



**2020 – 2025  
STRATEGIC PLAN**

**EMERGENCY MEDICAL  
SERVICES FOR CHILDREN  
COLORADO**



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## Acknowledgements

### *The Colorado Pediatric Emergency Care Committee*

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Mark Burdick, BS, NRP - Eagle County Paramedics  
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Lana Martin, RN – Children’s Hospital Colorado at Colorado Springs  
Lori Morgan, MS, Paramedic – UCHealth Memorial Hospital  
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### *Additional Summit Attendees*

Amanda Abramczyk-Thill, Children’s Hospital Colorado at Colorado Springs  
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### *Facilitators and Special Guests*

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Kristin Kim – Children’s Hospital Colorado

## Background

### *EMS for Children at the National and State Levels*

The National Emergency Medical Services for Children (EMSC) program was established in 1984 with the overall objective of decreasing disability and death in children through a well-prepared emergency care system. Congress initially appropriated \$2 million dollars for the program in 1984 and the national program is currently funded at a level of approximately \$22 million annually. The national EMSC program, administered by the U.S Department of Health and Human Services Health Resources and Services Administration (HRSA), funds and supports improvements in pediatric emergency care in each state and territory through a variety of grants including state partnership grants, the pediatric emergency care applied research network (PECARN), the National EMS for Children Data Analysis Resource Center, regionalization of care grants, and targeted issue grants. Colorado has participated in the EMS for Children program since 1992 and is currently one of 58 EMS for Children State Partnership grantees. The University of Colorado School of Medicine currently serves as the Colorado EMSC state partnership grantee and is provided \$130,000 per year in federal funding for the program.

As a state partnership grantee, EMSC Colorado is charged with integrating, expanding, and improving pediatric emergency care by promoting the value and importance of integrating pediatric emergency care into the state emergency medical system. Toward this end, all state partnership grantees are guided by Standards of Achievement which are based on nationally set EMSC performance measures. In 2011, 2014, and again in 2020, EMSC Colorado utilized stakeholder input to develop a multi-year strategic plan that guides the program in effectively addressing these performance measures along with other priorities deemed important to the Colorado pediatric emergency care community.

As of early 2020, a number of goals and objectives from the 2014 strategic plan have been partially or fully implemented. Subsequent to the availability of carryover funding, the Colorado EMS for Children program held a stakeholder summit for the purpose of updating the strategic plan in early 2020. The summit was held at the University of Colorado Anschutz Medical Campus on January 28 and 29, 2020 and was facilitated by staff from EMSC Colorado, the Health Resources and Services Administration, and the EMS for Children Innovation and Improvement Center (EIIC). A complete listing of attendees is contained in the acknowledgements section. The complete agenda for the summit can be found in Appendix A.

The current Colorado EMS for Children State Partnership grant is funded through March 31, 2022, with an annual noncompetitive renewal process. Renewal for the remainder of 2020 and beyond is anticipated. This strategic plan is intended to be in effect through at least the remainder of the current grant cycle.

### *Governance of EMSC Colorado*

Colorado's State Emergency Medical and Trauma Services Advisory Council (SEMTAC) is a governor-appointed council consisting of 25 members and seven non-voting (ex-officio) members representing the interests of citizens and emergency medical service providers. The council advises the Colorado Department of Public Health and Environment (CDPHE) on the development, implementation, and improvement of emergency medical and trauma services statewide. Among the 25 voting members is a

physician with pediatric experience. This appointee, currently Dr. Kathleen Adelgais from the University of Colorado School of Medicine, also serves as the chair of the state Pediatric Emergency Care Committee (PECC) as well as the principal investigator for EMSC Colorado. The PECC advises the state regarding EMS for Children program activities and is comprised of 13 geographically and professionally diverse members who are appointed by CDPHE.

### *Colorado Demographics*

Colorado is a mid-sized state with a total population of 5,758,736.<sup>1</sup> In 2018, there were 1,265,235 children under the age of 18, approximately 22% of the state's population.<sup>2</sup>

Approximately 11.9% of children under the age of 18 in Colorado are living below the Federal Poverty Level (FPL).<sup>3</sup> At the end of 2019, 560,110 (44%) children in Colorado were enrolled in Medicaid Child or the Children's Health Insurance Program.<sup>4</sup> According to the 2019 Colorado Health Access Survey, approximately 58,134 (4.3%) children in Colorado are uninsured. With so many children experiencing poverty and lacking health insurance, many parents utilize the nearest emergency room for their child's care. In fact, over 21% of Colorado children visited the emergency room at least once in the previous year and over half of those visits were for a condition the parent felt could have been treated by a regular doctor.<sup>5</sup>

### *Colorado Emergency Medical Services*

Emergency Medical System (EMS) responses in Colorado are handled by over 200 ground ambulance services licensed by counties and 34 state-licensed air ambulance services. There are currently 19,021 certified EMS providers in the state of Colorado. At the local geographic level, Colorado has 11 regional EMS and trauma advisory councils (RETACs) that help coordinate emergency care. As a "local control state", governance of the EMS and trauma care system is led by CDPHE and supported by other state agencies. However, units of local government, including cities, counties and special districts, oversee and shape large portions of the emergency systems of care.

In 2019, there were 573,082 EMS incident records submitted to Colorado's Emergency Medical and Trauma Services office for which the patient was treated and/or transported, and patient age was reported.<sup>6</sup> Among these incident records, 46,005 (8.0%) represented children under the age of 18. Over the past several years, the age distribution of pediatric EMS calls in Colorado has consistently shown the highest number of calls for those under 1 year of age and those in their teenage years (Figure 1).

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<sup>1</sup> U.S. Census Population Estimates, 2019.

<sup>2</sup> U.S. Census Population Estimates, 2018.

<sup>3</sup> U.S. Census American Community Survey, 2018.

<sup>4</sup> Centers for Medicare & Medicaid Services, 2019. Retrieved from [www.medicaid.gov](http://www.medicaid.gov), February 2020.

<sup>5</sup> Colorado Health Access Survey, 2019.

<sup>6</sup> There were an additional 2,235 records of patients who were treated and/or transported; however, age was not reported in these records.

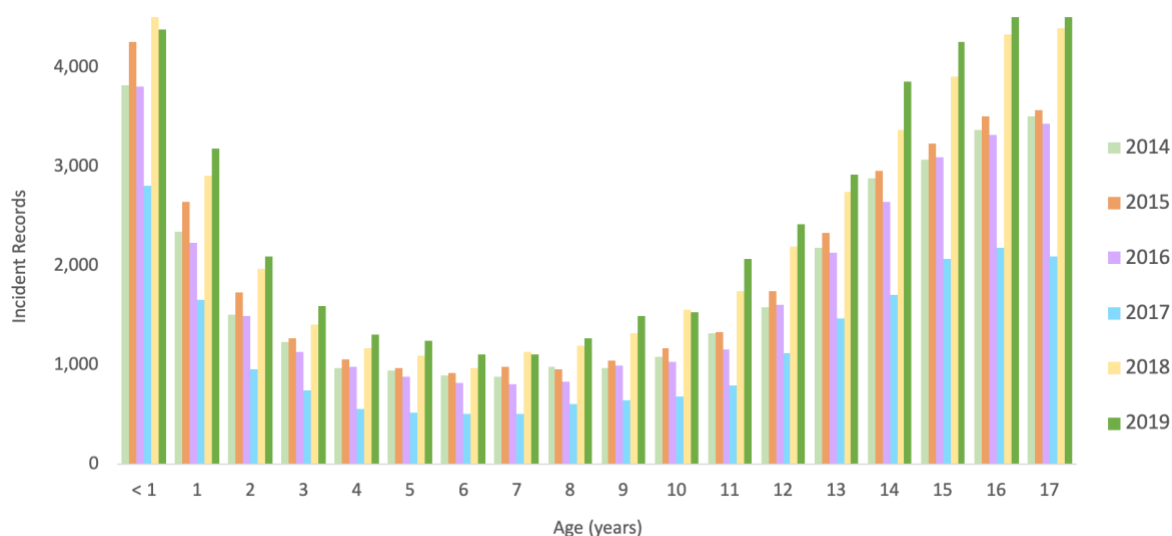


Figure 1. Age Distribution for Colorado Pediatric EMS Incident Records (2014-2019). Data provided by CDPHE EMTS Branch.<sup>7</sup>

The majority of primary impressions recorded in EMS pediatric incident records in Colorado typically fall under the category of injury, behavioral/psychological, general/other, respiratory, pain, nervous system, and substance abuse. The breakdown of these primary impressions for 2018 and 2019 are illustrated in Figure 2, below.

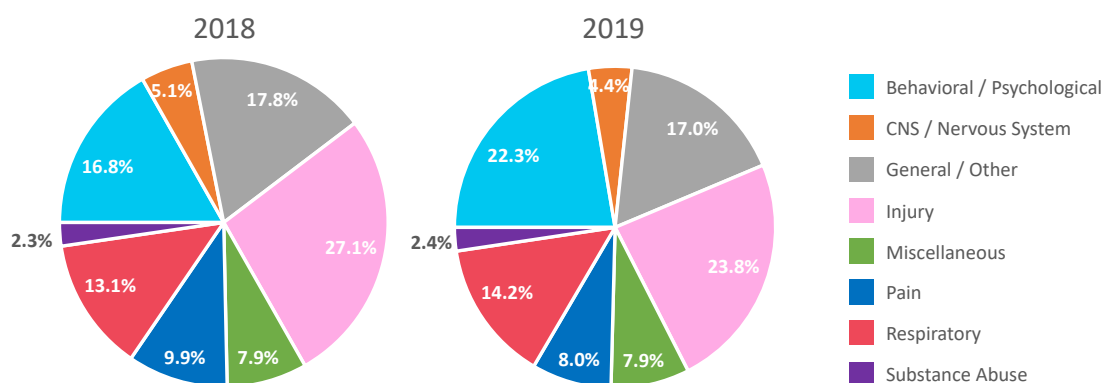


Figure 2. Primary impressions recorded on pediatric EMS calls in Colorado, 2018 and 2019.<sup>8</sup>  
Source: Colorado EMS Database v3.4.

Of concern is the sharp increase in behavioral/psychological primary impressions which rose from 16.8% to 22.3% between 2018 and 2019. Among incident records for all ages in 2019, only 12.85% were categorized as behavioral/psychological, compared to the 22.3% of pediatric calls that fell into this category. This suggests the pediatric population in Colorado is experiencing a disproportionate amount of behavioral/psychological problems and/or illness.

<sup>7</sup> Data for 2017 are artificially low due to the transition to a new data platform.

<sup>8</sup> The Miscellaneous primary impression category includes the following: No Patient Complaint, Foreign Object in Body, Digestive System, Diabetic, Endocrine, or Metabolic Disease, Environmental/exposure, Childbirth - Infant, Infection, Pregnancy or Childbirth - Maternal, and Shock.

### *Colorado Hospital Emergency Care System*

Hospital emergency care in Colorado is provided by 146 facilities of which 84 are designated as trauma centers. The state trauma system includes a robust designation process through which all facilities seeking to obtain or maintain trauma designation are reviewed every three years. Pediatric-specific equipment, protocols, and guidelines are written into state rule thereby ensuring that trauma facilities are prepared to stabilize, treat, and/or transfer pediatric trauma patients in accordance with their trauma designation level.

The Denver metropolitan area is home to Children's Hospital Colorado (CHCO), a 553-bed children's specialty hospital and Level 1 Regional Pediatric Trauma Center that serves a seven-state region across the inter-mountain west. CHCO serves as the regional referral center for thousands of children with critical and complex illnesses and injuries each year.

There are five additional pediatric emergency departments in the Denver area. These are operated by Rocky Mountain Hospital for Children, which is owned by HCA, Denver Health and Hospital Authority, and Children's Hospital Colorado. Rural Colorado, which consists of 24 rural and 23 frontier counties, is served by 30 critical access hospitals, indicating a significant capacity gap between our concentrated urban areas and expansive rural geography.

Children represent a significant portion of the state's emergency department volume. In 2019, there were over 1.8 million emergency department visits in Colorado with 442,186 (23.9%) of those represented by children under age 18.<sup>9</sup> There were 4,826 and 4,564 pediatric (under age 18) records submitted to the state trauma registry in 2017 and 2018, respectively. The majority of these pediatric patients, 87.8% in 2017 and 91.6% in 2018, were seen at Level I-III facilities, with the remainder being seen at Level IV-V facilities. The most common type of trauma among pediatric patients is blunt trauma followed by penetrating and thermal (Figure 3).

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<sup>9</sup> Colorado Hospital Association Emergency Department Database.



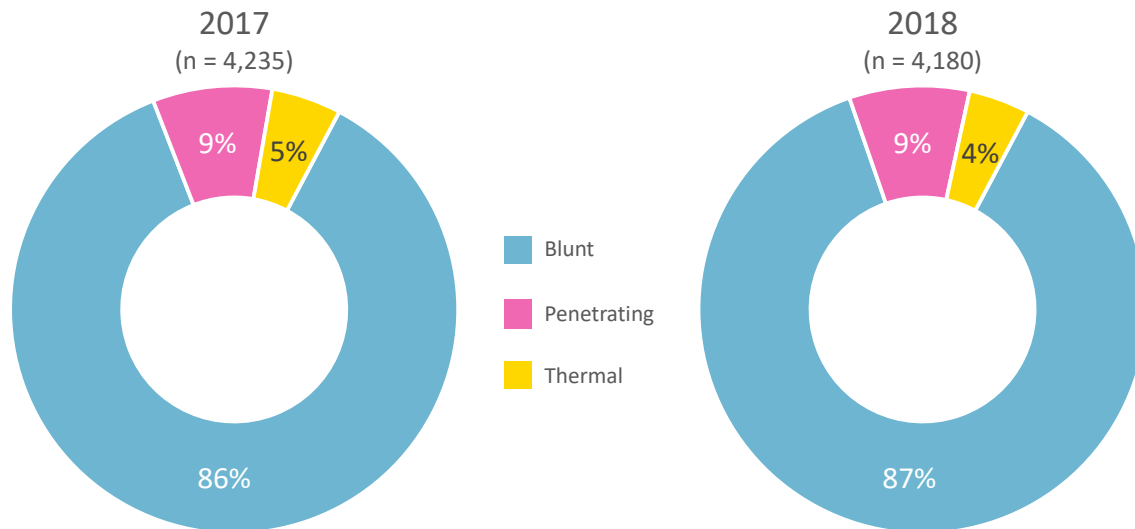


Figure 3. Pediatric patients in Colorado by trauma type, 2017 and 2018. Data source: Colorado Trauma Registry.

Children represent a unique but complex portion of patients being treated by Colorado's emergency systems of care. EMS for Children Colorado is dedicated to helping strengthen and improve the emergency systems of care for all pediatric patients.

### ***Mission, Vision, and Values***

EMS for Children Colorado is guided by the following Mission, Vision, and Values:

#### **MISSION**

*To promote optimal care for pediatric acute illness and injury across Colorado through prevention, advocacy and education*

#### **VISION**

*All children in Colorado receive the best pediatric emergency care*

#### **VALUES**

*Collaborative, Family-Centered, Evidence-Based, Compassionate, Responsible, and Equitable*





Figure 4. EMS for Children Colorado Mission, Vision, and Values.

## Previous Accomplishments

A number of initiatives conceived in the 2014 EMS for Children Strategic Plan were either partially or fully implemented. Accomplishments include:

- Redesign of the Colorado EMSC website, [www.emsccolorado.com](http://www.emsccolorado.com) which provides resources for emergency care providers across the state including:
  - Contact information for pediatric specialty centers across the state
  - Links to online educational content across the U.S.
  - Links to pediatric resources and equipment
- Operation of a pediatric mobile simulation trailer for statewide use
- Participation in the Colorado Pediatric Disaster Coalition
- Formed steering committee to help develop and implement the Colorado Pediatric Preparedness for the Emergency Room (COPPER) program
- Worked with state EMTS Data Team to develop quarterly pediatric EMS reports
- Participation in SEMTAC's Injury Prevention Committee
- Ongoing pediatric emergency care education delivered by a variety of partners including Children's Hospital Colorado, HealthONE EMS, Denver Health, Centura Health and a variety of community colleges and EMS continuing education groups across the state
- Ongoing pediatric representation (Dr. Kathleen Adelgaïs) on the State Emergency Medical and Trauma Services Advisory Council (SEMTAC)
- Pediatric representation on the Emergency Medical Practice Advisory Council (Dr. Maria Mandt).

- Ongoing program representation at the quarterly forums of the Colorado Regional Medical and Trauma Advisory Councils (RETACs)
- Pediatric emergency physician representation on state task forces rewriting trauma rules
- Participation in the Pediatric Emergency Care Applied Research Network (PECARN)
- Addition of pediatric reference tool and child protective restraint system to the state's minimum equipment list for ambulances

## Current and Ongoing Projects

In addition to the accomplishments listed above, EMSC Colorado has elected to develop a number of ongoing projects. These projects include:

- Ongoing participation in national EMSC assessment activities including the annual EMSC assessment of EMS agencies and the National Pediatric Readiness Project assessment, for which Colorado will be a pilot state
- The Colorado Pediatric Preparedness for the Emergency Room (COPPER) program
- The Colorado Pediatric Emergency Care Coordinators (COPECC) program
- Deployment of the Pediatric Mobile Simulation Lab (Figure 5) across the state to train EMS and hospital providers on important pediatric emergency care topics
- Ongoing advocacy for family-centered and culturally appropriate care and injury prevention activities
- Periodic review and analysis of statewide EMS and emergency department data
- Development of and participation in EMS for Children related research activities
- Support of pediatric educational activities statewide as resources allow



Figure 5. Colorado EMS for Children Mobile Simulation Lab.

## National Performance Measures

The performance measures depicted in Figure 5, below, have been enacted by the national EMS for Children program. State Partnership EMSC programs are responsible for developing and implementing initiatives that address each of these measures. Each state's progress on the performance measures is

reported annually to the Health Resources and Services Administration (HRSA). These performance measures, along with HRSA's discretionary performance measures, are listed in Appendix B.



Figure 5. National EMS for Children Performance Measures.

Many of the current and ongoing projects listed previously are EMSC Colorado's approach to addressing these national performance measures. Specifically, the COPPER the COPECC programs are designed to address the following measures and, as such, will remain two of EMSC Colorado's top priorities over the next 5 years, in addition to the priorities that emerged from the strategic planning summit which will be

discussed in more detail in the following sections:

1. The percentage of EMS agencies in the state or territory that have a designated individual who coordinates pediatric emergency care.
2. The percentage of EMS agencies in the state or territory that have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.
3. Hospitals with an ED recognized through a statewide program for being capable of managing pediatric medical emergencies.
4. Hospitals with an ED recognized through a statewide program for being capable of stabilizing and/or managing pediatric trauma.

## **Strengths, Weaknesses, Opportunities, and Threats**

At the EMS for Children Colorado Strategic Planning Summit held in January of 2020, attendees identified strengths, weaknesses, opportunities, and threats (SWOT) in Colorado's current pediatric emergency care system. The results from the SWOT analysis are listed in the table below.



STRENGTHS	<ul style="list-style-type: none"> <li>• Simulation-based education</li> <li>• Strong educators</li> <li>• Community paramedicine</li> <li>• Data collaboration (e.g., Health Information Exchanges or HIEs)</li> <li>• Recognition of marijuana risk factors</li> <li>• State trauma program</li> <li>• Healthcare coalitions and their pediatric annexes</li> </ul>	<ul style="list-style-type: none"> <li>• Rural providers eager for knowledge</li> <li>• State EMTS grants</li> <li>• Robust pediatric healthcare market in Denver metro area</li> <li>• RETACs</li> <li>• Data</li> <li>• World class school of medicine with engaged faculty</li> </ul>
WEAKNESSES	<ul style="list-style-type: none"> <li>• Misperception that Children's Hospital's systems of care are separate from regular systems of care</li> <li>• Rural eastern Colorado is lacking in pediatric training opportunities</li> <li>• Lack of knowledge/training for responders (especially rural) on how to best deal with special needs children</li> </ul>	<ul style="list-style-type: none"> <li>• Pediatric simulation labs are based on the eastern side of the state</li> <li>• Need better engagement with other public health professionals (e.g., children are dying alone while family is held at home by police)</li> <li>• Families of special needs children don't know how to access resources that are available</li> </ul>
OPPORTUNITIES	<ul style="list-style-type: none"> <li>• Healthcare coalitions' pediatric annexes</li> <li>• Expansion of sim programs into rural Colorado</li> <li>• Community paramedicine and expansion into pediatrics</li> <li>• Pediatric life support course requirement</li> <li>• Pediatric disaster coalition</li> <li>• ET3 reimbursement</li> <li>• Targeted identification of at-risk individuals</li> <li>• More online education</li> <li>• Coordinate with western states</li> <li>• Raise awareness of hospital/ED/EMS resources for families of children with special health care needs</li> </ul>	<ul style="list-style-type: none"> <li>• Promote FCC in public safety (e.g., medical direction for pediatric termination of resuscitation)</li> <li>• In rural communities, providers know their patients</li> <li>• New state peer assistance program for EMS</li> <li>• Better engagement/ utilization of regional centers</li> <li>• Career development to meet demands</li> <li>• COPPER / COPECC</li> <li>• Data, including HIEs such as CORHIO and QHN</li> <li>• Telemedicine / AI / big data</li> <li>• APLS course for education / EPC for NAEMT program</li> <li>• Cultural competency</li> </ul>
THREATS	<ul style="list-style-type: none"> <li>• Reimbursement for education providers</li> <li>• Limited time for education providers</li> <li>• Resistance by school districts to address / discuss mental health</li> <li>• Limited pediatric care in rural areas</li> <li>• No budget for education at EMS agencies</li> <li>• Children's Hospital is the only RPTC in 7-state region</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of coordination between emergency systems of care and law enforcement (i.e., mental health holds)</li> <li>• Lack of resources / education on children with special health care needs</li> <li>• Provider burnout and stress</li> <li>• Marijuana legalization</li> </ul>

Table 1. Results of the EMS for Children Colorado 2020 SWOT Analysis.

Four themes were identified from the SWOT analysis: regional coordination, education, mental health, and leveraging data. Within each of these categories, summit attendees brainstormed specific priorities that could be considered for EMS for Children Colorado's 5-year strategic plan. These priorities were then voted on by attendees for their feasibility and importance. The items ranked most feasible and most important in each category, along with the development and implementation of the COPPER and COPECC programs, will comprise the priorities for EMSC Colorado over the next 5 years. These priorities are listed below.

### *EMS for Children Colorado Priorities*

1. Develop and implement the COPPER program.
2. Develop and implement the COPECC program.
3. Utilize RETACs for coordination of care and education.
4. Expand technology-driven pediatric education.
5. Develop an online resource center to house a master pediatric education calendar, pediatric speakers' bureau, and pediatric content library.
6. Implement and/or expand existing youth suicide prevention programs.
7. Collaborate with existing mental health resources across Colorado.
8. Use data to drive evidence-based pediatric care.

### **Implementation of Priorities**

<b>Objective: Develop and implement the COPPER program</b>		
<b>Key Strategies</b>	<b>Time Frame</b>	<b>Success Measure(s)</b>
Continue holding steering committee meetings regularly	2020 - 2025	EMSC will facilitate monthly meetings in 2020  EMSC will host periodic meetings after COPPER is launched
Complete development of COPPER resource library	2020	Resource library will be available online and on flash drives; it will include key tools and templates to help sites satisfy COPPER criteria
Develop COPPER application package, marketing materials, website	2020	All COPPER materials will be complete and available in print (if applicable) and digital formats
Launch COPPER statewide	2021	COPPER application process will be available and open to all hospital emergency departments  By 2022, 25% of hospitals EDs will be recognized by the COPPER program



Objective: Develop and implement the COPECC program.		
Key Strategies	Time Frame	Success Measure(s)
Form steering committee	2020	EMSC will recruit 6 – 10 key stakeholders to serve on the COPECC steering committee
Develop COPECC resources and marketing materials	2020 - 2021	Completion of the following: <ul style="list-style-type: none"> <li>• Completion of a PECC manual</li> <li>• Library of existing resources</li> <li>• COPECC website</li> <li>• COPECC infographics/fact sheets/flyers</li> </ul>
Evaluate COPECC resources at pilot agencies	2021	Feedback on utility of COPECC resources
Market and launch COPECC statewide	2021 - 2025	By 2025, 75% of Colorado's EMS agencies will designate a PECC

Objective: Utilize RETACs for coordination of care and education		
Key Strategies	Time Frame	Success Measure(s)
RETACs to help promote and monitor EMS agency participation in annual EMS for Children assessment	2020 - 2025	Colorado EMS agency response rate increases to 90%
Identify key regional pediatric resource facilities	2021 - 2025	25% of Colorado hospitals will participate in the COPPER program
Coordinate regional pediatric resources	2020 - 2025	Pediatric resources will be shared within/across RETACs
Ensure regional medical directors are encouraging evidence-based pediatric protocols	2021 - 2025	RETAC coordinators will work with EMSC to deliver "Top 5" recommendations for incorporating pediatric considerations into regional protocols  Regional medical directors will use these recommendations to make protocol changes where necessary

Objective: Expand technology-driven pediatric education		
Key Strategies	Time Frame	Success Measure(s)
Post pediatric related webinars on EMSC website	2020 - 2025	EMSC will post 10-20 webinars on its website annually



Create downloadable toolkits	2021 - 2023	EMSC will develop pediatric education resources and post them on its website
Provide access to online pediatric courses through EMSC website	2021 - 2025	A calendar and links to various pediatric education offerings will be posted on the EMSC website

Objective: Develop an online pediatric resource center		
Key Strategies	Time Frame	Success Measure(s)
Gather relevant educational offerings from EMTS Blast	2020 - 2025	EMSC website will post a master calendar of pediatric educational offerings; calendar will be cross-referenced with EMTS Blast
PECCs funnel relevant dates and materials to EMSC Colorado	2021 - 2025	PECCs will share upcoming pediatric events and resources with EMSC on a quarterly basis; EMSC will include these on its website/calendar
RETAC coordinators share education calendar events with EMSC Colorado	2020 - 2025	RETAC coordinators will share their pediatric education events with EMSC Colorado; these will get posted on EMSC's master pediatric education calendar
Model a speakers' bureau after UCHHealth to ensure proper credentialing of speakers	2023 - 2025	EMSC will develop and implement a pediatric speakers bureau for those looking to have a pediatric expert speak at educational events; information about the bureau and each speaker will be posted on the EMSC website

Objective: Implement and/or expand youth suicide prevention programs		
Key Strategies	Time Frame	Success Measure(s)
Promote access of existing suicide prevention resources	2021 - 2025	EMSC will include de-escalation techniques and suicide prevention information in COPECC and COPPER toolkits  EMSC will raise awareness of crisis center phone numbers and Safe2Tell app

Appoint a mental health advisor to the EMSC Colorado advisory committee as well as the COPPER steering committee	2020	EMSC will recruit a mental health advisor to its advisory and COPPER committees
Assist with the provision/expansion of youth mental health training for EMS providers	2023 - 2025	Promote the <a href="#">Youth Mental Health First Aid</a> training for EMS providers  25% of all PECCs in Colorado will complete the Youth Mental Health First Aid course

Objective: Collaborate with existing mental health resources across Colorado		
Key Strategies	Time Frame	Success Measure(s)
Partner with CDPHE on relevant mental health projects	2021 - 2025	EMSC will identify opportunities for collaboration within CDPHE's Office of Behavioral Health (OBH)  EMSC and OBH will partner on projects if opportunities are identified
Partner with the Colorado School Safety Resource Center (CSSRC)	2023 – 2025	The CSSRC will gain awareness of the EMS for Children program and the two entities will collaborate on projects as appropriate
Identify ways to collaborate with crisis centers and crisis lines	2023 – 2025	EMSC will identify gaps in the current dissemination of information on Colorado crisis center help lines  EMSC will develop a campaign to help raise awareness of the crisis centers in schools, on social media, etc.
Identify telepsychiatry resources and raise awareness with hospital EDs across the state	2021	EMSC will develop a list of telepsychiatry resources that will get disseminated through its website, through RETAC coordinators, and through the COPPER program
Promote use of the Colorado Safe2Tell mobile app	2023 - 2025	EMSC will identify gaps in the current marketing of the Safe2Tell app

		EMSC will develop a campaign to help raise awareness of the Safe2Tell app
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Objective: Use data to drive evidence-based pediatric care		
Key Strategies	Time Frame	Success Measure(s)
Conduct NEMSIS queries to identify correlation of patient characteristics with risk behaviors	2023 - 2025	EMSC and CDPHE will identify feasible pediatric study topics using NEMSIS data queries  EMSC will conduct and present the results of pediatric study(ies)
Facilitate common data collection and reporting	2022 – 2024	EMSC and CDPHE will identify gaps in pediatric data and strategies for addressing those gaps  Identified gaps in pediatric data collection/reporting will be improved based on metrics agreed on between EMSC and CDPHE
Develop and share standard algorithm for 5 most common pediatric complaints	2023 - 2024	EMSC and CDPHE will identify 5 most common pediatric complaints in NEMSIS dataset  EMSC will utilize medical experts to develop standard algorithm that will be disseminated to regional medical directors
Targeted outreach/education based on commonly identified chief complaints	2022 - 2023	EMSC, along with Rocky Mountain Hospital for Children and Children's Hospital Colorado, will develop targeted outreach and education on the most common chief complaints among pediatric patients
Develop and disseminate data dashboard to share common near miss, success, and problem areas	2022 - 2025	EMSC will develop data dashboard that will be posted on its website

## Additional Areas of Interest

In addition to the priorities noted above, a number of other priorities were identified by stakeholders who attended the strategic planning summit. These additional areas of interest are listed in the sections

below. Should time and resources allow, EMSC Colorado may choose to address a handful of these priorities over the next 5 years or beyond.

### **Regional Coordination**

1. Identify and advertise regional pediatric experts and resources
2. Ensure ground and air providers are well prepared for pediatric patients (e.g., provide feedback, transport priorities, minimum capabilities of facilities, etc.)
3. Ensure multi-state coordination on key pediatric initiatives (NASEMSO Western Plains, EMSC Program Managers, interfacility transfer agreements)
4. Provide feedback to referring facilities and EMS
5. Focus efforts on Level II and Level III regional hospitals
6. Regional Pediatric Emergency Care Coordinators
7. Ensure EMSC is on agenda at Colorado Hospital Association conferences
8. Interfacility guidelines for transfers from other states

### **Education**

1. Require more pediatric education for EMS providers
2. Expand pediatric educational opportunities to non-medical providers (e.g., law enforcement, schools, etc.)
3. A “How-To” guide on family centered care
4. Identify what measures “competency” for pediatric emergency care and then educate toward competency metric
5. Increase use of online child abuse module [www.identifychildabuse.org](http://www.identifychildabuse.org)
6. Targeted education for specific communities on their specific patients
7. Expand educational opportunities to other sectors such as law enforcement, schools, etc.
8. Involve real-life pediatric role players in high-fidelity simulations
9. Joint deployment of Rocky Mountain Hospital for Children’s Mobile Training Center and EMSC Colorado’s Mobile Sim Lab

### **Mental Health**

1. More education with respect to children with special health care needs
2. More provider education / resources around youth mental health
3. EMS involvement in mobile crisis response
4. LGBTQ support for teens in rural areas
5. Educate EMS on how to ask questions with children and youth
6. EMS providers ask suicide screening questions and provide resources
7. First responder kits geared towards patients with special needs and/or mental health conditions
8. Expansion of mental health triage directly to crisis centers
9. Develop online education and training on adolescent mental health for EMS providers
10. Integration of mental health and community paramedicine
11. Facilitate non-crisis interactions between providers, patients, and their families
12. Coordinate with Colorado Department of Human Services and regional mental health providers



### ***Leveraging Data***

1. Data integration across systems to better assess patient outcomes
2. Leverage data to drive pediatric education initiatives (who, what, where, how)
3. Use pediatric data for real-time information, artificial intelligence, etc.
4. Track trends in pediatric emergency care data to adjust programming/education based on need



## Appendix A: EMS for Children Colorado 2020 Strategic Planning Summit Agenda

### EMS for Children Colorado 2020 Strategic Planning Summit

#### AGENDA

**Tuesday, January 28<sup>th</sup>, 2020**

Anschutz Medical Campus  
Fulginiti Pavilion, Gossard Forum  
13080 E 19th Ave, Aurora, CO 80045

**Wednesday January 29<sup>th</sup>, 2020**

Anschutz Medical Campus  
Research 2, Room P15-2100  
12700 E 19th Ave, Aurora, CO 80045

**Lodging:** For those who requested lodging, your rooms have been reserved at  
**Springhill Suites by Marriott, 13400 E. Colfax Ave Aurora, CO 80011**

<b>Tuesday, January 28<sup>th</sup>, 2020</b> Anschutz Medical Campus Fulginiti Pavilion, Gossard Forum 13080 E 19th Ave, Aurora, CO 80045	
<b>11:00 am – 11:15 am</b>	<b>Opening Comments and Introductions</b> <i>EMSC Colorado Project Director Dr. Kathleen Adelgais</i>
<b>11:15 am – 11:45 am</b>	<b>National EMS for Children (EMSC) Update</b> <i>EMSC Federal Project Officer Jocelyn Hulbert</i>
<b>11:45 am – 12:15 pm</b>	<b>Review of the EMSC Colorado State Partnership Program</b> <i>EMSC Colorado Program Manager Stacey Quesada</i>
<b>12:15 pm – 12:45 pm</b>	<b>Lunch &amp; Networking (Lunch Provided)</b>
<b>12:45 pm – 1:15 pm</b>	<b>State of Pediatric Emergency Care in Colorado</b> <i>EMSC Colorado Program Manager Stacey Quesada</i>
<b>1:15 pm – 1:30 pm</b>	<b>2014 EMSC Colorado Strategic Plan Recap</b> <i>Former EMSC Colorado Leaders Sean Caffrey and Dr. Christine Darr</i>
<b>1:30 pm – 2:15 pm</b>	<b>SWOT Analysis – Large Group</b> <i>Facilitators</i>
<b>2:15 pm – 2:30 pm</b>	<b>Break</b>
<b>2:30 pm – 3:15 pm</b>	<b>Small Group Session: Priority Brainstorming</b> <i>Facilitators</i>
<b>3:15 pm – 3:30 pm</b>	<b>Report Out</b> <i>Facilitators</i>



<b>Tuesday, January 28<sup>th</sup>, 2020</b> <i>Anschutz Medical Campus  Fulginiti Pavilion, Gossard Forum  13080 E 19th Ave, Aurora, CO 80045</i>	
<b>3:30 pm – 4:00 pm</b>	<b>Priority Ranking</b> <i>Dr. Kathleen Adelgais and Stacey Quesada</i>
<b>4:00 pm – 4:15 pm</b>	<b>Break</b>
<b>4:15 pm – 4:30 pm</b>	<b>Report Out</b> <i>Dr. Kathleen Adelgais and Stacey Quesada</i>
<b>5:00 pm – 6:00 pm</b>	<b>Happy Hour</b> <i>Cedar Creek Pub 2100 North Ursula Street, Aurora, CO 80045</i>
<b>Wednesday, January 29<sup>th</sup>, 2020</b> <i>Anschutz Medical Campus  Research 2, Room P15-2100  12700 E 19th Ave, Aurora, CO 80045</i>	
<b>8:30 am – 9:00 am</b>	<b>Breakfast</b>
<b>9:00 am – 9:15 am</b>	<b>Day 1 Recap</b> <i>Dr. Kathleen Adelgais</i>
<b>9:15 am – 10:45 am</b>	<b>EMS Agency and Hospital Presentations</b> Lincoln Community Hospital, <i>Rachel Smith</i> St. Mary's Medical Center, <i>Dr. Kaia Knutson</i> Rocky Mountain Hospital for Children, <i>Dr. Christine Darr</i> Eagle County Paramedics, <i>Jodi Nagle</i> Upper Pine Fire Protection District, <i>Bruce Evans</i> Northglenn Ambulance, <i>Erin Selby and Melissa Wartman</i>
<b>10:45 am – 11:00 am</b>	<b>Break</b>
<b>11:00 am – 12:15 pm</b>	<b>Topics requested by registrants</b> Pediatric Issues for Emergency Management <i>Dr. Kristin Kim (Children's Hospital Colorado)</i>  Volumetric Drug Dose Confirmation <i>Dr. Kathleen Adelgais (EMSC CO / Children's Hospital Colorado)</i>  Termination of Resuscitation <i>Dr. Matt Harris (Children's Hospital Colorado)</i>
<b>12:15 pm – 12:30 pm</b>	<b>Grab Lunch (Lunch Provided)</b>
<b>12:30 pm – 1:00 pm</b>	<b>Informal Discussion / Recap</b>
<b>1:00 pm – 2:15 pm</b>	<b>Small Group Session: Strategies for Priority Areas</b> <i>Facilitators</i>
<b>2:15 pm – 3:15 pm</b>	<b>Report Out – Group Discussion</b> <i>Facilitators</i>
<b>3:15 pm – 3:30 pm</b>	<b>Wrap Up and Next Steps</b> <i>Stacey Quesada and Dr. Kathleen Adelgais</i>



## Appendix B: Performance Measures

### *National EMS for Children Performance Measures*

Number	Performance Measure Title
EMSC 01	The degree to which EMS agencies submit NEMSIS compliant version 3.x data to the State EMS Office
EMSC 02	The percentage of EMS agencies in the state or territory that have a designated individual who coordinates pediatric emergency care
EMSC 03	The percentage of EMS agencies in the state or territory that have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment
EMSC 04	The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies
EMSC 05	The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial or regional standardized system that are able to stabilize and/or manage pediatric trauma
EMSC 06	The percent of hospitals with an Emergency Department (ED) in the state or territory that have written inter-facility transfer guidelines that cover pediatric patients.
EMSC 07	The percent of hospitals with an Emergency Department (ED) in the state or territory that have written inter-facility transfer agreements that cover pediatric patients
EMSC 08	The degree to which the state or territory has established permanence of EMSC in the state or territory EMS system
EMSC 09	The degree to which the state or territory has established permanence of EMSC in the state or territory EMS system by integrating EMSC priorities into statutes or regulations





*HRSA Discretionary Performance Measures*

Number	Performance Measure Title
Core 1	The percent of MCHB funded projects meeting their stated objectives.
Core 2	The percent of MCHB funded projects implementing quality improvement initiatives.
Core 3	The percent of MCHB funded projects with specific measurable aims related to promoting health equity.
Capacity Building 4	The percent of MCHB funded initiatives working to promote sustainability of their programs or initiatives beyond the life of MCHB funding, and through what methods.
Capacity Building 6	The percent of MCHB funded projects supporting the development of informational products, and through what processes.



## Appendix C: Typical Annual Operating Budget

### **REVENUE**

State Partnership Grant	\$	130,000
Mobile Simulation Lab Fees	\$	5,000
Children's Hospital Elevate Grant	\$	5,000

<b><u>TOTAL REVENUE</u></b>	<b>\$</b>	<b><u>140,000</u></b>
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### **EXPENSES**

Program Manager Salary	\$	73,560
Program Manager Benefits	\$	20,600
Program Supplies	\$	2,300
Special Projects	\$	4,000
Mobile Simulation Lab		
Fuel	\$	2,000
Maintenance	\$	2,500
Insurance	\$	715
Supplies	\$	1,000
Travel		
Program Manager	\$	5,000
Family Representative	\$	1,500
University Facilities & Administration	\$	26,825

<b><u>TOTAL EXPENSES</u></b>	<b>\$</b>	<b><u>140,000</u></b>
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