Emergency Medical and Trauma Services Branch Activity Report

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Jan. 10, 2019

This report is submitted as a record of key activities by the Emergency Medical and Trauma Services Branch for the period ending Dec. 31, 2018.

Organizational Effectiveness
Please help us welcome Andrew Yancey to the branch as our Technician III, primarily responsible for handling the certification program. Andrew holds a Master of Public Policy - Administration and a Bachelor of Science - Criminal Justice. He most recently has worked with the Department of Revenue in the Motor Vehicle Division. He has previous USAF experience as a security forces member/specialist, and has served as a deputy with the Boulder County Sheriff’s Office. He is currently attending the Denver Health Paramedics - EMS Education EMT program.

Professional Standards Section
Mike Bateman, Interim Section Manager, michael.bateman@state.co.us

EMS Provider Certification
At the end of the second quarter of 2018, there were 18,515 certified EMS providers in the state: 13,074 EMTs; 302 AEMTs; 454 Intermediates; and 4,301 Paramedics (of which 373 paramedics have critical care endorsement, ten have the community paramedic endorsement, and one has both the critical care and community paramedic endorsements).

EMR Registration
There are 433 voluntarily registered Emergency Medical Responders. On July 1, 2017, the Emergency Medical Responder (EMR) registration officially moved from the Colorado Department of Public Safety, Division of Fire Prevention and Control (DFPC) to the department.

Education
EMS education is divided into two categories: 1) education centers offer initial training, and 2) education groups offer continuing education for recertification. An organization can be either a center, a group or both. All the education centers in Colorado are also education groups and so are counted in both categories. Additionally, an organization can offer programs for EMR, EMT, EMT-IV, Advanced EMT, EMT-Intermediate or Paramedic in any combination. EMRs and EMS providers renewing their state registration/certification using CE/skills must affiliate with a state-recognized education program in their application. An education program must submit an application and be recognized to provide CE approval and skill competency attestation. There are approximately 200 recognized education programs in OATH.

The education task force is continuing to work on revisions to the state Primary Instructor, Assistant Instructor and EMS Administrator courses.

Emergency Medical Practice Advisory Council (EMPAC)
There are currently 422 active scope of practice waivers (230 waivers expired on Jan. 1, 2018 when the current version of Chapter 2 went into effect). The next EMPAC meeting is scheduled for Monday,
Feb. 11, 2019, starting at 10 a.m. at CDPHE offices in Denver. The next Regional Medical Direction committee meeting is also Monday, Feb. 11, 2019 at the same location, starting at 8 a.m.

Air Ambulance
There are 33 licensed air ambulance service agencies in Colorado, of which 24 are full two-year license and nine are recognition licenses.

EMTS Investigations
Anne Strawbridge, EMTS Enforcement Supervisor, anne.strawbridge@state.co.us

During the fourth quarter of 2018, there were three disciplinary actions against EMS providers’ certifications that resulted in final disposition. There are six ongoing cases filed with the Office of Administrative Courts, in which the department is represented by the Attorney General’s Office. Finally, six complaints were investigated and closed by the investigations unit.

Funding Section
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Technical Assistance
At the request of local governments and in conjunction with the Regional Emergency Medical and Trauma Services Advisory Councils (RETACs), staff members coordinate technical assistance services to local entities. The department issued the purchase order for Central Mountains RETAC to coordinate an emergency medical and trauma services (EMTS) system assessment of Lake County in 2019. The department has performed 20 local EMTS system assessments since the program began. Copies of the final reports with recommendations are available from the department.

CREATE
The Colorado Rural Health Center continues to administer the Colorado Resource for EMS and Trauma Education (CREATE) grant program. One financial waiver application was received for review during the quarter and was approved. The Expert Review Committee evaluated 19 applications requesting funding for 20 different courses. Thirteen courses were approved with $128,505 awarded.

Provider Grants and System Improvement Funding Requests
Correct reimbursement requests were received in October and the last project from the fiscal year 2018 funding cycle was closed. There were no additional reversions for fiscal year 2018.

The legislature authorized approximately $8.4 million for the funding program in fiscal year 2019. More than $7 million is available for provider grants and system improvement funding requests after the $150,000 set aside for emergency grants, $500,000 allocation for the CREATE educational grant program, $363,000 reserved for regional medical direction projects, $284,915 earmarked for supplemental RETAC funding and $76,000 assigned to provide support for the new trauma registry software. For the fiscal year 2019 funding cycle, the department awarded $6,928,378 in provider grant awards and $500,293 for system improvement funding, including regional medical direction projects. Purchase orders and contracts for 153 projects are fully executed. Statements of work for two projects are still in progress pending signature by the grantee organization. Four projects were withdrawn by grantee organizations this quarter. The reverted funds were re-awarded to fully fund projects for the last organization in the initial award list and one new project. The statement of work for the new project is in progress pending signature by the grantee organization.

As noted last quarter, no incentive category requests were submitted. The SEMTAC Public Policy and Finance committee did not need to take action on an incentive category for the fiscal year 2020 grant cycle at the October 2018 meeting.
Emergency Grants
There was one emergency grant request this quarter. An EMTS organization in southwest Colorado requested funding to repair an emergency backup generator.

Trauma Section
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Trauma Reviews/Designations
During the fourth quarter of 2018, the Trauma Section completed ten triennial reviews and one re-review. There are currently 81 designated trauma centers.

- Estes Park Medical Center, Level IV, triennial review
- Spanish Peaks Regional Health Center, Level IV, triennial review
- Rio Grande Hospital, Level IV, triennial review
- Mercy Regional Medical Center, Level III, triennial review
- Longs Peak Hospital, Level III, triennial review
- Heart Of The Rockies Regional Medical Center, Level IV, triennial review
- North Colorado Medical Center, Level II, focused re-review
- Gunnison Valley Hospital, Level IV, triennial review
- Poudre Valley Hospital, Level III, triennial review
- Sterling Regional Medical Center, Level III, triennial review
- Colorado Plains Medical Center, Level III, triennial review

Trauma Consultations and Outreach Visits
Staff members provided onsite technical assistance visits and/or onsite monitoring to five facilities during the third quarter including: North Suburban Medical Center, Rose Medical Center, Pagosa Springs Medical Center, Animas Surgical Hospital and Southwest Memorial Hospital.

Designation Review Committee (DRC)
The DRC met once in the fourth quarter. One facility required a recommendation all other facilities received automatic designation during the quarter.

Statewide Trauma Advisory Committee (STAC)
The STAC made recommendations for expanded scope of care rules for general surgery and continues to review progress on the neurosurgery platform. The Trauma Chapter Two (trauma system rules) and Trauma Chapter Four (RETAC rules) task forces have competed their work.

Expanded Scope of Care Task Force
Convened by STAC, this task force met twice during the quarter and has completed work on a draft set of rules for neurosurgery expanded scope of care to be considered by STAC and SEMTAC.

Stroke Advisory Board
The board submitted its annual report to the legislature which is due each Jan. 1. The board continues to make recommendations to improve the stroke system of care in Colorado and will perform more outreach in 2019 to share evidence-based recommendations and gather feedback from prehospital and hospital stakeholders.

Other Trauma Section Activities
- Continued to provide technical assistance to stakeholders requesting registry assistance.
- Provided three opportunities for ImageTrend training. The department has contracted with ImageTrend to manage its trauma data repository. Trainings took place in Grand Junction, Pueblo and Denver. The trainings were well attended and the ImageTrend platform went live for direct entry users on Jan. 1, 2019.
Regional Emergency Medical and Trauma Advisory Councils (RETACs)
Mattew Paswaters, Coordinator, mattew.paswaters@state.co.us

First quarter activity reports and financial statements for FY19, Budget vs Actual Report/Variance Report and Regional/Local Funding Overview for FY18 were submitted by all 11 RETACs. The most recent quarterly RETAC forum was held in December in Loveland. The next RETAC forum is March 6-7 in Gateway.

Emergency Medical Services for Children (EMSC)
Contact: Stacey Quesada, Program Manager stacey.quesada@ucdenver.edu

EMS for Children is a federal partnership grant funded by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services. To address the grant deliverables most effectively the program is housed at University of Colorado School of Medicine, which employs the EMSC Program Manager and manages most EMS for Children activities. A close relationship is maintained with the EMTS Branch. The Pediatric Emergency Care Committee (PECC) serves as the advisory committee for the program. The program continues to implement a strategic plan. Activities this quarter included:

- The new EMSC Program Manager started in November and has been busy orienting to the many aspects of the EMSC program and the related Pediatric Emergency Care Applied Research Network (PECARN).
- The FY2019 Non-Competing Continuation Progress Report for the EMSC grant was completed and submitted to HRSA in December. This report summarized progress on the program’s nine performance measures during the current funding cycle, discussed barriers encountered to date, and outlined project plans for the next funding cycle.
- The EMSC Program Manager spent much of the quarter building relationships with key partners including the Pediatric Disaster Coordinator for the Office of Emergency Preparedness and Response, an injury prevention specialist from Children’s Hospital’s Child Health Advocacy Institute, the Director for Emergency Medical Services at CORHIO, HRSA’s EMSC Project Officer, EMSC Program Managers from Louisiana and Pennsylvania, staff from the EMSC Innovation and Improvement Center and NASEMSO, and key personnel from Arvada Fire Protection District and Aurora Fire Rescue.
- With the vacancy of the program manager position between June and November, work on the Pediatric Readiness project was delayed. The new program manager met with the Trauma Program Manager from St. Francis Medical Center in December to discuss plans for re-launching the project with this pilot facility.
- The EMSC Program Manager attended the December RETAC forum in Loveland to introduce herself and to discuss the program’s goal to work closely with RETAC Coordinators on defining and implementing Pediatric Emergency Care Coordinators across the state.

Additional information is available at the EMS for Children website.

Communications
Curtis Nations, Communications Program Coordinator, curtis.nations@state.co.us

The EMTS Branch continues to support the implementation of the Statewide Digital Trunked Radio (DTR) system. Since the statewide communications plan has been finalized, the communications program staff members continue to educate and inform EMS system users in “best practices” on how to integrate DTR into their daily operations. Staff members have also continued their work to
identify the various mechanisms being used to maintain hospital-to-field communication throughout the state and enhance inter-agency operability and interoperability capabilities.

Located throughout the state, the infrastructure currently consists of 238 on-the-air APCO P25 digital trunked radio sites operating in conjunction with five zone controllers and utilizes frequencies in the 700MHz/800MHz bands. Out of the 238 radio sites, 27 sites are accessible for EMS aircraft communications. There are several funded Digital Trunked Radio (DTR) remote sites throughout the state that are in the planning, engineering or installation phase. The DTR system uses mostly microwave radio, and some fiber optic cable, to link all of the sites together. A complete replacement/upgrade of the microwave is now underway, and equipment at about eight of the sites has been replaced. This project could take up to five years to complete. Once complete, the system will have redundant paths to improve communications reliability across the state.

AT&T continues to work with FirstNet to deploy additional public safety broadband infrastructure in Colorado. Earlier this year, AT&T stood up its dedicated public safety core. As of September 30, 2018, they advised the completed Initial Operating Capability-1 (IOC-1). They have deployed dozens of the planned Band 14 sites through the state, with more to come over the next few years. They are working to upgrade many sites from 3G to 4G and establish roaming agreements with smaller rural Colorado carriers to expand the network as well.

Data Section
Amber Viitanen, EMTS Data Section Manager, amber.viitanen@state.co.us

The data team continues to make progress in building relationships with licensed air and ground ambulance agencies to make the transition from submitting Version 2.2.1 EMS data to the more robust Version 3.4.0 data as required by rule. This new dataset includes more data elements to better capture the state of EMS in Colorado, and allows for more robust research, quality assurance, and improved data quality. As of December 2018, over 200 agencies have transitioned to NEMSIS Version 3 data reporting. The new software version corrects many of the shortcomings of the previous version, and provides additional capabilities to collect quality data that has been used to improve patient care and support quality improvement projects. As a result, the department began work on building EMS benchmark reports that examine key aspects of patient care across the state. These reports will allow ambulance agencies to retrieve their own benchmark data as well as compare their numbers to their region and the state overall.

The Colorado EMS Information System (CEMSIS) statewide database houses over 5 million prehospital care reports reflecting EMS response and transport, which has been in place since 2006. These data are now stored on a new server, which allows greater capacity within the statewide database. The department has been working with OIT and ImageTrend to increase the frequency of system backups to ensure accurate and up-to-date data for analysis.

As of the end of 2018, there were over 800,000 patient records in the current Colorado Trauma Registry. The branch began implementation of a new software, ImageTrend’s Patient Registry, to serve as the data repository, and data entry system for the Colorado Trauma Registry. ImageTrend provided three days training to end users of the product (trauma facilities), to ensure full understanding of the tools available, and the department has distributed several training document to support new users of the system. The new platform will be ready for data entry and submission in early 2019. The team continues to refine this system to meet the needs of the trauma facilities and the department. Facility and transport agency lists continue to be reviewed and updated to document changes in service with EMS and trauma agencies and facilities.
Data section staff members continue to:

- Provide NEMSIS Version 3 training and CQI, including new processes, rules, and updates
- Troubleshoot problems that arise with a completed schematron, ImageTrend ePCR, data entry, reporting, or other data issues
- Provide ongoing technical assistance to transport agencies, trauma centers and their software vendors
- Assist hospitals with accessing Hospital Hub Dashboard and Elite Field to enhance communication between medical staff and EMS providers
- Develop ad-hoc EMS and trauma reports to accommodate data requests and other data driven requirements including benchmarking and quality improvement
- Analyze data and prepare reports and/or presentations for stakeholders
- Assist EMS agencies using third party vendor software to establish an administrative web access and process for submitting XML data to the ImageTrend database
- Assist in implementation of new Trauma Registry system in Colorado, including building data entry forms, validation rules, data dictionaries, scheduled reports, etc.
- Develop and implement new ways to use EMS and Trauma data such as benchmark reports, dashboards, and presentations to enhance care for patients across Colorado