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

April 11, 2019

This report is submitted as a record of key activities by the Emergency Medical and Trauma Services Branch for the period ending March 31, 2019.

Organizational Effectiveness
The Professional Standards Section has been renamed the Operations Section, and the branch is in the recruitment and hiring process to fill the section manager position. Mike Bateman has been filling this role on an interim basis.

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

EMS Provider Certification
At the end of the first quarter of 2019, there were 18,629 certified EMS providers in the state: 13,163 EMTs; 322 AEMTs; 458 Intermediates; and 4,676 Paramedics (of which 371 paramedics have critical care endorsement, 15 have the community paramedic endorsement, and 2 have both the critical care and community paramedic endorsements).

EMR Registration
There are 457 voluntarily registered Emergency Medical Responders.

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. The next EMPAC meeting is scheduled for Friday, May 17, 2019, starting at 10 a.m. at CDPHE offices in Denver. The next Regional Medical Direction committee meeting is also Friday, May 17, 2019 at the same location, starting at 8 a.m.

Air Ambulance
There are 34 licensed air ambulance service agencies in Colorado, of which 24 are full two-year license and ten are recognition licenses.
EMTS Investigations
Anne Strawbridge, EMTS Enforcement Supervisor, anne.strawbridge@state.co.us

During the first quarter of 2019, there were seven disciplinary actions against EMS providers’ certifications that resulted in final disposition. There are three ongoing cases filed with the Office of Administrative Courts, in which the department is represented by the Attorney General’s Office. Finally, 14 complaints were investigated and closed by the investigations unit.

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. The on-site visit for the emergency medical and trauma services (EMTS) system assessment of Lake County is scheduled to begin April 22, 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 not approved. The Expert Review Committee evaluated 16 applications requesting funding for 21 different courses. Eighteen courses were approved with $177,647 awarded.

Provider Grants and System Improvement Funding Requests
The legislature authorized approximately $8.4 million for the funding program in fiscal year 2019. More than $7 million was 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 154 projects are fully executed. Statements of work for one project is still in progress pending signature by the grantee organization. One project was withdrawn by the applicant this quarter. The department is working to re-award these additional reverted funds to partially fund one new project. The statement of work for the new project is in progress pending approval by the department’s contracts section.

Applications for fiscal year 2020 are now closed. The department received 112 applications. Two applications were received after the deadline and were rejected. There were 94 provider grant applications, 11 regional medical direction requests and five system improvement requests. Fourteen applications requested waiver of the 50 percent standard cash match requirement and 13 waiver requests were approved. The amount of State funding requested for eligible projects totals $7,479,858. Ten of the RETAC grant reviews were competed in March. The last RETAC review and the system improvement review are scheduled in April and SEMTAC reviews are in May. Awards for FY2020 must be announced by June 30, 2019.

Emergency Grants
There were no emergency grant requests this quarter.
Trauma Reviews/Designations
During the first quarter of 2019, the Trauma Section completed ten triennial reviews and three re-reviews. There are currently 82 designated trauma centers.

- Parkview Medical Center, Level II, triennial review
- Littleton Adventist Hospital, Level II, triennial review
- St. Anthony North Health Campus, Level III, triennial review
- St. Joseph Hospital, Level IV, re-review
- Rose Medical Center, Level IVV, re-review
- Sedgwick County Memorial Hospital, Level IV, triennial review
- Yuma District Hospital, Level IV, re-review
- Southwest Memorial Hospital, Level IV, triennial review
- East Morgan County Hospital, Level IV, triennial review
- Lutheran Medical Center, Level III, triennial review
- McKee Medical Center, Level III, triennial review
- UCH Pikes Peak Regional Hospital, Level IV, triennial review
- Children’s Hospital Colorado Springs, Level II, new facility review
- UCH Memorial Hospital Central, Level I, triennial review

Trauma Consultations and Outreach Visits
Staff members provided onsite technical assistance visits and/or onsite monitoring to five facilities during the first quarter including: North Suburban Medical Center, Rose Medical Center, Sedgwick County Memorial Hospital, North Colorado Medical Center.

Designation Review Committee (DRC)
The DRC met once in the first quarter. Three facilities 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 designation rubric was introduced and training to SEMTAC members will take place at the April meeting.

Expanded Scope of Care Task Force
Convened by STAC, this task force has completed work on a draft set of rules for neurosurgery expanded scope of care and the draft set of rules will go before the Board of Health April 17.

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. The schema has been provided to vendors for level I-III facilities and level IVs that use a vendor.
Regional Emergency Medical and Trauma Advisory Councils (RETACs)
Mattew Paswaters, Coordinator, mattew.paswaters@state.co.us

Second quarter activity reports and financial statements for FY19 were submitted by all 11 RETACs. The most recent quarterly RETAC forum was held in March in Gateway. The next RETAC forum is June 5-6 in Golden. SEMTAC members are encouraged to attend RETAC forum meetings.

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:

- Prepared for and facilitated the quarterly Pediatric Emergency Care Committee meeting.
- Continued work on the statewide Pediatric Readiness project, known as Colorado Pediatric Preparedness for the Emergency Room, or COPPER. This included developing informational handouts, presenting at the Pediatric Disaster Coalition Planning Summit, meeting with the Pediatric Readiness outreach coordinator at Rocky Mountain Hospital for Children, facilitating work group calls, meeting with the disaster preparedness representative from Colorado Hospital Association, and scheduling another site visit with Lincoln Community Hospital.
- The EMSC Program Manager attended the March RETAC forum in Gateway where she presented an overview of the EMSC program and the statewide projects the program is currently developing: COPPER and the Prehospital Pediatric Emergency Care Coordinator project.
- Developed handouts for each RETAC summarizing their region’s data on prehospital emergency care coordinators, as reported by EMS agencies on the National EMS for Children Data Analysis Resource Center’s 2017 survey. Using these data, EMSC will work with RETACs in developing education and strategies for implementing prehospital Pediatric Emergency Care Coordinators across the state.
- Dispatched the EMSC simulation trailer for a total of 3 training days at AMR in Arvada and 1 training day at Elizabeth Fire in Elizabeth.
- Assisted with basic pediatric skills training at the Colorado Springs Fire Department’s Paramedic Symposium.
- Attended the Pediatric Emergency Care Applied Research Network’s winter meeting in Crystal City, VA.

Additional information is available at the EMS for Children website.

Communications
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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. 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 has shifted focus to quality improvement and improved data reporting. These reports will allow ambulance agencies to retrieve their own patient care and 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 completed implementation of a new software, ImageTrend’s Patient Registry, to serve as the data repository, and data entry system for the Colorado Trauma Registry, which went live April 1, 2019. The new platform is ready for data entry and submission, and trauma vendors have begun building the required data fields for import. The team will continue 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