Emergency Medical and Trauma Services Branch Activity Report
to the State Emergency Medical and Trauma Services Advisory Council (SEMTAC)

April 9, 2020

This report is submitted as a record of key activities by the Emergency Medical and Trauma Services Branch for the period ending March 31, 2020.

Organizational Effectiveness
In the first quarter of 2020, Cecelia Cook returned to the branch working as a temporary employee in the Operations Section.

Operations Section
Mike Bateman, Section Manager, michael.bateman@state.co.us

EMS Provider Certification
At the end of the first quarter of 2020, there were 19,021 certified EMS providers in the state: 13,379 EMTs; 360 AEMTs; 420 Intermediates; and 4,418 Paramedics (of which 418 paramedics have critical care endorsement, 20 have the community paramedic endorsement, and 6 have both P-CC and P-CP endorsements).

EMR Registration
There are 428 voluntarily registered Emergency Medical Responders.

Education
There are 214 recognized education programs in OATH representing education centers (initial training) and education groups (continuing education). Education centers are also recognized as education groups and are counted in both categories.

Emergency Medical Practice Advisory Council (EMPAC)
There are currently 455 active scope of practice waivers, of which 4 are for BLS provider levels, 38 are for both BLS and ALS provider levels, and 413 are for ALS provider levels. The next EMPAC meeting is scheduled for Monday, May 11, 2020, starting at 8 a.m. at the CDPHE offices in Denver. The next Regional Medical Direction committee meeting will run concurrently with the EMPAC meeting Monday, May 11, from 8 a.m. to 9:45 a.m.

Air Ambulance
There are 35 licensed air ambulance service agencies in Colorado, of which 22 are full two-year licenses and 13 are recognition licenses.
Funding Section
Eric Schmidt, Section Manager, eric.schmidt@state.co.us

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. A consultative visit for Bent County is currently in progress. The on-site interviews were completed February 6 with a final report scheduled for May. The department has performed 21 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. There was one financial waiver request submitted for review during the quarter and it was approved. The Expert Review Committee evaluated 10 applications requesting $49,150 in funding for 13 different courses. Three courses were approved with $3,838 awarded.

Provider Grants and System Improvement Funding Requests
The legislature authorized approximately $8.4 million for the funding program in fiscal year 2020. Five hundred thousand dollars was allocated for the CREATE educational grant program, $362,990 for regional medical direction projects, $284,915 for supplemental RETAC funding, $65,000 to provide support for the new trauma registry software, $316,302 in temporary funding for the peer assistance program and $150,000 was set-aside for emergency grants. An additional $1.2 million was held back due to reduced revenue projections based on a decreased number of vehicle registrations subject to the fee. For the fiscal year 2020 funding cycle, the department awarded $5,436,436 in provider grant awards and $106,905 for system improvement funding. All purchase orders and contracts for grants are fully executed. Twenty-five projects have been completed and there have been $6,488 in reversions this quarter. The application period for the fiscal year 2021 program closed February 15. Eighty-six funding applications were submitted, three for system improvement projects and 83 for provider grants. The financial waiver review and nine RETAC reviews have been completed. The system improvement review and remaining RETAC reviews are scheduled to be complete by April 15. SEMTAC reviews will take place May 14-15, 2020 and final awards will be announced in June.

Emergency Grants
There was one emergency grant request this quarter. A rural Level IV trauma center requested $35,856 to assist with the replacement of an archaic x-ray system that failed unexpectedly. The purchase order was issued and the new system will be operational early in the next quarter.

Trauma Section
Martin Duffy, Section Manager, martin.duffy@state.co.us

Tauma Reviews/Designations
During the first quarter of 2020, the Trauma Section completed three triennial reviews, one rereview and one staff site visit.

- Centennial Medical Plaza, Level IV, triennial review
- Skyridge Medical Center, Level II, triennial review
- Parker Advestist Hospital, Level II, triennial review
There are currently 84 designated trauma centers.

Trauma Consultations and Outreach Visits
Staff members provided onsite technical assistance visits and/or onsite monitoring to five facilities during the fourth quarter including: North Colorado Medical Center, Lutheran Medical Center, Arkansas Valley Regional Medical Center, Presbyterian St. Lukes Medical Center, Parker Adventist Hospital.

Designation Review Committee (DRC)
The DRC meets quarterly on SEMTAC committee day. One facility required a recommendation five facilities received automatic designation during the quarter.

Statewide Trauma Advisory Committee (STAC)
The STAC was updated on the draft Chapter 1-4 rule revision. STAC was informed of the mandatory transfer criteria, rule combination of level I/II and IV/V. The STAC went on to discuss trauma team activation response times at a level III facility.

Stroke Advisory Board
The board continues its work to make recommendations on how to improve the stroke system of care in Colorado. Priorities this year include building partnerships to better educate the public on prevention, recognition and seeking treatment for stroke. The board is also working with facilities and EMS representatives to develop evidence-based practice recommendations in a usable format that is accessible online. More information can be found on the Stroke Advisory Board webpage.

Other Trauma Section Activities
- Continued to provide technical assistance to stakeholders requesting registry assistance.
- The ImageTrend platform went live Jan. 1 for direct entry level IV and Vs. There have been several level III facilities and one level II that are using ImageTrend for direct entry. The schema has been provided to vendors for level I-III facilities and level IVs that use a vendor. The date for full compliance for 2019 data was April 1. There are less than a handful of facilities that need to submit 2019 data.

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

The data team continues to make progress enhancing data quality from licensed air and ground ambulance agencies across the state using Version 3.4.0. Over 200 agencies have transitioned to NEMSIS Version 3 data reporting. As a result, the department has shifted focus to quality improvement and enhanced data reporting. Most notably, the quarterly compliance reports that are sent to regional coordinators were expanded to include 13 total reports ranging from basic summary information to specific benchmark measures allowing coordinators to compare performance. In addition, the team has built several benchmark
dashboards that will allow ambulance agencies to retrieve their own patient care data and compare their performance to their region and the state overall.

Utilizing the department’s new partnership with Biospatial, Inc, a tool that uses emergency medical services and health-related data sources to provide timely, national-scale syndromic detection, monitor real-time trends, and alert to syndromic anomalies critical to the nation’s health and safety, the data team has built several sub-organizations to share vital data across the department. Such topics include disease surveillance, motor vehicle crashes, overdoses, and general performance measures.

With over a million records in the Colorado Trauma Registry, the branch continues to refine its trauma data. In early 2019, the implementation of a new software, ImageTrend’s Patient Registry was completed. It now serves as the data repository and direct entry system for the Colorado Trauma Registry. Over 40,000 records have been entered or imported into the system for over 80 facilities. The team has begun building new summary reports for facilities to access and will continue to refine this system to meet the needs of the trauma facilities and the department. In early 2020, the team implemented an updated data dictionary, inclusion criteria, and schema which was shared with the trauma community.

The EMTS branch also rolled out its new profile system in November 2019 and now has more than 200 organizations in the system. The ImageTrend Profiles replaced the previous homegrown CEMSI Profiles system. The old system was no longer functional, therefore, EMTS organizations are now required to maintain their profile information in ImageTrend. This is the organizational profile that licensed ambulance services are required to maintain as a condition of their license from counties. The ImageTrend Profiles system continues to maintain the same data that was collected in the old system and is the entry point for grant submission. Additionally, ImageTrend Profiles provides additional capabilities including: linking to ePCR data, medical directors, scope of practice waivers, and air ambulance licensing, increasing data quality and improved contact lists with verified accounts, and providing entry point to new EMS data dashboards.

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 the 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

EMTS Investigations
Shelley Sanderman, HFEMSD Enforcement, shelley.sanderman@state.co.us

During the first quarter of 2020, there were seven disciplinary actions against EMS providers’ certifications that resulted in final disposition. There are five ongoing cases filed with the Office of Administrative Courts, in which the department is represented by the Attorney General’s Office, and one of which has settled. Finally, twenty-three complaints were investigated, twenty of which have been closed by the investigations unit, leaving three complaints still under investigation.

Regional Emergency Medical and Trauma Advisory Councils (RETACs)
Mattew Paswaters, Coordinator, mattew.paswaters@state.co.us

Second quarter activity reports and financial statements for FY20 were submitted by all 11 RETACs. The most recent quarterly RETAC forum was held March 11-12 in Gateway. The next RETAC forum is June 3-4 in Steamboat Springs. SEMTAC members are encouraged to attend RETAC forum meetings.

Emergency Medical Services for Children (EMSC)
Contact: Stacey Quesada, Program Manager stacey.quesada@cuanschutz.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 are listed below.

- Conducted the quarterly Pediatric Emergency Care Committee meeting
- Facilitated the fourth Colorado Pediatric Preparedness for the ER (COPPER) steering committee meeting
- Developed and administered COPPER resource list for steering committee feedback
- Hosted a two-day Strategic Planning Summit with advisory committee members and stakeholders; input gathered during the summit will inform the new EMSC Strategic Plan
- Deployed the EMSC Mobile Simulation Lab to Thornton Fire for three days of pediatric training with all shifts
- Disseminated EMSC survey invitations to all Colorado EMS agencies
- Mailed postcards to all Colorado hospital emergency departments notifying them of upcoming National Pediatric Readiness Project assessment
- Attended the March RETAC forum (via phone)

Additional information is available at the EMS for Children website.
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 247 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 247 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. AT&T stood up its dedicated public safety core and 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.