and regional resources. It is recognized that in some cases closer hospitals may be “bypassed” in favor of hospitals with expanded stroke care for patients whose pre-hospital evaluation indicates increased chances of benefit from interventional stroke care.

Stroke Triage Tool Grid

	Facial Droop	Abnormal Speech	Upper Extremity Weakness	Grip Strength	Lower Extremity Weakness	Abnormal Gaze	Abnormal Vision	Neglect or Agnosia	Confusion/LOC	Coordination	Sensation
Cincinnati Prehospital Stroke Scale (CPSS)	X	X	X								
Cincinnati Stroke Severity Scale (CSSS)			X			X			X		
Los Angeles Prehospital Stroke Scale (LAPSS)	X		X	X							
Los Angeles Motor Score (LAMS)	X		X	X							
Vision, Aphasia, Neglect Assessment (VAN)		X	X			X	X	X			
Rapid Arterial Occlusion Evaluation Scale (RACE)	X	X	X		X	X		X			
Miami Emergency Neurologic Deficit (MEND)	X	X	X		X	X	X		X	X	X

Stroke Triage Tools, References

Cincinnati Prehospital Stroke Scale

Kothari RU, Pancioli A, Liu T, Brott T, and Broderick J. Cincinnati Prehospital Stroke Scale: Reproducibility and Validity. Ann Emerg Med April 1999;33:373-378.

Cincinnati Stroke Severity Scale

Katz BS, McMullan JT, Sucharew H, Adeoye O, Broderick JP. Design and validation of a prehospital scale to predict stroke severity: Cincinnati Prehospital Stroke Severity Scale. Stroke 2015 Jun; 46(6): 15078-12.

Los Angeles Prehospital Stroke Scale

Kidwell CS, Starkman S, Eckstein M, Weems, K, and Saver JL. Identifying stroke in the field. Prospective validation of the Los Angeles prehospital stroke screen (LAPSS). Stroke 2000 Jan;31(1):71-6.

Los Angeles Motor Score

Llanes JN, Kidwell CS, Starkman S, Leary MC, Eckstein M, and Saver JL. The Los Angeles Motor Scale (LAMS): a new measure to characterize stroke severity in the field. Prehosp Emerg Care 2004 Jan-Mar;8(1):46-50.

Vision, Aphasia, Neglect Assessment

Teleb MS, Ver Hage A, Carter J, Jayaraman MV, McTaggart RA. Stroke vision, aphasia, neglect (VAN) assessment – a novel emergency large vessel occlusion screening to: pilot study and comparison with current clinical severity indices. J NeuroIntervent Surg2016;0:1-5.

Rapid Arterial Occlusion Evaluation Scale

Perez de las Ossa N, Carrera D, Gorchs, M, et al. Design and validation of a prehospital stroke scale to predict large arterial occlusion: the rapid arterial occlusion evaluation scale. Stroke 2014 Jan;45(1):87-91.

Miami Emergency Neurologic Deficit

Brotons AA, Motolas I, Rivera H, Soto RE, Schwemmer S, and Issenberg B. Correlation of the Miami Emergency Neurological Deficit (MEND) exam performed in the field by paramedics with an abnormal NIHSS and final diagnosis of stroke for patients airlifted from the scene. (Abstract) http://www.asls.net/pdf/MEND%20Poster%202012.1.23%20Final.pdf