STAR Program Evaluation

JANUARY 08, 2021
Executive Summary

On November 6, 2018, the Caring for Denver Foundation ballot initiative passed with 70% approval creating a fund to support initiatives combatting mental health and substance misuse in the City and County of Denver. Of the money raised through a 0.25% sales tax increase, generating roughly $35 million annually, at least 10% is allocated for specific public safety services and training related to mental health and substance misuse services. And there was significant need in the community for greater resources. Heading into 2020, Denver Police data showed mental health-related calls for service were up 17% over the three-year average. Once the ballot measure passed, City agencies and community partners began the work of expanding the co-responder program and developing the Case Manager Hub in the Denver Police Department and laying the groundwork for a successful alternative response team, Support Team Assisted Response (STAR). A team of individuals from the City and non-profits traveled to Eugene, Oregon in June 2019 to learn more about the White Bird Clinic’s CAHOOTS program; the community-based response the STAR program would be developed after. This trip reinforced the need to develop a program that included government and non-profit partnerships to ensure not only an appropriate response to individuals in need but to build a network of support services.

STAR is a community response program made possible through collaboration between the Caring for Denver Foundation, Denver Police Department, Mental Health Center of Denver (MHCD), Denver Health Paramedic Division, Denver 911, and community supports and resources. STAR provides person-centric mobile crisis response to community members who are experiencing problems related to mental health, depression, poverty, homelessness, and/or substance abuse issues. Prior to the development of STAR, the Denver 911 system was limited to traditional paths for addressing the more than one million calls for service in the City and County of Denver. Calls into Denver 911 for health and safety issues were routed to one of two paths; either the criminal justice system or the health/hospital system. STAR created a third path into the service connection system, directing certain calls to more appropriate support providers while redirecting them away from a costly emergency department visit or introducing the possibility of jail. Lastly, having a third path for appropriate call types increases efficiencies and cost-saving while allowing for traditional police, fire, and emergency medical services to be redirected towards higher acuity calls that require their training and experience.

During the first 6 months of the STAR program, the team responded to 748 calls for service and based on STAR-eligible call data, this alternative response could reduce Denver Police calls for service by approximately 2.8%.

Pilot Area and Nature Codes

After a review of like programs, member of the community and city agencies determined the most appropriate call types to be handled by the STAR pilot program as well as a geographical focus where data identified the greatest need for this type of alternative response. The area included:

- Entirety of police district 6
- Precinct 123 in police district 1
- Precinct 211 in police district 2
- The Broadway corridor in police district 3

Identifying the appropriate call types within the broader nature codes was essential to the success of the program. Within the approved nature codes, there should be no evidence based on the call received through Denver 911 of criminal activity, disturbance, weapons, threats, violence, injuries, or serious medical needs. Additionally, the STAR van is not designed to respond to violent situations or life-threatening emergencies. The seven nature codes approved for inclusion in the pilot were:

- Assist
- Intoxicated Person
- Suicidal Series
- Welfare Check
The STAR van was staffed Monday through Friday from 10 am until 6 pm. The decision to staff the van during this timeframe was based on historical data for the identified call types as well as the availability of providers to allow for the greatest opportunity for warm handoffs. Lastly, it was – and continues to be – the Denver 911 emergency call taker’s responsibility to properly identify a call as appropriate for STAR and dispatch the resource.

Data Overview

The information provided in this report needs to be viewed in the context with which the program was launched. The City and community’s initial plan was to introduce the STAR program towards the end of the first quarter in 2020 but in February it became apparent that the world was dealing with a global pandemic for the first time in a little over a century. Because of concerns around the safety of the community and our providers, the program was temporarily put on hold until we could address these issues. However, as the pandemic continued to cause significant impacts to the health of our residents and the economy, we began to see greater inequities and decreased services provided in the Denver metro area. To help address the deficit in service providers for those in need, we launched the STAR program on June 1, 2020. The data from our six-month project reflects calls from one specific area of the city with the greatest identified need and was primarily during a period when the Denver Police Department sees the greatest number of calls for service. Additionally, there were significant demonstrations, activism, and even rioting during the pilot period. All these factors are important to note, as the data during a time of less uncertainty or in a different area of the city would likely result in different types of calls, services needed, and cultural considerations.

At the conclusion of the six-month pilot period (June 1, 2020 – November 30, 2020), STAR responded to 748 incidents or 28.76 per week or 5.75 per 8-hour shift. Additionally, starting on August 16, 2020, Denver 911 began flagging calls for service that would be appropriate for STAR even if the call did not qualify for the pilot because of location, time of day, or availability of the van. During the entire pilot period, 2,546 calls for service were identified as STAR-eligible during a period in which DPD responded to 92,482 incidents, accounting for 2.8% of overall call load. A breakdown of the 2,546 calls by geography and into specific problem types and can be seen below in Exhibit 1 and Exhibit 2 respectively.
Exhibit 1: STAR Response Geography

STAR Response Density: 1Jun2020 - 2Dec2020

STAR Flagged with Other Agency Response Excluding Police District 6: 1Jun2020 - 28Oct2020
The STAR unit can be assigned to a call for service through three general mechanisms:

1. 911 call takers flagging incoming calls and directly dispatching the STAR unit – *This accounted for 313 (41.8%) incidents*
2. Uniformed response independently requests STAR to respond on scene – *This accounted for 260 (34.8%) incidents*
3. STAR self-initiates a response in the field – *This accounted for 175 (23.4%) of incidents*

STAR's operational footprint has been concentrated in DPD District 6 (see: figure 1) with a few incidents outside of this area, most notably around the overflow shelter at 4655 N Humboldt St. The median STAR response required 24.65 minutes of on-scene personnel time to resolve the call compared to 34.08 minutes for a traditional response.

Outside of the information contained in the 911 CAD database, most of the case-specific information was collected and retained by the Mental Health Center of Denver. This was intentional as we did not want to include potential mental or physical health-related information in our law enforcement databases. Their data included 243 unique individuals from 261 contacts with a relatively even adult age distribution. The demographic information captured in this data, displayed in *Exhibit 3* shows that the individuals contacted were 59% male, were primarily White (32%), though a large percentage – 35% – were listed as unknown race, and included 5% identifying as a Veteran. Most individuals contacted (68%) were experiencing homelessness. As seen in *Exhibit 4*, Clinicians identified a mental health condition as a primary concern in 61% of those served with 33% having co-occurring conditions; it should be noted the primary concern of a mental health condition was based on an initial assessment by the clinician and may not reflect a diagnosis. The most commonly diagnosed mental health conditions identified by MHCD mental health records were schizoaffective disorder (26%), bipolar disorder (19%), and major depressive disorder (14%). In addition to specialized care, another benefit of the STAR program is the ability to transport individuals to needed services.
Based on MHCD data, the STAR van provided transportation to 41% of its calls for service where an individual’s information was recorded. Of those incidents (107), the most common locations were a shelter or other homeless services (30), the walk-in crisis center (24), or a hospital (18).

One of the goals of the STAR program was to divert individuals away from the criminal justice system and utilize a trauma-informed approach to individuals who may benefit from the unique education and expertise of the mental health clinician and EMT. An important benchmark for this is whether the STAR team was able to resolve the issue and if an individual was introduced to the criminal justice system as a result of the contact. In 748 calls handled by the STAR

Exhibit 3: Assessed Demographic Information of Individuals Encountered

Exhibit 4: Primary Concerns of Individuals Encountered

<table>
<thead>
<tr>
<th>Primary Concern</th>
<th>Question</th>
<th>Suspected Co-Occurring</th>
<th>Environmental</th>
<th>Physical Health</th>
<th>DX Previous Given</th>
<th>Age Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health</td>
<td></td>
<td>87</td>
<td>20</td>
<td>18</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Suspected Co-Occurring</td>
<td></td>
<td>87</td>
<td>20</td>
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<td>Age Related</td>
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Top 10 Primary Diagnoses

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Schizoaffective Disorder</td>
<td>26%</td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td>19%</td>
</tr>
<tr>
<td>Major Depressive Disorder</td>
<td>14%</td>
</tr>
<tr>
<td>Mood Disorder</td>
<td>7%</td>
</tr>
<tr>
<td>Post-traumatic stress disorder, unspecified</td>
<td>7%</td>
</tr>
<tr>
<td>Schizophrenia Disorder</td>
<td>7%</td>
</tr>
<tr>
<td>Anxiety Disorder</td>
<td>5%</td>
</tr>
<tr>
<td>Depressive Disorder NOS</td>
<td>5%</td>
</tr>
<tr>
<td>Other Psychotic Disorder</td>
<td>5%</td>
</tr>
<tr>
<td>Alcohol Related Disorder</td>
<td>2%</td>
</tr>
</tbody>
</table>
van during the pilot program, no calls required the assistance of the Denver Police Department and no individuals were arrested.

Lessons Learned

The pilot program allowed the team to identify a number of lessons we feel are important to note here in addition to the guidance we have provided to a significant number of cities around the world looking to build a similar program.

1. It is important to properly identify the call types for the STAR team to handle and to construct decision trees that govern their assignment to those calls. Without the collaboration between the Denver Department of Public Safety (EDoS), Denver Police Department (DPD), Denver 911, Denver Health Paramedic Division, and Mental Health Center of Denver this would not have been as successful as it was. Other cities with similar alternative responses, like Eugene’s CAHOOTS program, report needing to call for police assistance a small minority of the time. Continuing to monitor this aspect is important to ensure the STAR program is responding to the most appropriate calls, providing trauma-informed care, and creating cost savings for the City and County of Denver through a lower profile response to these 911 calls.

2. There is a significant need for available supplies to support members of our community. The STAR team quickly identified the need to be able to provide cleaning products, food, clothing, and blankets to individuals they encountered. The ability of the team to provide these items was enhanced by donations through Word of Thanks, an initiative started by Kyle Clark at 9 News. In future budget considerations, in addition to increasing access to services, funding should be identified to provide these items.

3. The data shows a need for the STAR program beyond the current pilot capacity and the majority of appropriate calls for service are in the downtown corridor. This is important to understand as the community and City discuss future growth of the program because in order for this program to be good stewards of public and grant funding, we must make data informed decisions based on need. It would be ill-advised to put a resource in an area where it would be underutilized while another area of the city cannot keep up with the call volume.

4. Many service providers were off-line or their services significantly modified as a result of the pandemic but there continues to be a need for additional locations for the STAR program to provide warm hand-offs.

5. To better serve all individuals, future STAR vans should be outfitted with wheelchair lifts. This will allow for greater service to persons who are wheelchair-bound and unable to ambulate.

Recommendation for Future Growth and Research

Data from the six-month pilot period not only show no concerning issues but suggest the STAR program is accomplishing its stated goals. While this is promising, we must be mindful that the data is from a small window of time, in one area of the city, during the busiest months of the year for call volume, and co-occurring with a global pandemic. A larger dataset will allow more sophisticated analysis of the extent to which STAR is operating with fidelity, reducing utilization of the 911 system for individuals who are contacted by STAR, and responding more efficiently to calls for service than a traditional 911 response. Based on the data thus far and the financial support identified in Mayor Hancock’s 2021 budget, we can make the following recommendations for growth.

Future evaluations should consider the following lines of inquiry, as more data become available:

1. A better understanding of populations served. There were a number of calls where the STAR team spoke with groups instead of specific persons, individuals who were not interested in engaging with the team, or interactions that were not clinically significant resulting in limited demographic data. Having a better understanding of the populations served will ensure the STAR program is culturally relevant and
responsive. It is understood that the collection of data can be viewed from multiple perspectives but having a greater knowledge of the interactions even if names and demographic information is not collected will still provide a greater picture of work and potential gaps in service.

2. A longitudinal study to understand long-term outcomes. Specifically, future evaluations should focus on an individual’s interactions with the criminal justice system post intervention and fidelity to established treatment programs as a result of their initial assessment by the STAR team.

3. An understanding of the economic impact of this alternative program. Exploring the cost-benefit analysis to the city compared to a traditional criminal justice approach will provide a clearer picture of the return on investment for the City and our community partners. Additionally, this line of inquiry could explore the impact to community providers who are part of or associated with the STAR program.

The City and County of Denver has identified approximately $1.4 million in the general fund to support the STAR program in 2021. If we use the current budget estimates for the cost of purchasing and outfitting additional vans and hiring additional medics and mental health clinicians to staff the expanded units, we believe the City could move forward with the purchase of four vans and six teams (one medic and one clinician) to staff alternating schedules seven days a week. This will allow for coverage during the times of day when there would be the call load to support the units based on our pilot data and the hours with which most providers would be available for a warm hand-off of individuals. This recommendation would also allow for the hiring of a full-time supervisor to oversee the program and provide leadership as this alternative response continues to grow. While it would be ideal to have a dedicated van in each district of the city, the estimated call load does not currently support this plan. However, this does not mean that service would not be possible in all areas of the city. To address both the realities of the data and the need to have this service available to all who call Denver home, a response model similar to Denver Health’s paramedic system where units rotate around the city to address anticipated call volume at various times of the day could work for this program instead of a district-specific resource. Lastly, we recognize that there are other alternatives to responsibly use public funding to provide this service, including the support of additional community providers to address gaps in services.

Ultimately, the success of STAR will be measured by resolving crises and connecting people to services. The Denver Police Department, under the leadership of Chief Paul M. Pazen, has put a significant emphasis on creating alternatives to a traditional criminal justice approach. These initiatives include the expansion of the co-responder program, the development of a case manager hub, participating in multiple diversion programs for low level offenses, and building up communities through partnerships with non-profits exemplified by the Together with Westwood initiative. The STAR program has been successful based on the metrics and program goals we evaluated. However, the STAR program will continue to be successful only if the City can continue to engage and build with the community.

### Evaluation Team Members

The evaluation of this program was made possible by the work of the following individuals in alphabetical order:

- Brian Blick – Denver 911
- Vinnie Cervantes – DASHR
- Blake Christianson – Office of the Executive Director of Safety
- W. Andrew Dameron – Denver 911
- Terese Howard – Denver Homeless Out Loud
- Matthew Lunn – Denver Police
- Zach McDade – Office of the Executive Director of Safety
- Christopher Quinn – Denver Police
- Lisa Raville – Harm Reduction Action Center
- Chris Richardson – Mental Health Center of Denver
- Carleigh Sailon – Mental Health Center of Denver
- Jennifer Schwartz – Denver 911
- Tracesea Slater – Mental Health Center of Denver
- Janet van der Laak – Community Advocate