## COMMUNITY RESPONSE TEAMS (CRT)

MAY 8, 2017 - APRIL 30, 2018

Of the 1,001 encounters:

**410** = active 911 calls for service

**591** = follow-ups and referrals

**72** = field medical clearance by Fire/EMS

60% of 911 calls treated in place; 16% direct mental health placement 163 people were referred for case management with 75% successful engagement

142 Emergency
Department
& 53 Jail
Diversions

**599** Patrol Officers released back into service

**127** Fire Employees **66** Fire Vehicles released back into service

Estimated Cost Avoidance for Fire/EMS, ED's, and Detention: \$1,703,605

# THE COMMUNITY RESPONSE TEAM

# Annual Report

A program of the <u>Douglas C</u>ounty Mental Health Initiative

May 8, 2017 – April 30, 2018

## **Table of Contents**

A Letter from the Douglas County Board of County Commissioners1
A Year in Review 2 - 4
<ul> <li>Community Response Team Goals</li> </ul>
<ul> <li>Douglas County Mental Health Initiative Organizational Membership</li> </ul>
Learning from History 5 - 6
Community Response Team Snapshot 7
CRT Population Characteristics 8 - 10
<ul> <li>Race/Ethnicity, Gender &amp; Ages Served</li> </ul>
Insurance Status
<b>CRT Calls for Service</b>
<ul> <li>Area of County &amp; Follow-Ups</li> </ul>
<ul> <li>Incident Type Observations</li> </ul>
First Responders Released Back to Service

<b>CRT Dispositions</b>
<ul> <li>Calls for Service Dispositions</li> </ul>
<ul> <li>Follow-up, Referral and Initial Visit Dispositions</li> </ul>
<ul> <li>Insurance Status of Direct Placements from the field and Placement Locations</li> </ul>
<ul> <li>Jail Saves and Emergency Department Diversion</li> </ul>
Follow-up, Referral and Staffing 23 - 24
Case Management
Looking to the Future 30
Appendix 31 - 56
<ul> <li>Psychiatric Evaluations in Emergency Departments</li> </ul>
<ul> <li>Rate of Hospitalization on Key Calls for Service, and M-1 Trends</li> </ul>
CRT Stories
<ul> <li>The Original High Utilizer Sample - Pre/Post Comparisons of first responder encounters and emergency department admissions</li> </ul>
<ul> <li>Using Call Data to Identify High Utilizers – Creating a baseline for 2018/2019</li> </ul>
<ul> <li>Cost Saving Analysis</li> </ul>
Lexicon
Community Response Team Partners 58

### A Message from the Board of County Commissioners

July 10, 2018

On the occasion of the first year of our Community Response Teams, a program of the Douglas County Mental Health Initiative, we want to thank our partners and acknowledge the truly remarkable accomplishments from the past year as set forth in this report.

We are so grateful for the time and leadership of the 40 organizations that comprise the Douglas County Mental Health Initiative. By working together, we are seeing a positive impact in many areas, but perhaps the most significant benefit is connecting people in our community with much needed and coordinated mental health services.

We look forward to the continued development of the Community Response Teams as well as additional strategies from the Mental Health Initiative, such as creating a case management network and designing an integrated mental health system to address unmet needs for county residents.

The challenge of establishing an effective and integrated mental health system in Douglas County remains daunting and even overwhelming, but by working together we are hopeful and confident of further improvements and a brighter tomorrow.

Sincerely,

Diane A. Holbert

Roger A. Partridge

Lora L. Thomas

BOARD OF DOUGLAS COUNTY COMMISSIONERS



#### **A Year in Review**

Through the leadership of the Douglas County Mental Health Initiative, Douglas County, Castle Rock Police and Fire Rescue, the Douglas County Sheriff's Office and many member organizations within the Initiative, the Community Response Team pilot program launched in May 2017. This collaboration of key stakeholders resulted in a process designed to improve upon the existing mental health crisis response in Douglas County. Goals include efficiently connecting residents with care most appropriate for them and their needs, curb emergency department visits for medical clearance when an M-1 is written or when the primary issue is mental health and avoid arrests for individuals who would benefit from mental health intervention in the community. The Community Response Team pilot ran for four months from May 2017 through August 2017, and data driven indicators were shared with the Douglas County Board of County Commissioners (BOCC) at a special business meeting in September 2017. With support from the BOCC and partnering law enforcement and Fire/EMS organizations, a second team was added, including South Metro Fire Rescue, in December 2017 with their first shift in early January 2018. A second case manager was also hired to support the growing need of client support and system navigation.

Throughout 2017 and into 2018, the progress of the Community Response Team was monitored as was law enforcement data to strive for continuous program improvement. The commitment of the community partners who worked to make this program a reality is a testament to the possibility of making the existing system operate more efficiently for the people who need it – community members, hospitals, jails, law enforcement and other first responders. This report is a snapshot of CRT activities from May 2017 to April 2018. It is a collection of diverse data points that may be interesting to various stakeholder groups. Several types of data are explored as a cross reference and strategy to expand the perspective of this report.

## **Community Response Team Goals**

1. Emergency department diversion for mental health crisis unless medically necessary

2. Jail diversion when mental health is the primary issue

3. Facilitate connection to appropriate mental health resources

## Douglas County Mental Health Initiative Organizational Membership

18th Judicial District Court

18th Judicial District Attorney

18th Judicial District Probation

AllHealth Network-Community Mental Health

ARC Arapahoe & Douglas Counties

Aurora Mental Health – Community Mental Health

Behavioral Healthcare, Inc.

Castle Rock Fire and Rescue

Castle Rock Police Department

Catholic Charities

Centura Adventist Hospitals

Church of the Rock

Colorado Access- MSO

Colorado Community Media-Newspapers

Denver Children's Home

Denver Springs- Universal Health Services, Inc.

Developmental Pathways- IDD Services

**Douglas County Administration** 

Douglas County Board of County Commissioners

Douglas County Private Citizen

Douglas County Community Justice Services

Douglas County Community Planning- Community Services

**Douglas County Human Services** 

**Douglas County School District** 

Douglas County Sheriff's Office

**Douglas County Youth Initiative** 

Dr. Jim Baroffio, Private Sector Psychologist

HB-1451/CMP Coordinator

HCA Healthcare- Highlands Behavioral Health

**Heart Centered Counseling** 

Office of the County Attorney

Other Local Fire Districts

Lone Tree Police Department

Parker Police Department

Peak View Behavioral Health

Signal Behavioral Health Network-Substance Abuse

Sky Ridge Hospital - Health One

South Metro Fire Rescue Authority

State of Colorado Vocational Rehabilitation

Tri-County Health Department

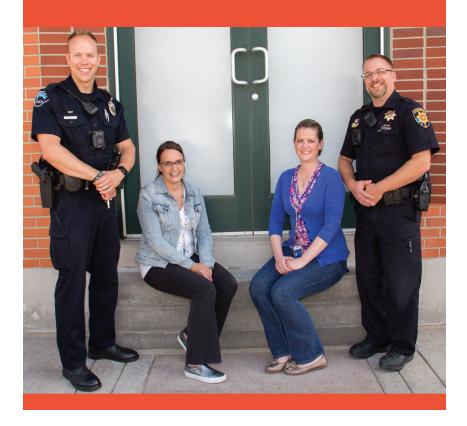
### **Learning from History**

Prior to the Community Response Team, and the Mental Health Initiative, first responders were at the front lines of a system struggling to address growing mental health needs. Law enforcement and Fire/EMS were experiencing similar challenges and limited resources when it came to handling calls for service where mental health was the primary issue. The options were limited and frequently put pressure on first responders to take people in mental health crises to Emergency Departments.

This system is a revolving door. Law enforcement can write mental health holds (M-1s) if they are concerned about the safety of an individual and/or their threat to others.

However, law enforcement must take the person to an Emergency Department for medical clearance and a mental health assessment before they could be placed into care. Many of these individuals are released into the community with limited or no follow-up.

Perhaps they leave the emergency department with a list of options if they want to seek follow-up mental health care. Sometimes, the same people cycle in and out of this system resulting in repeat contact calls to first responders as well as a lack of treatment for those in need.



The Community Response Team (CRT) steps in at a critical point in this process. They can intercept calls to first responders, or be called to the scene when mental health is thought to be the primary issue. The CRT can perform an in-field mental health/crisis evaluation and call emergency medical services (EMS) to the scene to perform medical clearance. Armed with the information from these assessments, CRT can bypass the Emergency Department in favor of direct placement to the level of care appropriate for the individual.

Direct placement is made possible by an agreement among key care providers to accept the CRT's clinical evaluation and medical clearance when seeking placement for an individual from the scene. This group of providers developed a universal Release of Information (ROI), allowing the CRT and case managers to communicate with providers on care coordination.

To avoid the likelihood of individuals falling through the cracks, CRT can also receive referrals from first responder agencies. Often these come from law enforcement who are concerned about the welfare of someone in the community.

The CRT plays a crucial role in changing the way the mental health system, from crisis to treatment, has traditionally

worked in Douglas County. Agencies are communicating like never before. First responders are finding relief from long-time high utilizers, and these high utilizers of emergency systems are finding relief from being caught in a revolving door that does not lead to sustained treatment.

The commitment and collaboration between local government, law enforcement, fire departments and treatment providers is key to this process. Throughout the development and implementation of this program invaluable relationships have been built which have begun to move the needle on the ways in which mental health care is delivered in Douglas County.

"The success behind what we've created here is in the collaboration we undertook to achieve the CRT. We worked with dozens of partners, each of whom helped us either overcome an obstacle or informed the process along our way. The police and fire components draw your attention because of the uniforms, but it's the collaboration that got us here. Every partner approached this concept with a real concern for those among us who need services, and the people of Douglas County are the real benefactors of that spirit."

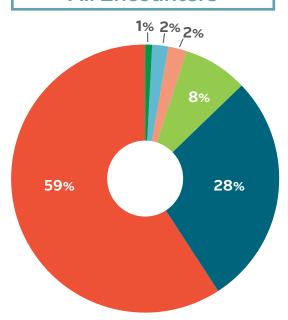
- James Jensen, Captain. Douglas County Sheriff's Office

### **Community Response Team Snapshot**

The following information offers a glance at CRT activities, which are covered in greater detail in this report.

#### Major Disposition Categories • N=1,001

#### **All Encounters**



## Treated in Place

Direct Placements

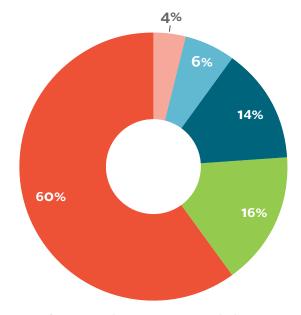
ED (Medical)

Other Disposition

ED (Behavioral Health)

**Medical Assist** 

#### **Active 911 Calls**



#### For reference, Other Disposition includes:

- No contact/ attempt to contact
- Arrested/Jail (CRT did not initiate any arrests)
- Spoke to Family
- Courtesy Transports
- Phone Contact
- · Referred to DHS
- Deceased

#### **Quick Facts**

#### **Age Range**

(All Unique Individuals N=499)

5	1%
62	12%
90	18%
40	8%
78	16%
70	14%
55	11%
24	5%
22	4%
34	7%
8	2%
1	0%
10	2%
	62 90 40 78 70 55 24 22 34 8

- 142 ED saves
- 53 jail saves
- 599 patrol units released
- 127 fire rescue personnel released
- 66 fire rescue vehicles released
- 77 mental health holds (M-1s)
- EMS called for Point of Care (POC) testing: 72

#### **Case Management**

- Distinct individuals referred by CRT to case management: 163
  - Successful engagement: 75%

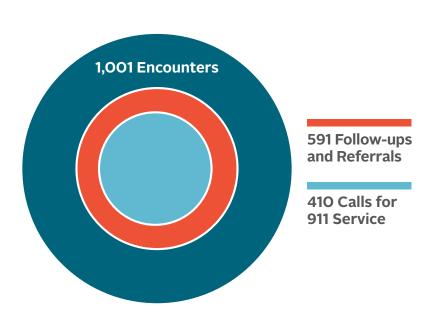
### **CRT Population Characteristics**

In approximately one year, CRT encountered and/or served 499 unique individuals – 344 were seen on active 911 calls, and 155 people were either officer referrals or proactive, preventive outreach made by CRT. Proactive outreach was common during the pilot (May 8, 2017 –

September 1, 2017) to engage high utilizers. There were 410 calls for service and 591 follow-ups and referrals, for a total of 1,001 encounters. Referrals began in July 2017, and became a formalized process using a specific form on February 1, 2018.

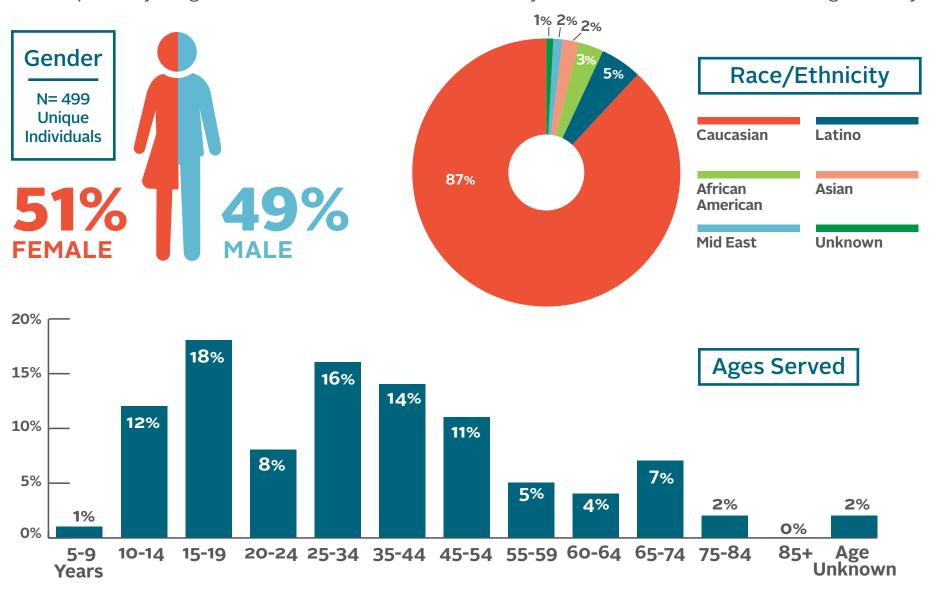
MAY 8, 2017 - APRIL 30, 2018





## Race/Ethnicity & Gender

The race/ethnicity and gender breakdown of CRT encounters closely mirrors the overall distribution in Douglas County.

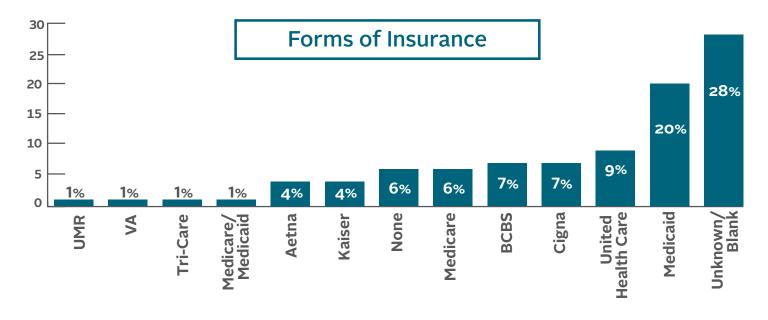


#### **Insurance Status**

Unknown insurance status was the largest category at the end of CRT's first year. CRT did not begin recording insurance status until later in the program on October 2, 2017. By that time 220 calls for service and follow-ups had occurred. If conflicting insurance information was provided for one individual, CRT used the first recorded insurance, as subsequent entries may have been recall errors. In all cases, care

has been taken to fill in missing pieces of information if updated status is available and to correct multiple insurance providers listed under the same individual.

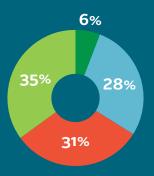
152 unique individuals, or 31% of CRT clients with known status had some form of government issued insurance (Medicare, Medicaid, VA, Tricare, CHP+) \*. Of that 31%, 20% had Medicaid.



<sup>\*</sup>Tricare and VA are both healthcare programs of the U.S. Department of Defense Military Health System that provide benefits for active and retired U.S. Armed forces military personnel and their dependents. The programs are differentiated by the benefits associated with each.

#### Insurance Type (<3)

Humana, Bright
Health, Charter,
Cofinity, Liberty,
Humana +
Physicians Health,
CHP Plus,
MediAsure,
Rocky Mountain,
Centura Health Plan



None

Unknown

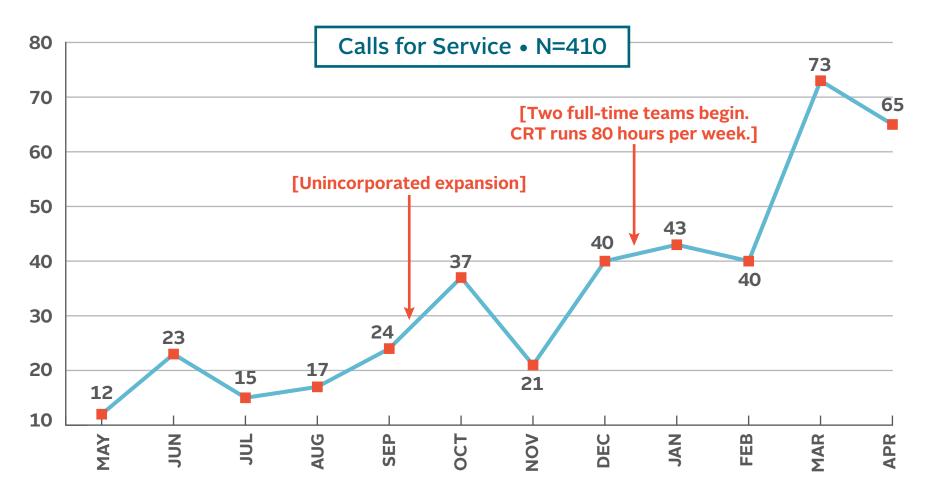
**Government Issued** 

**Private** 

#### **CRT Calls for Service**

The Community Response Team responded to 410 active 911 calls for service for 344 unique individuals. CRT listens to the police scanner and watches the Computer Aided Dispatch (CAD) for calls that may have a mental health element. If they hear or see something involving mental health, they can self-dispatch to

the scene. CRT can also be called in by another in-field officer or deputy (unit to unit) or be requested to respond by dispatch. Calls increased after a second CRT team was added in mid-December, when CRT's coverage hours increased from 40 per week to 80.



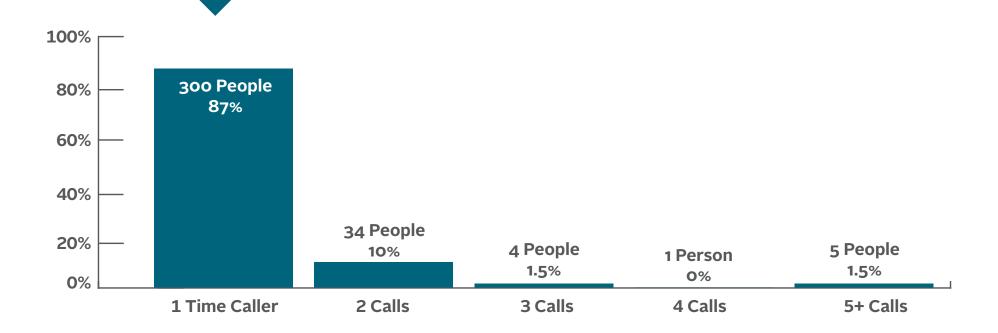
#### **CRT Calls for Service (Continued)**

#### **CRT Active Call Response (N=410)**

#### • Repeat Calls for Service

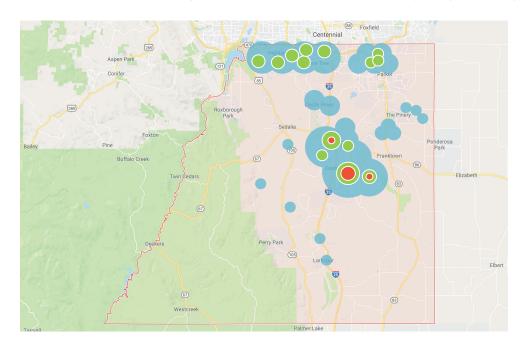
In most cases, CRT was not responding to the same people multiple times. Most active calls, 87%, were unique events for unique individuals. Just 10 people out of 344 individuals in the active call sample were contacted by CRT 3 or more times. There

is not a specific incident type or combination of incident types that are associated with people who CRT sees more than once on an active 911 call. The teams may see a suicidal subject one time and be successful with follow-up, or they may meet someone who is more acute.



### **Area of the County**

The heat map of Douglas County below shows the concentration of calls for service which CRT responded to in year one. The Castle Rock area may be slightly denser due to the pilot occurring here for four months before the program expanded to take county-wide calls. There were eighty-one Castle Rock calls during the pilot before the CRT responded to anything in the Highlands Ranch and Parker areas.

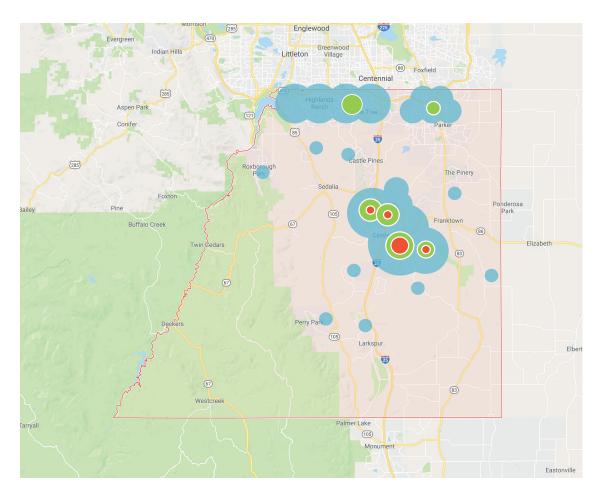


"The CRT program is an amazing example of collaboration and synergy. The CRT provides the solution to the needs of those in crisis by leveraging the capabilities of law enforcement, EMS and mental health professionals into one cohesive team. The right capabilities in the right place, at the right time. It's pretty rare to see the most cost-effective solution turn out to be the most satisfying for both the clients and the responders."

- Rick Lewis: EMS Chief South Metro Fire Department

## **Area of the County Follow-Ups**

#### CRT encountered 499 unique individuals in year one. Where are they from?



People
248
11
114
5
70
2
4
2
18
2
2
7
6
1
1
2
4

## **Incident Type Observations**

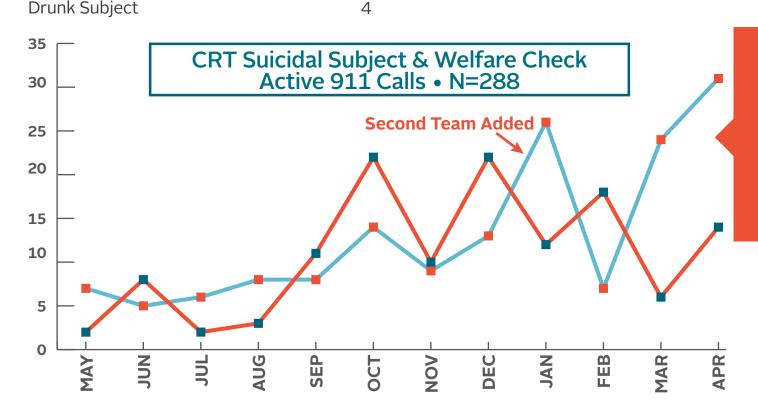
Before the start of the pilot, data and expertise from CRPD and DCSO advised which incident types tend to be associated with mental health needs. This information helped inform each agency's dispatch on best-fit calls that would meet the criteria of CRT. Reviewing incident types was an important first step in setting the criteria for CRT response and understanding the information that would be beneficial in exploring program impact.

- CRT's top incident types were welfare checks with a mental health component (158) and suicidal subjects (130). The next most common incident types, by a large margin, were disturbances (36) and "other" welfare checks (31).
- The 15 to 19 age group had the largest amount of calls for suicidal subject (29%), and 51% of all suicidal subjects were 24 years or younger. Fifteen suicidal subjects were 14 years old or younger, and the youngest suicidal subject was 9 years old.
- Responses to disturbance calls increased in the last few months of CRT's first year. Many were disputes between parents and youth in the home.

- One of the most common incident types for law enforcement is welfare check, although many do not have a mental health component. CRT responds to a subset of welfare checks that have a known or suspected mental health issue.
- 58% of the calls that CRT responded to were for welfare check and suicidal subject.
- The CRT responds to a variety of calls for service.
   Some less common incident types such as runaway and lost property were taken by CRT because they were familiar with the name on the call, either a known high utilizer, or someone they had encountered on a prior call.

## **Incident Types**

Welfare Check (Behavioral Health)	158	Citizen/Vehicle Assist	3
Suicidal Subject	130	Harassment	3
Disturbance	36	Runaway	2
Welfare Check (Other)	31	Medical	2
Citizen Assist	18	Drug Offense	2
Suspicious Circumstances/Person	7	DHS Assist	2
Civil Situation	7	Domestic	1
Attempt to Contact	3	Lost Property	1
Drunk Subject	4		



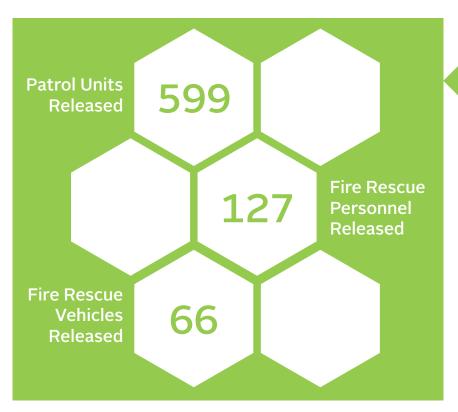
The graph to the left isolates CRT's top calls for service over the program's first year.

These calls accounted for 58% of CRT's active calls.

CRT Welfare Check for (Behav. Health)

**CRT Suicidal Subject Total** 

# First Responders Released Back to Service



When CRT releases a first responder back to the field, they are free to continue their job of protecting and serving the public. CRT released 726 first responders back to service in 12 months.



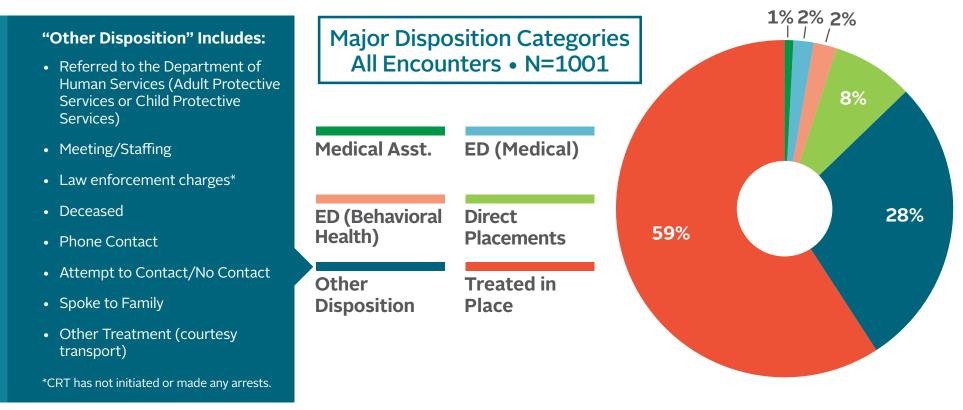
"This model of a co-responder program, adapted specifically to meet the needs of our community, has been one of the most profound initiatives I have been a part of in my career. We can literally see improvement in the lives of people who are suffering with mental health issues".

- Jason Lyons: Commander, CRPD

#### **CRT Dispositions**

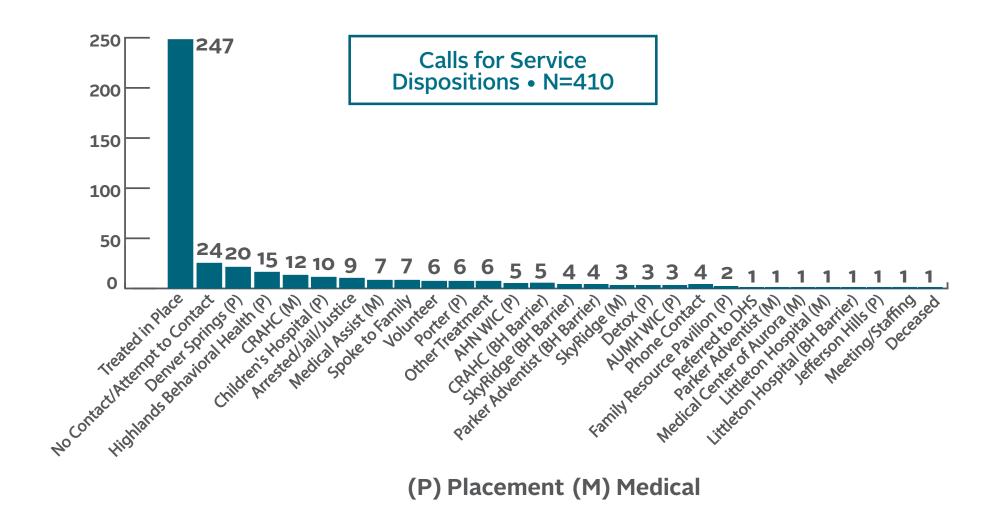
CRT monitors disposition as a key outcome indicator. A disposition for a contact is the assigned outcome of a call. This ranges from treated in place, to hospitalization, to direct placement at a mental health facility. Dispositions are based on the needs of the individual. Mental health need is evaluated by the clinician; medical need is evaluated by EMS; safety at the scene is monitored by law enforcement. If someone meets criteria for a mental health

placement, they can be directly admitted from the scene to the appropriate level of care. If the best outcome is for the individual to be treated in place, the clinician can provide brief, solution focused treatment techniques. The CRT's goal is to responsibly and safely assess and assist the people they meet and determine the best disposition based on need.



\*CRT records "Attempt to Contact" as a disposition for an individual encounter when they do not make direct contact with the subject of a call, referral, or follow-up. They may have spoken to a family member, spouse or guardian, or be unable to locate the subject. This does not mean that CRT was never able to reach an individual.

## **Calls for Service Dispositions**

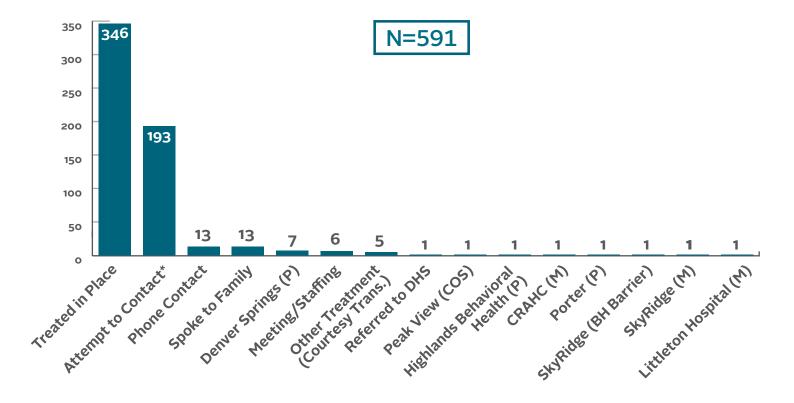


\*Emergency Department placements have two categories: medical (M), and behavioral health barrier (BH Barrier). The distinction is important to accurately describe the factors that go into the CRT selecting a hospital as the proper disposition for a contact. Fifty-five percent of ED placements were for co-occurring medical needs, or injury/risk due to suicide attempt. The remaining 45% of ED placements occurred due to an insurance barrier, or combative behavior of the individual. To increase the accuracy of the placement and medical categories in the graphic below, these distinctions were made.

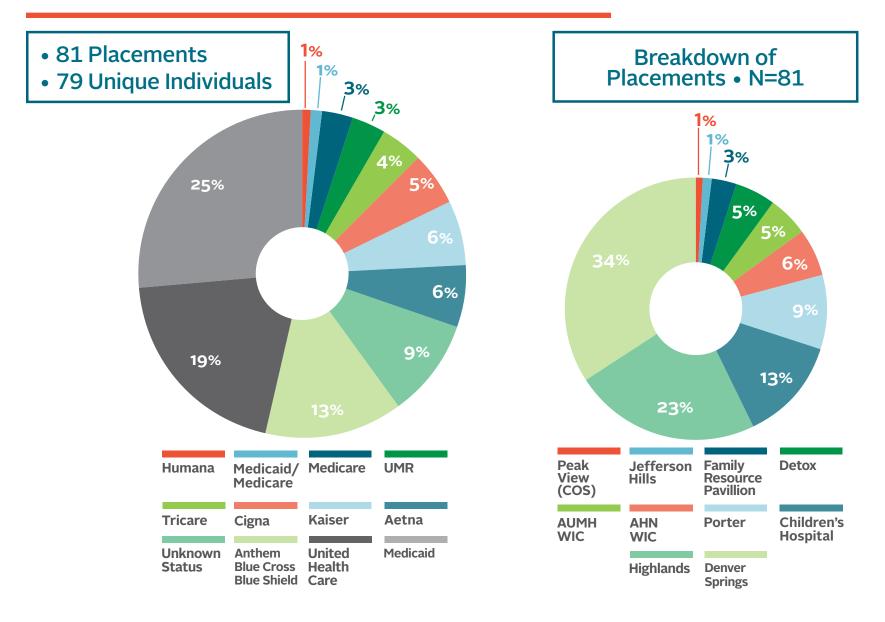
## Follow-Up, Referral and Initial Visit Dispositions

\*Each encounter has a disposition. Many follow-ups are unscheduled. Likewise, the first attempt to contact after a referral has been made is not usually planned with the subject of the referral. The "Attempt to Contact" disposition does not mean

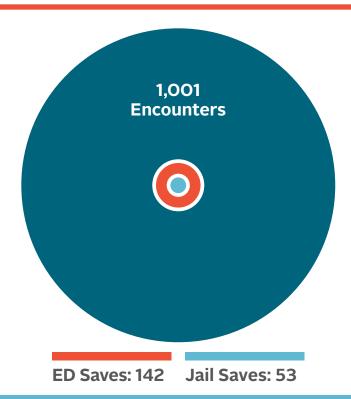
that CRT was never able to reach an individual. This simply counts the outcomes of each encounter, and not the outcome for each individual.



# **Insurance Status of Direct Placements from the Field and Placement Location**



## **Jail Saves & Emergency Department Diversion**



"In the year we have been involved we have seen a decrease in the calls, cost savings, and transports to facilities. We continue to firmly believe in this program and look forward to continuing to grow with it."

- Rich Martin

Battalion Chief Castle Rock Fire and Rescue

Out of 1,001 encounters, **CRT intervention prevented 53 arrests.** Therefore, nearly 6% of encounters had elements that historically may have led to arrests but did not reach that level due to CRT intervention. If each of these arrests had occurred and subsequently spent just one day in jail, the bill would have reached almost \$12,000 in total.

Out of 1,001 encounters, **CRT** intervention prevented 142 emergency department visits. According to data via Centura, the median cost of a behavioral health visit at an ED was \$9,314, and the vast majority of individuals who went to an ED for a behavioral health reason did not stay for even one day.

If the CRT is concerned about a potential medical issue on scene, or if they can safely avoid the emergency department in favor of direct placement to mental health care, they can call Emergency Medical Services to perform an in-field screen. This is called Point of Care testing (POC) and is a set of agreed upon vital measures that EMS gathers in lieu of a medical clearance at an emergency department.

EMS, from multiple fire jurisdictions, was called to perform Point of Care testing 72 times. According to CRFD the cost to perform a POC test in the field is approximately one third of the cost of a traditional medical response and reduces the number of Fire/EMS personnel traditionally on scene from five to two. This style of response saves not only money, but time and Fire/EMS resources.

## Follow-Up, Referral and Staffing

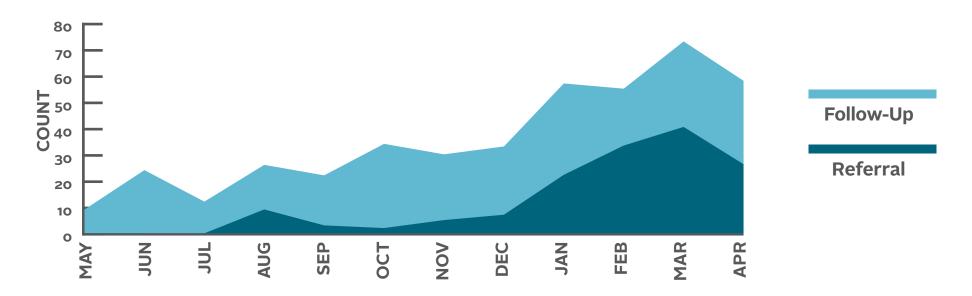
#### Follow-Ups

CRT provides follow-ups after each call for service, with the permission of the person contacted. Often, case managers are present for the first follow-up to establish rapport if they are needed to help provide ongoing services. Time to follow-up on an active call can vary greatly depending on the nature of the original call, for example, the outcome/disposition of the call or the preference of the individual or guardian.

CRT went on 433 follow-ups and spent a total of 321.5 hours on these visits. (This is not including additional follow-ups by case managers).

#### Referrals

CRT started receiving referrals in July 2017. This began as verbal requests by law enforcement officers to CRT to check on people whom they had contacted and had concerns for. Later, in February 2018 the process was formalized to include a referral form and a special email address to receive referrals. CRT received 147 referrals in nine months. In January 2018 CRT began tracking more information regarding referrals, for example, if a referral is viable for CRT, and the threat level associated with the individual. CRT aims to respond to referrals within 72-hours of receiving the request. However, time to respond may vary depending on threat level and whether the individual is currently hospitalized.



## **Staffing**

The Community Response Team is a voluntary program, and individuals have the choice to decline the services that are being offered. The team will make every effort to engage individuals, but if services are refused, the next step for the team is to determine level of risk that exists for the individual and community. If the individual is determined to pose a substantive risk to themselves or the community the case is reviewed by the CRT and the Office of the County Attorney, as well as other key organizations that are involved in trying to engage the individual in care.

The purpose of this review, called a Case Staffing, is to determine whether a possible civil remedy may be appropriate in this case. There are several involuntary treatment options, that may be

ordered by the Court, during civil proceedings, and the Office of the County Attorney is responsible for representing these matters in civil court. The goal in any involuntary commitment procedure, is that the individual gets the mental health treatment that they need, even if they are not able to make decisions for themselves. These are often the most acutely ill members of our community, who are so impacted by their mental illness, that they are a risk to themselves, the community and are often unable to care for themselves. Members of the CRT and other key organizations hold staffings regularly and can schedule on an emergency basis, if needed. The OCA and CRT staffed 55 unique individuals in the first year.





"The impact that individuals who are high utilizers of emergency systems have on the cost and efficiency of County resources, is immeasurable. Whether phone calls, emergency response, meetings, involvement of supervisory staff to solve an individual issue, the impact on time and dollars is extensive.

Not only does the Community Response Team provide an immediate response, the creation of the program and the relationships built between the partners involved, has created an environment of trust, responsiveness and collaboration."

- Anne Mosbach: DC Mental Health Initiative Coordinator

### **Case Management**

During the first months of the Community Response Team, the clinician role included responding to active 911 calls, triaging the emergency and then conducting a follow-up visit a few days later to ensure that the intervention was sustained and the individual was connected to appropriate services for ongoing care. It was not unusual that a client would have made some progress toward service connection by the time that the team followed up, but needed more assistance to get an appropriate set of services arranged for ongoing care.

To ensure that individuals were getting the help they needed, the Case Management Team was implemented in July 2017. A Masters Level clinician can receive referrals directly from the CRT clinician if they determine that an individual needs ongoing care coordination beyond the CRT's follow-up visit. The Case Management Team quickly expanded from one clinician to three to accommodate the referrals from the CRT for ongoing care coordination and connection to community based mental health services. The Case Management Team collects data on everyone they work with and a new, intuitive mobile integrated health system, pending implementation (Julota), will assist with care coordination, agency communication and analytics moving forward. This section provides a glance at the data case managers gather, and their perspective on providing case management for CRT clients.

#### January 8 – April 30

- Approximate distinct individuals: 163
- Case managers were never able to contact: 42
- Closed: 35
- **Why:** moved out of district, multiple attempts with no contact.

## What does case management look like for CRT?

Each referral to the Case Management Team is made directly from the CRT, and includes evaluation and assessment from the initial contact, as well as a care plan that was developed with the client which outlines goals for service connection. The case managers will often accompany the CRT on follow-up visits, to be introduced to the client and assume the client's care with a warm hand off.

Table 1 • Contact	t Method:	Success Rate
Phone	554	56.8%
CRT • Contact	6	50%
Email	163	93.7%
In-Person	43	79%
Multi-Method Contact	12	83%
Staffing	1	100%
Text	132	85.5%
Therapy Dog	5	100%

The case manager will evaluate each client's needs, barriers and abilities, add to the care plan, and work with the client on next steps. Some clients with more acute needs or more barriers to treatment may receive more frequent contact, or contact over a longer period, whereas other clients may need only one or two more contacts with a case manager to be connected to appropriate services in the community.

What does success look like? Once a client is connected to ongoing services, the case manager will continue to check in with the client as needed, to ensure the connection was made, that the

treatment is appropriate and that the client is working toward their goals for recovery. The case manager will ensure that the client is comfortable with their current services before stepping back. Clients are not 'closed' in the traditional sense, but case managers will step back from contact once the client has the services they need. The door to CRT and the Case Management Team is always open. If a client needs the support of either team, or both, they can respond to a client at any time. The Case Management Team does not report any recidivism (i.e. a client coming back through CRT on a 911 call and being re-referred to the Case Management Team).

Table 2 • Case Manager Contact With:		Success Rate
Client	609	65.5%
Parent/Guardian	252	76.5%
Spouse/Partner	10	90%
Specialist	6	83%
Case Manager	5	80%
Care Coordinator	6	66.7%
Resource	25	64%
Other	4	100%

163 people were referred for case management with 75% successful engagement.

## Based on case manager experience, what works and what doesn't work in the current system of care?

Case Managers report access to therapists as a system strength, when a client has private insurance. The availability to levels of psychiatric care beyond the hospital setting is also a system asset, for the privately insured. Connections with people in decision making roles, facilitated by the Mental Health Initiative members and the Coordinator, have been a significant help in coordination appropriate levels of care for each individual and establishing access to treatment.

Table 3 • Contact Purpose: *	
Home Safety Check	8
Create A Care Plan	6
Patient Navigation	175
Follow-Up	708
Care Plan Meeting	5
Other Meeting	4
Rx Inventory	1
Scheduled Appointment	7

<sup>\*</sup> Follow-ups are defined as a check-in to see how clients are doing. Patient navigation is logged if a client contacts a case manager with questions, or, if case managers assist clients with resources and support, and/or provide information.

Individuals insured by Medicaid have a harder time accessing behavioral health care. The Case Management Team reports appointments for mental health care being scheduled a month or more in the future. Transportation is a major issue for individuals trying to access care. Although the levels of psychiatric care are satisfactory, accessing these treatment modalities can be a barrier. For example, if an individual is appropriate for Intensive Outpatient Level of Care, but the care conflicts with work or school, the individual may have to make a choice between treatment and maintaining employment.

Out of all the individuals referred to case management 75% were engaged by the team. Forty-two (163), were never able to be reached (25%). The typical trend for CIT (data from 2016) is between 30% and 46% unable to contact or no response. CRT has improved engagement anywhere from 5% to 21% of the time using multiple engagement strategies.

- CIT data, 2016

#### Looking to the future for case management:

With the support of the Mental Health Initiative, the Case Management team will continue to assess community need and provide for their clients in an effective, holistic manner. As Julota is implemented, we will be analyzing outcomes for the Case

Management Team and will strive to continuously improve the process for our clients. Continuing to develop direct connections to ongoing treatment providers and standardized procedures, with the help of our partners, will streamline the ways in which the Case Management Team provides care.

Table 4 • Primary Referral / Service Type (Individual Cases)	
Out-Patient Mental Health	36
In-Patient / Residential Substance Use	3
Intensive Out-Patient (IOP)	4
Partial Hospitalization (PHP)	2
Community Based Services	27
Task Force	1
Wellspring	1
Social Community Groups	2
Primary Health Provider	3
In-Patient Mental Health	2
Medication Management	1
Set Up With Insurance	1
Total	83

The CRT has proven to be very successful in diverting people with mental illness or substance use disorder from county jails and hospital emergency departments and connecting those in need of treatment directly to services... this is a novel, results-oriented, prevention-focused and community based program that has been substantially successful."

- Jim Baroffio, PSY. D.: Contracted provider of clinical staff for the CRT

Table 5 • Secondary & Other Referral / Service Type (Individual Clients/Families)	
Medication Management	4
Women's Crisis Center	2
Family Therapy	3
Intensive Out-Patient	2
Community Based Services	2
Family/Peer Support group	2
Mom2Mom	1
To The Rescue	1
Dental	1
Out-Patient Mental Health	2
Intensive Case Management (AHN)	1
Scheduled Case Management Appointment	2
Victims Assistance/Advocacy	2
Welfare Check From CRT	1
Social/Community Groups	1
Adult Protective Services	2
Denver Springs	1
Legal Resources	1
Mental Health Navigator	1
Total	32

### **Looking to the Future**

#### JULOTA IMPLEMENTATION

The Community Response Team and other key agencies will begin managing data and communicating via Julota beginning in 2018. Julota is a mobile integrated health system that allows traditionally siloed

agencies to communicate with each other regarding pertinent client information. This platform should further a goal of the Mental Health Initiative: no one falls through the cracks.

#### SPECIALIZED CASE MANAGEMENT

A case manager with specialized skills to serve diverse populations with health, substance use disorders, and older adult mental health. unique needs. Skill areas may include youth and young adult mental

#### NO FAIL CASE MANAGEMENT NETWORK AND AN INTEGRATED MENTAL HEALTH SYSTEM

CRT has altered processes and closed gaps, and it has also shed light on gaps that still exist. Armed with this information, members of the Mental Health Initiative (DCMHI) and/or representatives from member agencies began designing a Case Management Network in 2018. The County and Centura Hospitals are co-leading this effort.

The purpose of this strategy is to expand the case management capability of the DCMHI's programming and to design a network that incorporates a larger, community-based approach, that includes partner agencies that already provide case management services. This network is being designed with "no fail or no wrong door" as a key principle. DCMHI has also contracted with a consultant to develop a model, in cooperation with DCMHI members, for an Integrated Mental Health System to serve Douglas County.

#### SETTING BENCHMARKS FOR PROGRAM IMPROVEMENT

CRT will use data from year one to set benchmarks for program success, and review processes for continuous program improvement.

Examples for outcome indicators include:

- Contact success rate for case management:
- For high utilizers, percent reduction in calls to 911;
- For high utilizers, percent reduction in ED visits;
- Explore and measure indicators for successful case management

#### ADDITIONAL LAW ENFORCEMENT PARTNERS

Co-responder teams will be available to all of Douglas County through the addition of law enforcement partners.

## **Appendix**

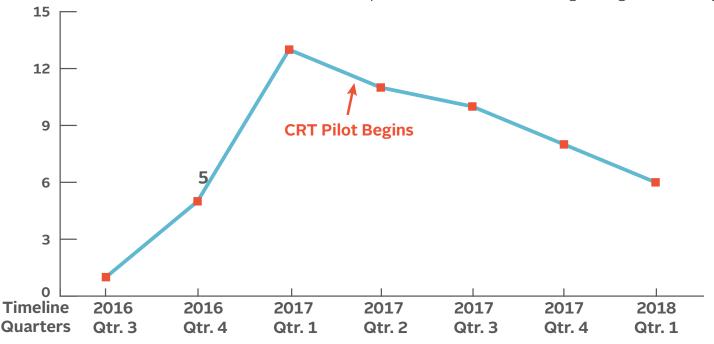
Additional information on the Community Response Team, high utilizers, law enforcement trends, mental health in emergency departments and cost analysis

### **Psychiatric Evaluations in Emergency Departments**

An issue raised within the Mental Health Initiative, and in other settings, has been the need to systematically address and reduce the number of psychiatric evaluations performed in emergency department settings. A new state law, effective June 1, 2018, SB18-207 INVOLUNTARY TRANSPORTATION HOLD (M-.05), intends to redirect possible M-1s to, "an outpatient mental health facility or other clinically appropriate facility," for an, "immediate screening," to determine if criteria is met for 72-hour treatment and evaluation. Emergency department data supplied by Centura was examined for trends in psychiatric evaluations in light of this need and given the recent legislative response. Additionally, CRT shares the goal of reducing the use of EDs for psychiatric evaluations, and

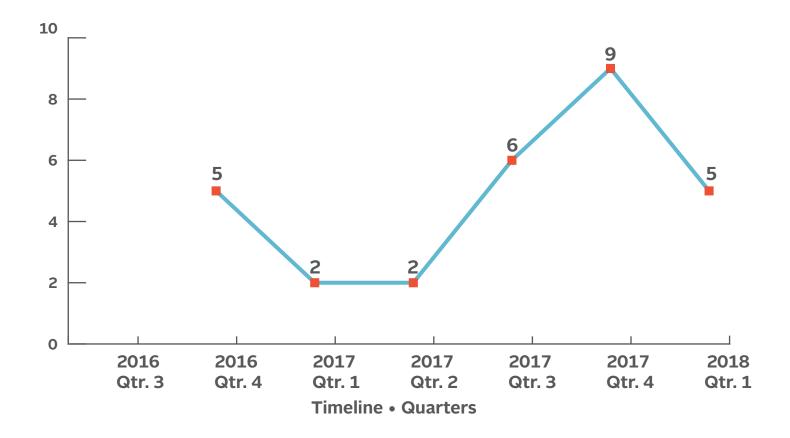
the holding of people whose primary issue is mental health. The alternative and solution is appropriate intervention delivered in appropriate settings. This data allows an opportunity to explore CRT impact on psychiatric evaluations performed in EDs prior to this new legislation.

ED data from May 2016 to March 2018 was used for this analysis. For all Centura hospitals in this dataset, the trend is irregular and does not point to any reliable decrease. However, if Castle Rock Adventist Hospital is isolated, the primary ED for Douglas County first responders when traditionally transporting a mental health hold, a steady decrease can be observed beginning in the first quarter of 2017 and continuing through CRT's first year.



### **Continued**

Another hospital in Douglas County, Parker Adventist. While not definitive, this may be a promising trend to watch as CRT continues, and as the new process for vetting 72-hour holds takes effect.



#### Limitations

- Codes used to indicate a psych hold in the ED may not be entered (missing data) or may be inconsistently recorded.
- One month of 2018 Quarter 1 is not included.
- Psychiatric evaluations for high utilizers with 6+ ED visits.

# Rate of Hospitalization on Key Calls for Service, and M-1 Trends

A sample of CRPD data on welfare check and suicidal subject calls for service (June 2017 - April 2018) was analyzed for outcomes of Mental Health Holds (M-1) that were transported to the ED. The data sample includes all welfare check and suicidal subject calls that CRT did not respond to in this time frame. This represents a control group where outcomes can be observed independent of CRT involvement.

Of all CRPD welfare check and suicidal subject calls that CRT did not respond to (1,361), 126 (9%) were transferred to an emergency department on a M-1. An additional 53 were taken to a hospital, but no M-1 was indicated.

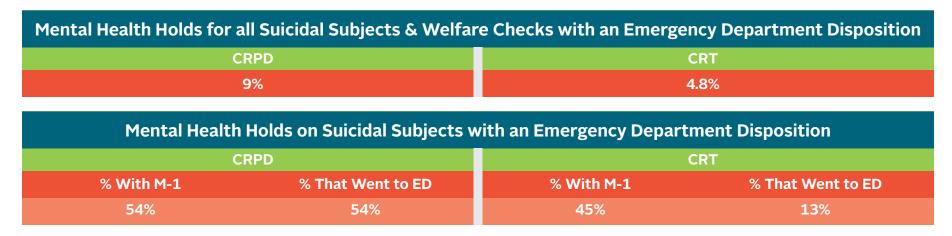
On the other hand, of all welfare check and suicidal subject calls which CRT did respond to in Castle Rock, about half (4.8%) were

transported to an ED.

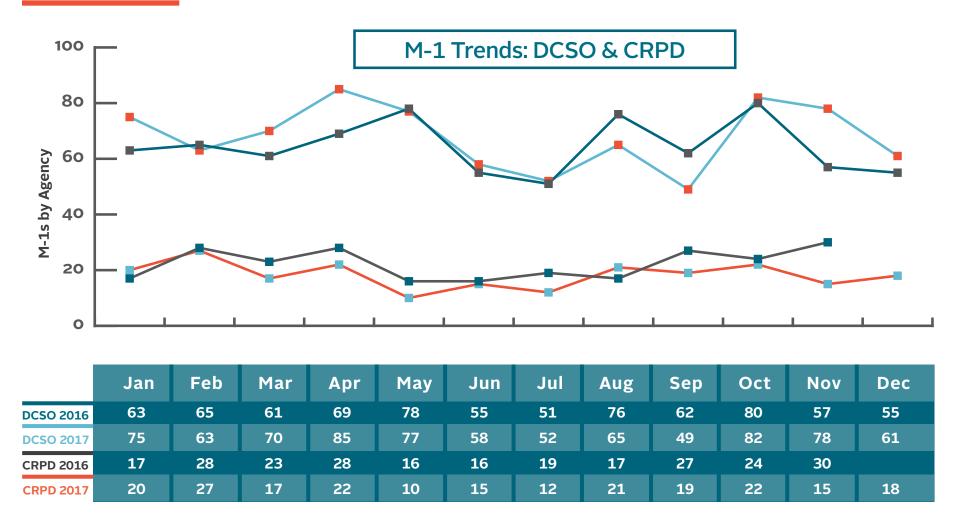
Of the 126 M-1s which CRPD wrote and subsequently transported to an ED, nearly 75% were for suicidal subjects.

In total, CRPD responded to 175 suicidal subjects. Ninety-five (54%) had an M-1 hold, and every suicidal subject with an M-1 hold (100%) went to an ED for evaluation. An additional 25 suicidal subjects (14%) were taken to an ED, but there was no indication of a M-1.

While on shift CRT responded to 68 suicidal subjects in the Town of Castle Rock. Forty-five percent had an M-1 hold, but only 13% were transported to an emergency department. CRT only utilizes the emergency department when there is a co-occurring medical issue that needs to be addressed prior to psychiatric placement.



## **Continued**



Trends in Mental Health Holds (M-1) seem to follow a similar pattern for law enforcement in the last two years, although cumulatively they are being written more often. In all situations represented in the graph above, a clinical evaluation to determine

the necessity of a M-1 is absent. Therefore, many of these M-1s could have resulted in an emergency department visit. CRT's ability to bypass the emergency department, if clinically safe to do so, is part of what makes the process valuable.

### **CRT Stories**

A severely mentally ill woman who was identified as a high utilizer had a breakthrough with the team. This is a woman who has had no insight into her mental illness and has lived in fear because of her delusions. She was afraid to take her trash out, could not care for her home, all due to her mental illness. She has a sister out of state who is willing to help care for her, but the client had to sell her home in Castle Rock, which could be impossible, based on her symptoms. Because of her interaction with the team and the rapport built, this client was hospitalized voluntarily-after admitting to the team that she was afraid that she might hurt her neighbors.

After an extended period of hospitalization, she is on medication and is in the process of selling her home. The law enforcement officers were even able to pool resources and a fellow officer, who is also a Boy Scout leader, offered his troop to go the house and clean up the woman's yard, which was in total disrepair because of years of neglect. With the intervention of CRT, this client has stabilized considerably, is medication compliant and is planning to move to be with family soon. She will have the proceeds from the sale of her home to help pay for her care.

\*All names have been changed to protect the privacy of the citizens involved.



## **CRT Stories Continued**

Mark\*, is a 22-year-old man, was born and raised in Douglas County. His mother describes him as a good kid, and very smart. When Mark began college four years ago, all was well. As time progressed, his family noticed a change in his behavior. He became paranoid and withdrawn. His personal care began to suffer, and his family began to worry. It wasn't long before they realized their fears were true, and Mark was having his first psychotic break. He was diagnosed with Paranoid Schizophrenia. After withdrawing from school, Mark moved home with his parents, where his symptoms continued to build. He isolated himself from his family, who became afraid of him. He was paranoid, aggressive and his family could not reach him. He began to have contact with police. His mother called on his behalf, in hopes that someone would be able to help her son. As many mothers would, Mark's mother combed over her insurance, local psychiatric hospitals and treatment centers and knew she would need support if she were to help her son. The CRT assessed Mark and determined that his symptoms were so severe, that if the support of his family was removed, Mark would not be able to care for himself. He was gravely disabled due to his mental illness. Mark was guickly hospitalized. The psychiatrists at the hospital agreed with the assessment of the CRT clinician and immediately began planning for Mark's future treatment. They realized, that the nature of his illness would not allow him to make informed decisions that were in his best interest. They knew he needed medication and lots of support. The CRT Deputy developed a very good relationship

with Mark's mother and began to offer support to her as well. The unique stress of caring for an adult child was taking its toll on Mark's mother. CRT Deputy began working with her to connect her with support services available to family members of individuals living with mental illness.

During his hospitalization, which was quite lengthy, Mark was placed on a Short-Term Certification, which allows providers to continue to treat Mark, if he displays symptoms that threaten his ability to care for himself. CRT then began to work with the Office of the County Attorney, and Marks' family, to petition the Douglas County Courts for an Involuntary Commitment to long term mental health treatment. A court agreed with the petition and placed Mark on an Involuntary Commitment, which also included a requirement from the courts that Mark take psychiatric medication for his symptoms. The Community Response Team continues to keep in contact with the family. Mark is doing very well; his psychotropic medications have minimized his symptoms. He is working with treatment providers and his family to become more independent, while knowing that his mental illness is something that he will have to manage for the rest of his life. CRT continues to check in on Mark and his family. He recently told the team that he is in the process of re-applying to college to finish his degree, with the support of his family and his treatment team.

<sup>\*</sup>All names have been changed to protect the privacy of the citizens involved.

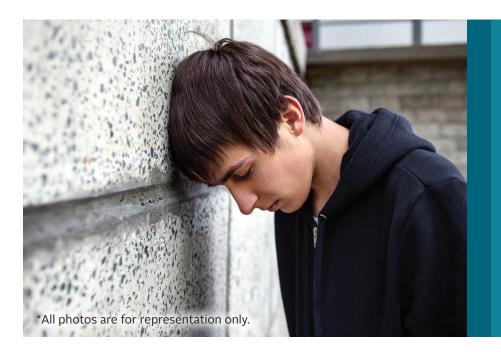
### **CRT Stories Continued**

Tyler\*, a 17-year-old high school student in Douglas County, was by all accounts, a normal kid. Living with his family, attending school, working a part time job. In the Fall of 2017, his family noticed that he seemed down, just "a bit blue", they said. He assured them that he was fine, but they continued to be concerned. One afternoon, Tyler's sister got a phone call from a friend. Tyler made a post on social media, stating that he was planning to take his own life. His sister rushed to the family home, up to the locked bathroom door, where she heard water running. Knowing Tyler was inside, his sister forced open the door, where she found her brother unresponsive on the floor. She made a panicked call to 911. The fire department and the Community Response Team were there within minutes. Tyler had ingested an unknown quantity of pills and was rushed to the emergency room, with CRT right behind them. Because of the medical issues that needed to be addressed immediately, the CRT was unable to talk with Tyler, but immediately began working with the distraught family at the hospital. The clinician and case manager for the team worked closely with hospital staff to ensure, after Tyler was medically stabilized, that he was discharged into the appropriate level of psychiatric care. Tyler was diligent. He was cooperative with the staff in the psychiatric placement that followed his hospitalization and was very committed to the treatment process. After being treated in an inpatient psychiatric setting, Tyler went home to be with his family. The Community Response Team case manager, in concert with treatment staff from

the inpatient psychiatric family recommended Tyler to a partial hospitalization program, which consists of 40 hours of treatment per week, and multiple contacts with a psychiatrist to ensure medication management is at the forefront of Tyler's recovery.

Tyler completed this intensive program and continues to work with his treatment team to ensure that he remains stable. He takes medication every day, is doing well in school, is working part time and has a new girlfriend. Tyler and his mother both remain in contact with the CRT to provide updates on his progress.

\*All names have been changed to protect the privacy of the citizens involved.



## The Original High Utilizer Sample

# Pre/Post Comparisons of first responder encounters and emergency department admission

The original concept for the Community Response Team was to address repeat use of first responder resources – a small number of people utilizing emergency resources at a high rate. Today, the CRT not only works with high utilizers, but with community members experiencing a mental health crisis, living with mental illness, living with intellectual or developmental disabilities and mental health issues, and those needing assistance accessing mental health services. For the high utilizer population, the goals were:

- 1. Reduce calls to first responders;
- 2. Avoid the emergency room and jail when appropriate if the nature of the call is primarily mental health;
- 3. Connect individuals with appropriate and sustainable mental health resources.

Goals two and three apply to all CRT encounters, regardless of a history of high utilization.

Castle Rock Fire Department (CRFD) and Castle Rock Police Department (CRPD) created a list of shared high utilizers, whom they had collectively encountered 10 or more times in the prior calendar year. This work was done in 2015/2016, so the call counts in the year prior to CRT implementation may not reach 10 for some of the originally identified high utilizers.

In the program planning stage, primarily CRPD data was analyzed to describe incident types associated with mental health calls and high utilizers, outcome of calls, law enforcement time spent on scene, and peak days and times for calls.

These identified high utilizers were tracked during the pilot stage (May 8 – September 1, 2017) and throughout program year one.

In this section, CRFD/CRPD high utilizers that received CRT intervention are examined.

The following information has been compared from the year prior to CRT (May 2016 to April 2017) to the first year of CRT (May 2017 – April 2018):

- · Calls to law enforcement
- Encounters with EMS and EMS transports to an emergency department (ED)
- Emergency department visits

## **Continued**

The story of high utilization of emergency services is complex, and numbers alone cannot account for the day to day, month to month changes that are lived by this small group. As such, contextual information is provided as appropriate to help frame the variation in data, from one service area to the next, for each person engaged by CRT. For example, for one person who had an increase in calls to law enforcement they also had a drastic decrease in their ED visits.

What cannot be captured by numbers was the creative solution behind this intervention, where the individual could call dispatch and speak to one officer which prevented a 911 response to the home, and possibly a transport to an ED.

The brief narratives in this section are important to understand the true impact of CRT, and the challenges that accompany working with a population with complex needs.

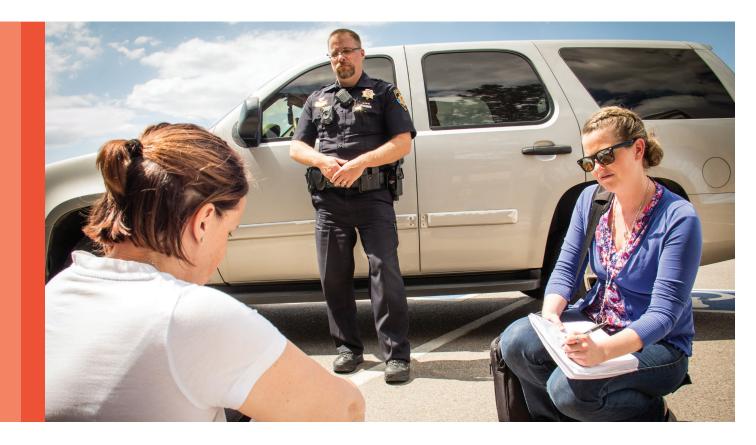


	Table 1: Calls to CRPD*					
	May 2016- Apr 2017	May 2017- Apr 2018	% Change	CRT Follow-Ups	CM Follow-Ups	Total Follow-Up
SUBJ 1	9	8	-11%	3	0	3
SUBJ 3	3	2	-33%	10	1	11
SUBJ 6	4	3	-25%	1	7	8
SUBJ 9	1	3	+66%	2	0	2
SUBJ 11	20	1	-95%	1	6	7
SUBJ 12	10	15	+50%	19	38	57
SUBJ 14	8	5	-37%	20	3	23
TOTAL	55	37				

	Table 2: Emergency Department Visits (Centura & Sky Ridge)					
	May 2016- Apr 2017	May 2017- Apr 2018	Change ?	CRT Follow-Ups	CM Follow-Ups	Total Follow-Up
SUBJ 1	12	7		3	0	3
SUBJ 3	1	11	<b>*</b>	10	1	11
SUBJ 6	0	0	N/A	1	7	8
SUBJ 9	0	10	_	2	0	2
SUBJ 11	0	0	N/A	1	6	7
SUBJ 12	10	1	<b>~</b>	19	38	57
SUBJ 14	0	0	N/A	20	3	23
TOTAL	23	29				111

<sup>\*</sup> Centura data only available for people with 6 or more visits. Sky Ridge visits are based on one-time ED report. Anything less than 6 was filled in with the help of CRFD.

<sup>\*\*</sup> Because this data source only captured individuals with 6 or more visits in a given calendar year, percent change is not calculated for this category. An entry of "O" could mean that someone has 5 or fewer visits, therefore percent change would not be accurate.

	Table 3: CFRD Encounters			CRFD Transports	CRFD Transports
	May 2016- Apr 2017	May 2017- Apr 2018	% Change	May 2016- Apr 2017	May 2017- Apr 2018
SUBJ 1	18	16	-11%	10	14
SUBJ 3	11	11	-33%	6	11
SUBJ 6	0	0	-25%	0	0
SUBJ 9	0	2	+66%	0	2
SUBJ 11	0	0	-95%	0	0
SUBJ 12	17	10	+50%	4	0
SUBJ 14	0	1	-37%	0	0
TOTAL	46	40		20	27

<sup>\*</sup>Due to EMS protocol for transport and chief complaints, CRT intervention was not an option in all cases. Some clients experienced declining health in CRT year one, resulting in an increase in transports to an ED. In another circumstance (Subject 1) CRT, first responders, DHS and the Office of the County Attorney coordinated on a joint strategy. After this intervention CRFD went for 6 months without any contact. This will hopefully reflect a dramatic decrease for the next evaluation period.

#### **Contextual Information on High Utilizers**

**Subject 1** had an increase in transports to an ED at the beginning of CRT year one, until a group of Mental Health Initiative organization members developed a strategy for collective action. After that intervention, her encounters with first responders dropped off.

**Subject 3** experienced declining health over the last year, therefore trips to the emergency department increased substantially.

**Subject 12** historically had regular contact with first responders, and often called 911 for someone to talk to. As a part of a creative solution, the individual was allowed to call dispatch, who would transfer the call to a designated officer in lieu of dispatching a vehicle. Although this individual's calls to CRPD increased over the last year, their visits to the emergency department decreased.

#### **Limitations:**

- Small sample size
- ED data set is limited to individuals with 6 or more visits in a year. Therefore, people with fewer than
  six visits will not be visible. However, this could also mean that they have fallen below the threshold
  of frequent ED use. Anything less than six was filled in with the help of CRFD.

## **Using Call Data to Identify High Utilizers**

#### Creating a Baseline for 2018/2019

Directly after the end of the pilot period in Castle Rock (September 2017), CRT made a controlled expansion into the county. This meant that CRT responded to some calls outside of Castle Rock, primarily in the surrounding area, but a team was not designated to respond specifically to county calls. By January 2018, the two teams that jointly staffed a 40 hour per week response, broke into two full-time teams. Currently, one team is staffed by a Castle Rock Police Officer and a mental health clinician, and the other is staffed by a Douglas County Sheriff's Deputy and a clinician. The Castle Rock team remains largely within Castle Rock, but can respond to calls in the county if needed. The same is true for the team assigned to the county at large.

The pilot program had a clearly defined list of high utilizers known to CRPD and CRFD who were tracked throughout year one for changes in behavior.

Information gathered at the end of year one will serve as a guide as CRT moves into its second year in Douglas County. The following table offers a sample of DCSO identified high utilizers, and individuals believed to be at risk of becoming high utilizers.

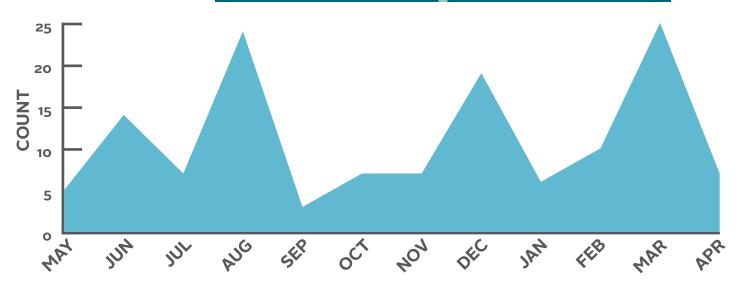
This list is an example of how historical call data can be used to identify high utilizers. It should be considered as a starting point

or baseline, an example of community members who may receive CRT intervention in the next year, and who may be followed for changes in high utilizing behavior.

#### Context

- Identified at the end of program year one;
- For some, frequent law enforcement contact escalated only recently towards the end of CRT year one;
- Some were identified based on recent escalating behavior, so changes in their use of emergency systems must be tracked into the future;
- Opportunity for CRT to continue to intervene on escalating behavior, curb frequent contact with law enforcement, and make an impact in the lives of these individuals.

Table 4: CALLS TO DCSO		
	May 2017- Apr 2018	
SUBJ 1	38	
SUBJ 2	26	
SUBJ 3	7	
SUBJ 4	9	
SUBJ 5	7	
SUBJ 6	7	
SUBJ 7	17	
SUBJ 8	2	
SUBJ 9	18	
SUBJ 10	0	
SUBJ 11	4	
TOTAL	134	



17-18 Calls

## **CRT Cost Savings Analysis**

## **Emergency Medical Services**

Crisis Evaluation & Mental Health Holds

## **Emergency Departments**

**Detentions** 

## **Emergency Medical Services**

Each CRT encounter is unique. As such, similar responses and outcomes have been grouped to improve the accuracy and specificity of cost calculation. All CRT encounters have been considered. The following groupings are included in this analysis:

#### **Group 1A:**

**EMS Called for Point of Care Testing + Recorded Emergency Department Save** 

#### **Group 1B:**

**EMS Called for Point of Care Testing + Transport to Emergency Department** 

#### **Group 1C:**

No Point of Care Testing + Recorded Emergency Department Save

#### **Group 1D:**

No Point of Care Testing + Transport to Emergency Department The figures used to calculate cost and cost savings for Fire/EMS include personnel, vehicle, average time on scene, evaluation, basic life support, and transport (if indicated). If a data field for point of care testing was left blank (i.e., to indicate whether EMS was called to perform POC), it was assumed that EMS was not called. Additional assumptions and rationale for the cost savings of each group are included below each table.

\*Not all encounters are captured in this analysis. The events in this analysis are based on CRT contact outcomes that either involve Point of Care Testing, recorded emergency department saves, or transport to an emergency department.

## **EMS Group 1A**

## **EMS Called for Point of Care Testing + CRT Recorded Emergency Department Save**

For this group, the Community Response Team dispatched EMS to perform the agreed upon in-field medical clearance for CRT (Point of Care testing). The results, either direct placement to an

appropriate level of care or treating the subject in place, deemed transport to the emergency department unnecessary. Therefore, CRT recorded these events as, "ED Saves."

Based on Castle Rock Fire Dept. Rates Analysis Dates: May 8, 2017 – April 30, 2018 • Percent of CRT call for service			Community Response Team ice responses in this category: 8.5%
Category		Base	Avoided
Medic Unit/Engine Transport to El	D <b>)</b>	\$1,038.00	
Personnel • Engine x3 people • Medic unit x2 people	•	\$65.96	39
Cost of POC testing	<b>→</b>	Approx. \$69.48	
Difference	<b>•</b>	\$1,034.00	
Cost Savings to Fire/EMS BEFORE REIMBURSEMENT	\$40,344.72		
Total Cost Savings to Fire/EMS AFTER REIMBURSEMENT (48%)	\$19,365.46		

- 1. Cost to respond and transport \$1,038.00.
- 2. Cost of personnel for an average of 30 minutes on scene \$65.96
- 3. Cost of differential response (POC) \$52.48 (1/3 of the cost of the response w/o transport: \$157.46) + \$17.00 for personnel = \$69.48
- 4. The cost savings is the difference between the traditional cost to respond and transport, and the cost of the differential response.
- 5. A transport would have occurred had CRT not been present.
- 6. The average reimbursement rate for all insurance types including no insurance is 48%.

## **EMS Group 1B**

# **EMS Called for Point of Care Testing + Transport to Emergency Department**

For this group, the CRT called EMS to perform the agreed upon in-field medical clearance, and it was either *clinically necessary* for individuals to be transported to the emergency department, or

an individual's insurance type, intoxication level or combativeness deemed it appropriate to be taken to an ED.

	POC Testing and ED Save Analysis Based on Castle Rock Fire Dept. Rates		
Analysis Dates: May 8, 2017 – Apr	il 30, 2018 • Percent of CRT	call for service responses in this category: 7%	
Category	Base	Transported	
Medic Unit/Engine Transport to E	D > \$1,038.00		
Personnel • Engine x3 people • Medic unit x2 people	<b>\$65.96</b>	33	
Total Cost Savings to Fire/EMS BEFORE REIMBURSEMENT	\$1,615.68		
Total Cost Savings to Fire/EMS AFTER REIMBURSEMENT (48%)		\$775.53	

- 1. It is less expensive for a transport to occur in these events because a full rig/medic unit response was not dispatched. Therefore, there are three fewer personnel on scene.
- 2. Cost of personnel for an average of 30 minutes on scene \$65.96
- 3. The cost savings is 3/5 of the personnel that would typically be on scene in a traditional response (\$48.96 for each encounter).

## **EMS Group 1C**

## No Point of Care Testing + CRT Recorded Emergency Department Save

Group 1c groups events where EMS was not called for point of care testing, and CRT believed that, under past protocol and given the current circumstances, the individual would likely have been taken to the emergency department. This may involve calls where CRT wrote a Mental Health Hold and was able to perform a

direct admission to care, bypassing the emergency department for medical clearance, or, encounters where an individual historically may have been taken to the ED for non-emergency issues due to a lack of options for responding law enforcement.

	No POC Testing and ED Save Analysis Based on Castle Rock Fire Dept. Rates	
Analysis Dates: May 8, 2017 – Apr	l 30, 2018 • Percent of CRT response	onses in this category: 22%
Category	Base	Avoided
Medic Unit/Engine Transport to E	\$1,038.00	
Personnel • Engine x3 people • Medic unit x2 people	<b>\$65.96</b>	101
Cost Savings to Fire/EMS BEFORE REIMBURSEMENT		\$111,499.96
Cost Savings to Fire/EMS AFTER REIMBURSEMENT		\$53,519.98

- 1. All calls would have resulted in transport to an emergency department if CRT had not been present for intervention.
- 2. The cost savings is the full cost to triage and transport an individual from the scene to the emergency department (\$1,038 for each encounter), plus personnel.
- 3. Cost of personnel for an average of 30 minutes on scene \$65.96

## **EMS Group 1D**

## No Point of Care Testing + Transport to Emergency Department

This grouping includes all calls where a transport to the emergency department occurred, and CRT did not dispatch EMS for in-field medical clearance (point of care testing). Many of these calls

were for youth who were transported to Children's. Their intake procedures involve passing through an ED for medical clearance.

No POC Testing and ED Save Based on Castle Rock Fire Dept. R	Community Response Team		
Analysis Dates: May 8, 2017 – Apr	il 30, 2018 • Percent of CRT responses in th	nis category: 5%	
Category	Base	Transported	
Medic Unit/Engine Transport to E	D <b>\$</b> 1,038.00		
Personnel • Engine x3 people • Medic unit x2 people	<b>\$65.96</b>	22	
Cost Savings to Fire/EMS BEFORE REIMBURSEMENT	\$24,287.12		
Cost Savings to Fire/EMS AFTER REIMBURSEMENT (48%)	\$11,657.81		

- 1. Based on the encounter description written by the on-scene clinician, it is assumed that 911 calls in this group were transported to the emergency department by the Community Response Team.
- 2. Although each encounter resulted in an ED visit, CRT performed the transport rather than EMS. Therefore, the cost savings is the full cost if EMS had triaged and transported an individual from the scene to the emergency department (\$1,038 for each encounter).

### **Crisis Evaluation & Mental Health Holds**

A critical component of the Community Response Team's success is their ability to write mental health holds in the field, supported by a clinical crisis assessment. This action allows CRT and their clients to bypass an emergency department when clinically necessary in favor of direct placement at an appropriate level of care. The Community Response Team provides assessment, transport, counsel, and in some cases case management/ care navigation.

Depending on the organization, the cost of an assessment is based either on the time required to complete and review the evaluation, or a flat rate. At both AllHealth Network and Highlands Behavioral Health, on-call crisis evaluators bill, on average, \$250.00 per crisis

evaluation. The cost of an evaluation is based on the overall time and expertise required to complete the assessment, and not on the tool used.

CRT performs the Columbia-Suicide Severity Rating Scale (C-SSRS) for each mental health hold written and suicidal subject, but may use questions from additional tools to support their decision. Over the course of a year, from May 8, 2017 through April 30, 2018, the CRT completed 151 evaluations in the context of a suicidal subject or mental health hold. At a rate of \$250.00 per evaluation, the cost avoided by the consumer for this service is **\$37,750**.

Consumer Cost Avoidance Based on AllHealth Network Ra	Community Response Team		
Category	Base	Assessments	
Mental Health Holds / M-1: 76	\$250.00	151	
Suicidal Subjects no M-1: 75	Ψ230.00	131	
Total Cost Avoidance to the Consumer	\$37,750.00		

- 1. Based on CRT report, an evaluation would take place for any suicidal subject, and/or to determine necessity for a Mental Health Hold at any contact.
- 2. More evaluations may have been performed. All Mental Health Holds and Suicidal Subjects have been accounted for.

## **Emergency Department Cost Benefit**

According to Behavioral Health Response Worldwide, "patients who present with mental health [behavioral health] issues account for between 7% and 10% of visits to emergency departments across the country." This is reflected in a dataset provided by Centura which covers one calendar year from October 2015 to October 2016. Ten percent of codes were for behavioral health related visits. The same was true for the second Centura data set which captured May 2016 to March 2018: 9.5% of codes were for behavioral health visits.

Patients stayed anywhere from zero to 32 days, with an average stay of 0.6 days. Those who were admitted and remained for a longer period (5 or more days) were almost all for alcohol dependence and withdrawal. Short stays for the behavioral health sample suggest that most individuals do not need to be in an emergency department setting. In the Centura sample, 91% of behavioral health codes did not stay for a full day.

In the same Centura sample for visits coded as behavioral health, the average cost for services was \$16,915. The median cost was \$9,314.

The cost benefit is somewhat limited due to the parameters of the hospital data. This dataset only captures individuals with 6 or more visits over the look-back period of approximately 2.5 years. So, for individuals with fewer than six visits (Subjects 9 and 13), and for those that dropped below six visits in a calendar year, the cost is unknown.

Savings fluctuate because some high utilizers had a decrease in ED utilization while others had an increase. However, for some significant utilizers, Subjects 1 and 12, their numbers went down. In fact, CRFD did not transport Subject 12 at all during program year 1, and there is no record of this individual in the ED dataset. CRFD did not transport Subject 1 in the last 6 months of CRT year one.

Emergency Department Save ( Based on the median cost of behavior	Community Response Team		
	ts based on Centura data from May 2016 t	o March 2018	
Category	egory ED Saves Median Cost		
Emergency Department Saves (Determined by CRT and/or Fire/EMS)	142	\$9314.00	
Estimated cost avoidance if all 142 individuals had been transported to an emergency department BEFORE REIMBURSEMENT	\$1,322,588.00		
Estimated cost avoidance if all 142 individuals had been transported to an emergency department AFTER REIMBURSEMENT*	\$925,811.60 - \$991,941.00		

<sup>\*</sup>Reimbursement rate: 25 – 30%

## **Douglas County Detentions**

A key indicator of success for the Community Response Team program is diverting individuals from jail for minor charges if the underlying cause is behavioral health. Law enforcement staff use their knowledge of traditional procedure as well as judgment of events on scene to determine if a "jail save" is warranted. For each CRT encounter, law enforcement staff indicates if the event was likely a jail save given the circumstances. During the pilot and the remainder of program year one, CRT never initiated an arrest.

Diverting an individual from jail avoids many administrative hoops, saves detentions staff time, and is starting to change the type of inmate coming through DCSO's doors, according to DCSO detentions staff. Administrative avoidances include intake, physical screening, and an inmate boarding per day. Additional avoidances for mental health inmates may include suicide watch, detox protocols, psychiatric nurse visits, and psychiatric medications.

CRT indicated 59 jail saves from May 8, 2017 to April 30, 2018. However, six out of the 59 indicated saves were not included

(three were minors, and the narratives for the other two did not support a jail save). Each contact was reviewed to improve the accuracy of the savings amount applied to the jail save. Therefore, rates may vary from save to save.

The base rate for detox protocol includes vital sign monitoring (average; twice per day), a med pass by a licensed practical nurse (average; twice per day), a physician visit (average), and housing cost per day (average).

The base rate for psych protocol includes a med pass by a licensed practical nurse (average; twice per day), a licensed professional counselor visit, a psychiatric visit, and housing cost per day (average).

Finally, the base rate for an inmate without detox or psych protocol includes intake, a medical screen and housing cost per day (average)

<b>Jail Save Cost Analysis</b> Based on rates for daily housing, psyc	Community Response Team		
Analysis Dates: May 8, 2017 – April 3	0, 2018		
Category	Assessments	Base Rate	
Encounters determined to be psych related	29	\$247.38	
Encounters determined to be detox related	9	\$308.29	
Encounters determined to be general baseline	15	\$123.05	
Total cost savings if each person stayed for ONE DAY	\$11,822.83		
Total cost savings for the average length of stay (14 days)	\$165,519.62		

#### **Assumptions:**

- 1. Psych and detox protocols were assigned if the CRT encounter narrative indicated likelihood of either being needed. Medications may be included in some cases, which would increase the total from the base rate.
- 2. The average length of stay in Douglas County detentions is 14 days not including court ordered fingerprints, which could potentially make the stay much longer. Other length of stay assumptions:
  - a. All jail saves are within the 14-day average length of stay
  - b. No one had court ordered fingerprints
  - c. No one, or very few, people bonded out in a few days

#### **Intangibles:**

- 1. Staff shifting to accommodate suicide watches (checks every 15 minutes per person on suicide watch). Additional staff is not brought on to do this, but it does take away from staff's normal daily routine.
- 2. Cost of being legally represented
- 3. Psychological costs to the individual arrested

## Estimated Cost Avoidance for Fire/EMS, EDs and Detentions \$1,703,605

### **Cost of the Community Response Team**

Administrative Staff: \$34,961 (annually)

Clinical Staff: \$230,000 (annually)

Law Enforcement: \$196,207 (in-kind, annually)

Team vehicles: \$89,500 (in-kind)

Local Fire/EMS support: Estimated \$5,000+ (in-kind annually)

\$555,668

## Lexicon

**Active call** – Interchangeable with, "call for service." A call that comes through dispatch which CRT responds to.

AHN WIC - AllHealth Network Walk-in Clinic

**AUMH WIC –** Aurora Mental Health Center Walk-in Clinic

**CRAHC** – Castle Rock Adventist Hospital

**Disposition –** The outcome of a law enforcement or CRT encounter.

**Follow-up** – An interaction that occurs after an active call for service. With the permission of the individual after contact on a 911 call for service, CRT will follow-up to assess needs.

Peak View (COS) - Peak View Colorado Springs

**Placement -** Placements refer to non-emergency settings for mental health or substance use needs.

**Radio Dispatch** – When CRT is requested to respond to an active 911 call by dispatch.

**Referral** – CRT accepts referrals from law enforcement or first responder agencies to contact an individual. Various incident types may be associated with a referral, for example, welfare check. CRT aims to respond to a referral within three days of the receipt date (depending on pending threat assessments or other circumstances).

**Self-Dispatch** – When CRT decides to respond to an active 911 call based on Computer Aided Dispatch (CAD) notes, or based on what they hear over the radio.

**Treated in Place** – A disposition that can occur on an active 911 call, follow-up or referral. If the best outcome is for the individual to be treated in place (remain at home or wherever CRT makes contact), the clinician can provide brief solution focused techniques to stabilize the individual.

**Unit to Unit –** When a law enforcement unit who has responded to a 911 call requests CRT assistance.













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