


**Overall, the CARES program seeks to:**

- Save more lives from OHCA
- Strengthen collaboration between 911 centers, first responders, emergency medical services (EMS) agencies and hospitals
- Provide a simple, confidential process for assessing patient outcomes in compliance with HIPAA
- Offer technical assistance (TA) to help community leaders identify and prioritize opportunities to improve EMS performance
- Generate annual national and statewide reports for benchmarking capability




**Objectives**

- Define CARES and its benefits
- Provide brief history and current status
- Examine Different Structure Options
- Examine Different Cost Options
- Discuss feasible options moving forward
- AED Registry

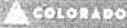
**CARES Benefits**

- Refine EMS resuscitation standards and protocols
- Formulate agency CQI programs
- Expand community CPR training programs and AED registry
- Establish 911 dispatch assisted CPR




**CARES**

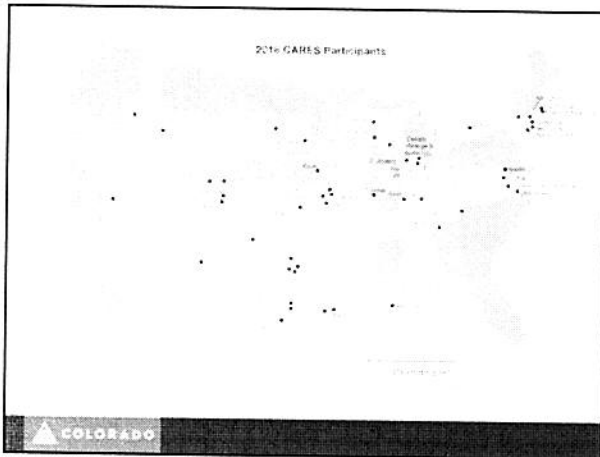
- Surveillance of Out of Hospital Cardiac Arrests (OHCA)
- Standardize outcome measures for OHCA
- Quality improvement and benchmarking care
- Annual performance reports
- Agency comparison
- Community assessment of AED and CPR use
- Hospital care outcome



**History**

- 2004 - Center for Disease Control (CDC) & Emory University
- 2005 - Atlanta, GA became first enrolled community
- 2009 - International participation
- 2011 - Statewide enrollment option





### Statewide CARES Requirements and Role

- \$15,000 statewide annual subscription
- State CARES Coordinator (1.0 FTE)
- Primary Point-of-Contact at each agency and facility
- Voluntary agency participation and data submission
- Data Sharing Committee
  - 6 members
  - Oversee the use of statewide CARES data

### Colorado CARES Participation

- Denver Health (\$2500)
- South Metro (\$2500)
- 12 licensed transporting EMS agencies in Central Mountains RETAC (\$1000)
- AMR Colorado: Colorado Springs, Golden, Pueblo

**\$6,000 already paid annually**

### National CARES Requirements

- CARES Data integrated in NEMSIS by February 2019
- CARES variables will become a national mandate by 2022

### Colorado Hospital Participation

- 81 Current Hospital Facilities
- Numerous Regional Medical Centers
- Hospitals within large healthcare networks
  - Adventist Health
  - Banner Health
  - Centura Health
  - DHHA
  - Health One
  - SCL Health
  - UCHealth

### What Qualifies as a CARES case?

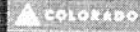
All non-traumatic out-of-hospital cardiac arrests where resuscitation is attempted by a 911-Responder

First Responders place hands on the patient

Includes patients that receive an AED shock by a bystander prior to the arrival of 911 Responders


### CARES Data Collection Method

- Paper Form
- Manual Online Entry
- EPCR Automatic Upload
  - Required 10 or more cases per month
  - Not supported by all vendors
  - Not allowed for consolidators\*



### Goals


1. Start date of 1 January 2019. RETACs are working to secure funding for the 2019 annual fee, along with maintenance of the CMRETAC CARES Coordinator to allow for immediate participate availability in the program.
2. Sustainable funding source within two - five years. The table below offers several funding opportunities.
3. Preferred funding from legislative and statute language with dedicated funding source outside HUTF.
4. State-wide implementation using a systems approach with well-defined roles and responsibilities, conducive to long-term sustainability



### CARES Data Elements


	<u>EMS</u>	<u>Hospital</u>	<u>CAD</u>
Required	33	5	0
Supplemental	14	8	11
<b>Custom*</b>	<b>19</b>	<b>13</b>	<b>4</b>

\* Due to incompatibility with NEMIS 3.4.0 required data elements, but won't be needed once 3.5 comes out




### 5 year Progression of Data Entry

1. Agencies directly inputting data into CARES only
2. Agencies documenting the data points within their ePCR
3. ePCRs push data directly to CARES




### Overall Goal for Colorado

Develop a sustainable model for CARES participation through executing a coordinated, collaborative and sustainable approach



### Progression of Data Entry: Items to be considered

1. How are other states funding the funneling the state data from the vendors to CARES on the state's behalf
2. Should the data just come from each individual agency? How?



## CARES Subscription Models

<u>Subscription</u>	<u>Population</u>	<u>Annual Cost</u>
Site*	<300,000	\$1,000
	300,000 - 750,000	\$2,500
	>750,000	\$5,000
State (Multiagency)	N/A	\$15,000

\*Single EMS transport provider



## State Coordinator: *Option 1*

- No unified model - each participating agency pays towards their individual, population-based CARES fee
- Colorado is not acknowledged as a 'CARES State'



## State Coordinator: *Time Breakdown*

TOTAL Estimated Time Requirement for Implementation  
Year for RETAC Contact

**380 hours**



## State Coordinator: *Option 2*

Participating RETACs contribute towards the \$15,000 annual CARES fee. The Seed Coordinator is utilized for technical support. A designated contact for each RETAC is responsible for onboarding for EMS agencies and hospitals and ongoing management



## State Coordinator: *Time Breakdown*

See Handout



## State Coordinator: *Option 2 Seed Coordinator*

- King County Public Health, Washington, Pacific NW CARES Coordinator has offered to be a "seed" coordinator for the State of Colorado as it works towards developing a sustainable model for CARES participation starting January 2019.
- Goal would be to establish the sustainable funding and "HR home" for the CARES system in Colorado within 2 years of initiation (by 2021).
- The "Seed" Coordinator will work with a contact from each RETAC to accomplish participation in the CARES registry.



### State Coordinator: *Option 2 Seed Coordinator*

- The RETAC contact can be filled by numerous people such as agency or facility representatives who wish to be champions for CARES within the RETAC, RMD RETAC contact, or RETAC Coordinator/Executive Director.
- Workload will vary depending on number of agencies onboarding within the system at the time and at the end of year when ensuring data is being submitted and outcome information is being completed by the facilities.



### HeartRescue Key Goals

improve care and outcomes for out-of-hospital cardiac arrest through the "measure and improve" strategy. This strategy focuses on quality improvement so communities can benchmark performance, learn from best practices and implement evidence-based changes to increase survival rates.

Measure cardiac arrest care through the use of CARES- The Cardiac Arrest Registry to Enhance Survival.

Improve SCA survival rates through use of the Resuscitation Academy model to educate providers and stakeholders on best practices.



### State Coordinator: *Option 2 Seed Coordinator*

- As part of the "Seed" Statewide Coordinator being provided at no-cost they ask we join the HeartRescue effort.



### State Coordinator: *Option 3*

Participating RETACs contribute towards \$15,000 annual CARES fee + coordinator fee for a local State CARES Coordinator to take on the onboarding and ongoing management of EMS agencies and hospitals.

The designated RETAC CARES Contact assumes an established percentage of the CARES onboarding and management responsibilities. The remaining responsibilities are assumed by the local State CARES Coordinator for an agreed-upon percentage of the Coordinator's compensation.



### HeartRescue Requirements\*\*

It is a state-based initiative that seeks to "measure and improve" resuscitation care, as well as build a state registry to help community-based programs improve care for SCA.

HeartRescue Partners have demonstrated that SCA is a treatable event and have made significant advances in their areas of research and expertise to help save more lives.

\*\*See HeartRescue Guidebook



### State Coordinator: *Option 3 Local Coordinator*

- The RETAC contact can be filled by numerous people such as agency or facility representatives who wish to be champions for CARES within the RETAC, RMD RETAC contact, or RETAC Coordinator/Executive Director.
- Workload will vary depending on number of agencies onboarding within the system at the time and at the end of year when ensuring data is being submitted and outcome information is being completed by the facilities.



### State Coordinator Breakdown

Position	Contract (includes 25% benefits)	Salary Only	Benefits 25%
		Total Combined = Contract Amount	
Year 1 Coordinator	\$69,300	\$55,440	\$13,860
Year 2 Coordinator + 2% COL	\$70,686	\$56,549	\$14,137
Year 3 Coordinator + 2% COL	\$72,100	\$57,680	\$14,420
Year 4 Coordinator + 2% COL	\$73,542	\$58,834	\$14,708
Year 5 Coordinator + 2% COL	\$75,013	\$60,011	\$15,002

All estimates based on Emergency Medical & Trauma Services Branch, Administrator III Classification  
COL = Cost of Living Annual Increase of 2%



### State CARES Annual Fee: Equally Divided by each RETAC

	Total Cost	Per RETAC
Annual Fee	\$15,000	\$1,364



### Total Contract Amount by Year: Using these numbers going forward

Position by Year	Contract Amount
Year 1 Coordinator	\$69,300
Year 2 Coordinator	\$70,686
Year 3 Coordinator	\$72,100
Year 4 Coordinator	\$73,542
Year 5 Coordinator	\$75,013

Position by Year = Includes Cost of Living Annual Increase of 2% each year  
Contract Amount = Includes addition of 25% for benefits



### Contractor + CARES Fee by Year: Equally Divided by each RETAC

Position by Year	Contractor	CARES Fee	Contractor + Fee
Year 1 Coordinator	\$6,300	\$1,364	\$7,664
Year 2 Coordinator	\$6,426	\$1,364	\$7,790
Year 3 Coordinator	\$6,555	\$1,364	\$7,919
Year 4 Coordinator	\$6,686	\$1,364	\$8,050
Year 5 Coordinator	\$6,820	\$1,364	\$8,184
<b>5 Year TOTAL</b>	<b>\$32,787</b>	<b>\$6,820</b>	<b>\$39,607</b>

Using total Contract amount which includes the 25% for benefits and annual COL increase



### Total Contract Amount by Year: Equally Divided by each RETAC

Position by Year	Contract Amount	Per Each RETAC
Year 1 Coordinator	\$69,300	\$6,300
Year 2 Coordinator	\$70,686	\$6,426
Year 3 Coordinator	\$72,100	\$6,555
Year 4 Coordinator	\$73,542	\$6,686
Year 5 Coordinator	\$75,013	\$6,820
<b>5 Year TOTAL</b>		<b>\$32,787</b>

Position by Year = Includes Cost of Living Annual Increase of 2% each year  
Contract Amount = Includes addition of 25% for benefits



### CARES Cases (Jan - June 2018)

RETAC	Cases*
Central Mountains	54
Foothills	313
Mile-High	836
Northeast	377
Northwest	68
Plains to Peaks	342
San Luis Valley	41
Southeast	12
Southern	152
Southwest	36
Western	72
<b>CO Total</b>	<b>2303</b>

Month	Cases*
January	374
February	348
March	407
April	394
May	395
June	385
<b>CO Total</b>	<b>2303</b>



### CARES Cases (\*Estimated 2018)

RETAC	Cases*
Central Mountains	108
Foothills	626
Mile-High	1672
Northeast	754
Northwest	136
Plains to Peaks	684
San Luis Valley	82
Southeast	24
Southern	304
Southwest	72
Western	144
<b>CO Total</b>	<b>4606</b>



### State Coordinator by Region: Year 1

RETAC	\$69,300 Contract	Percentage
Central Mountains	\$1,825.60	2.63%
Foothills	\$11,562.68	16.68%
Mile-High	\$28,126.37	40.59%
Northeast	\$8,857.78	12.78%
Northwest	\$3,167.87	4.57%
Plains to Peaks	\$9,105.84	13.14%
San Luis Valley	\$584.28	0.84%
Southeast	\$589.17	0.85%
Southern	\$2,976.24	4.29%
Southwest	\$1,228.59	1.77%
Western	\$1,275.58	1.84%
<b>CO Total</b>	<b>\$69,300.00</b>	<b>100.00%</b>



### Colorado Population by Region

RETAC	Population	Percentage
Central Mountains	145,957	2.63%
Foothills	924,438	16.68%
Mile-High	2,248,707	40.59%
Northeast	708,181	12.78%
Northwest	253,272	4.57%
Plains to Peaks	728,013	13.14%
San Luis Valley	46,713	0.84%
Southeast	47,104	0.85%
Southern	237,951	4.29%
Southwest	98,226	1.77%
Western	101,983	1.84%
<b>CO Total</b>	<b>5,540,545</b>	<b>100.00%</b>



### Fee & State Coordinator: Year 1

RETAC	BOTH	Percentage
Central Mountains	\$2,220.75	2.63%
Foothills	\$14,065.43	16.68%
Mile-High	\$34,214.32	40.59%
Northeast	\$10,775.05	12.78%
Northwest	\$3,853.56	4.57%
Plains to Peaks	\$11,076.80	13.14%
San Luis Valley	\$710.74	0.84%
Southeast	\$716.69	0.85%
Southern	\$3,620.45	4.29%
Southwest	\$1,494.52	1.77%
Western	\$1,551.68	1.84%
<b>CO Total</b>	<b>\$84,300.00</b>	<b>100.00%</b>



### CARES State Fee by Region: Yearly

RETAC	\$15,000 Fee	Percentage
Central Mountains	\$395.15	2.63%
Foothills	\$2,502.74	16.68%
Mile-High	\$6,087.96	40.59%
Northeast	\$1,917.27	12.78%
Northwest	\$685.69	4.57%
Plains to Peaks	\$1,970.96	13.14%
San Luis Valley	\$126.47	0.84%
Southeast	\$127.53	0.85%
Southern	\$644.21	4.29%
Southwest	\$265.93	1.77%
Western	\$276.10	1.84%
<b>CO Total</b>	<b>\$15,000.00</b>	<b>100.00%</b>



### Bucketed Cost by Region: Year 1

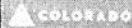
Population	Cost
>1,000,000	\$25,000
999,999-500,000	\$12,000
499,999-100,000	\$5,000
<100,000	\$1,000

Total amount for Year 1 is \$84,000 for both Coordinator and Fee



### Bucketed Cost by Region: Year 1

RETAC	BOTH	Percentage
Central Mountains	\$5,000.00	2.63%
Foothills	\$12,000.00	16.68%
Mile-High	\$25,000.00	40.59%
Northeast	\$12,000.00	12.78%
Northwest	\$5,000.00	4.57%
Plains to Peaks	\$12,000.00	13.14%
San Luis Valley	\$1,000.00	0.84%
Southeast	\$1,000.00	0.85%
Southern	\$5,000.00	4.29%
Southwest	\$1,000.00	1.77%
Western	\$5,000.00	1.84%
<b>CO Total</b>	<b>\$84,000.00</b>	<b>100.00%</b>



### Colorado Legislature Limitations

- . Legislation will be needed in order for the Department to fund and manage the statewide program
- . No authority to collect CARES data from hospitals
  - Specific legislation would be required
- . NEMESIS 3.4.0 data do not include custom CARES elements
  - Rule change required for additional data mandate



### AED Registry

- . Colorado State Law
- . Free National AED Registry Options
- . See Handouts

