The Tucson Mental Health Support Team (MHST) Model: A prevention focused approach to crisis and public safety

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ABSTRACT

While Crisis Intervention Team (CIT) programs provide law enforcement with tools to respond to mental health crisis, they are focused on the emergency response. The Tucson Mental Health Support Team (MHST) model was developed following a mass casualty event in order to prevent crises and associated threats to public safety via earlier intervention. Through the creation of dedicated teams and close collaboration with the mental health system, the Tucson Police Department and Pima County Sheriff's Office MHST program has achieved zero uses of force while serving civil commitment transport orders, a significant decrease in SWAT deployments to suicide-related calls, and case examples of averted threats to public safety. This model can be implemented along with CIT and Mental Health First Aid programs, adding to the continuum of solutions available to law enforcement for addressing mental health needs in the communities they serve.

INTRODUCTION

On January 8, 2011, Jared Loughner opened fire into a crowded supermarket parking lot in Tucson, Arizona. The attack left six dead and thirteen wounded, including U.S. Representative Gabrielle Giffords, his intended target. The resulting investigation would reveal that Loughner had been displaying signs of

deteriorating mental health but did not receive needed evaluation and treatment, despite multiple encounters with school officials, campus police, and local law enforcement.

The Tucson community reacted initially with grief, followed by shock and disbelief. Tucson already had in place many programs and practices that communities today are still struggling to implement in order to avoid such tragedies. At the time, Arizona's mental health system ranked seventh in the nation in per capita spending [8] and had been steadily improving since a 1981 lawsuit required the state to provide a full continuum of services to people with serious mental illness [12]. Its involuntary commitment laws are among the strongest on the books [18]. Tucson area law enforcement agencies had built one of the oldest Crisis Intervention Team (CIT) programs in the nation, with both the Pima County Sheriff's Office (PCSO) and Tucson Police Department (TPD) having already trained over a quarter of their officers and deputies in accordance with the Memphis model [7]. Yet, something was missing. Although CIT provided the tools to help officers respond to a person in behavioral health crisis, it seemed that with additional efforts, some crises might be prevented altogether.

To address this need, both agencies enhanced their CIT programs via the addition of prevention-focused Mental Health Support

Teams (MHST). PCSO created the first MHST in the mid 2013 and TPD MHST was created in early 2014. While the two departments work closely together, this report focuses on TPD outcome data.

METHODS

Defining the Problem

The investigation following the January 8 shooting identified a need to prevent people with mental health needs from "falling through the cracks" in the future. CIT had ensured that officers responded appropriately to individuals in crisis and transported those who posed an imminent danger to self or others to safety. However, the ability to intervene prior to the point of crisis or imminent danger was lacking. Two target populations were identified:

1) Individuals already involved in the civil commitment process. In Arizona, enforcement is required to transport individuals to a mental health facility when a non-emergent application for court-ordered evaluation has been filed with the court or when individuals under Involuntary Outpatient Commitment or Assisted Outpatient Treatment (AOT) have had their outpatient status revoked due to treatment non-adherence or clinical decompensation. (These transports are distinct from emergency transports initiated by field officers during a mental health crisis when there is an imminent risk of harm.) Investigations performed at both departments revealed that these orders were treated like any other routine warrant and assigned based on geographical location without regard to whether the assigned officers and deputies had received CIT training. Oftentimes the arrival of a uniformed officer, even if CIT trained, escalated the situation. If the individual wasn't home or had relocated to another precinct, the order wasn't prioritized for followup. Although not tracked at the time, it was estimated that only 30% were served before the court's 14-day expiration period. For those that were served, the use of personnel lacking mental health training or interest in this work resulted in preventable uses of force. In addition, people who would not come out of their homes were often considered barricaded individuals requiring Special Weapons and Tactics (SWAT) team deployment.

2) Individuals unconnected or under-connected to the mental health system that had not yet reached the point of crisis or imminent danger. Both agencies discovered that they were receiving calls categorized as domestic violence, public nuisance, vagrancy, etc. in which the underlying issue was a mental health need. Without a centralized tracking mechanism, patterns of escalating behavior could not be identified and targeted for proactive intervention. Furthermore, if a mental health need was recognized, patrol officers and deputies did not always know what to do. While CIT helped officers respond appropriately in a crisis when there was clearly an imminent risk of harm to self or others, more advanced knowledge of complex civil commitment statutes and close relationships with mental health professionals were needed to proactively address sub-threshold cases.

Creation of the MHST Model

While CIT focuses on crisis response, the MHST teams were developed in order to prevent crises via early identification and engagement. The Support/Transport function focuses on individuals in the civil commitment system. The Investigative component focuses underconnected/sub-crisis population by analyzing low level "nuisance" cases that would otherwise be ignored in order to identify at-risk individuals. Both seek to provide linkage before the situation further escalates to a crisis.

When building the initial teams, their leaders looked for veteran officers, with CIT training and experience in the civil system, and without histories of discipline problems, excessive force, or customer service complaints. An oral exam was developed to ensure an understanding of

the population to be served. All of the initially selected officers and deputies had family members with serious mental illness. Currently, TPD MHST is comprised of one sergeant, seven officers, and three detectives. The officers focus on the Transport function while the detectives perform the Investigative function.

Transport Function

The Transport function of MHST focuses on the transportation of individuals involved in the civil commitment process, specifically non-emergent applications for admission for court ordered evaluation and revocation of outpatient status for individuals on AOT. All transport orders were assigned to MHST as a centralized point of accountability. Core elements include:

- All orders served by highly trained personnel with an interest in doing this work.
- Setting a goal of 100% order completion to encourage officers to be proactive in finding individuals and making sure they don't fall through the cracks.
- Centralized tracking of all orders to allow the team to prioritize based on potential for escalating danger to self or others.
- Serving orders in plainclothes and unmarked cars to avoid the stigma and potential for behavioral escalation that can result from the sight of uniformed officers.
- Developing relationships and rapport with frequently served individuals, resulting in less uses of force.
- A cultural shift in the approach to barricaded individuals, relying on rapport and de-escalation before considering SWAT.
- Disseminating information about active orders and recommended interventions so that field officers/deputies who happened to come into contact with the individual would have the information needed to serve the order safely.

Investigation Function

The Investigation function focused on individuals who needed to be connected or re-connected to the behavioral health system before the situation escalated into a crisis or need for criminal justice involvement. Investigative functions focused on two types of cases:

1) Non-criminal cases that would not normally be investigated but may, if analyzed for patterns, indicate a mental health need (e.g. so-called "nuisance" complaints such as vagrancy, suspicious persons, frequent callers, etc.). Mental health circumstance codes were added to flag cases for review (e.g. a field officer determines that no crime was committed but "something doesn't look right."). If a mental health need was identified, detectives began looking for potential supports in the community with whom to collaborate – families, co-workers, prior case managers if the person has disengaged from services, etc.

2) Cases with a potential criminal component or threat to public safety (e.g. danger to others). If there was an ongoing criminal investigation, MHST employed a two-pronged approach in which MHST detectives work with both the mental health and criminal justice systems to facilitate an outcome that meets the needs of the individual while also addressing public safety concerns. Justice-system diversion is pursued whenever possible.

For high-risk individuals, MHST flagged the individual's name file, sent out alerts, and included information to assist officers/deputies who happened to encounter the individual in the field (e.g. specific triggers that may worsen agitation).

Collaboration with behavioral health partners

Information sharing: As a non-HIPAA covered entity, MHST focused on sharing information with health providers rather than receiving it [13]. MHST officers are able to convey important

information that clinicians may not otherwise have (e.g., living conditions, neighborhood factors, access to firearms, patterns of prior 911 calls or law enforcement contacts that did not result in behavioral health services, etc.). Initial barriers due to privacy concerns and mistrust were overcome as MHST convinced providers of their intent to facilitate connection to treatment and prevent arrest whenever possible. Some patients have developed strong rapport with MHST team members and signed consent for their participation in treatment team meetings.

Crisis Response Center:

A crisis receiving facility easily accessible to law enforcement is a core element of successful prebooking jail diversion efforts [16]. For this reason, the Crisis Response Center (CRC) was built in late 2011 with Pima County bond funds and provides psychiatric triage, urgent care, and 23-hour observation services for 12,000 adults and 2,400 children annually. It is managed by Connections Health Solutions and located within the Banner University Medical Center South Campus as part of a complex that houses a crisis call center, civil commitment court, inpatient psychiatric facility, and hospital emergency department. As the law enforcement receiving facility, the CRC has a strict no-refusal policy for enforcement, no behavioral health exclusionary criteria, and accepts over 400 mental health transports per month with a median officer turnaround time of less than 10minutes [3]. MHST communicates information helpful to CRC clinicians who must make a determination regarding disposition within 24 hours. Conversely, CRC psychiatrists are available 24/7 for consultation to MHST.

Crisis Mobile Teams:

Tucson and surrounding Pima County is serviced by 12 Crisis Mobile Teams (CMTs), dispatched by a 24/7 crisis call center. CMTs are available to collaborate with MHST and field officers/deputies in assessment, stabilization, connection to services, and welfare/follow-up checks. Wait times are a potential deterrent to law enforcement's utilization of mobile crisis services [15]. To mitigate this risk, the call center created a dedicated law enforcement line that connects directly to supervisor, and CMTs are held to a performance standard of 30 minutes from dispatch to arrival, half that of the standard for community-initiated dispatches. In addition, a pilot project pairing a CMT clinician with MHST detectives has been implemented.

Leadership collaborations:

MHST represents law enforcement in stakeholder forums and operational workgroups, collaborating closely with leaders from various system partners, including the Regional Behavioral Health Authority, CRC, CMTs, behavioral health providers, and advocacy organizations.

OUTCOMES

Mental Health Transport Orders

In 2015, TPD served 308 civil commitment transport orders without a single use-of-force. Approximately 90% of the issued orders resulted in transport to treatment, compared to the estimated rate of 30% prior to the implementation of MHST. (Data shown includes non-emergent civil commitment transport orders only. In addition to the data shown in Figure 1, TPD provides an additional 4,000 emergency transports annually.)

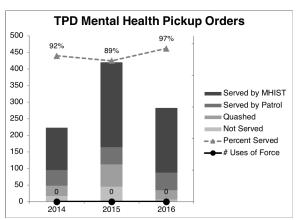


Figure 1: Civil Commitment Pickup Orders: Service Rate and Use of Force. Bar graphs depict the numbers of civil commitment transport orders successfully served by the Tucson Police Department, broken down by orders served by MHST officers versus served by patrol officers, which was made possible by MHST's inclusion of the outstanding order in the individual's name file. The remaining orders were verified quashed (rescinded) by the mental health provider or not-served. Most of the not-served were determined to be transient and had left the jurisdiction. The dotted line depicts the service rate (number successfully served prior to the 14-day expiration date divided by the total number of orders received, excluding those which were verified as quashed/cancelled). The solid line depicts the number of uses of force while serving a transport order. Use of force is defined as any of the following: officer involved shooting, Taser, impact weapon, chemical weapon, control hold, other less lethal weapon. Prior to the creation of MHST, data related to mental health orders was not tracked and thus baseline data is not available.

SWAT calls for suicidal barricades

TPD SWAT deployments for "suicidal barricaded subject" significantly decreased from 14 per year 2012-2013 to 2.3 per year 2014-2016 (Two Counts Poisson Distribution Test [10], Z = 3.77, 95% CI, p < 0.0001) at an average cost savings of \$15,000 per incident.

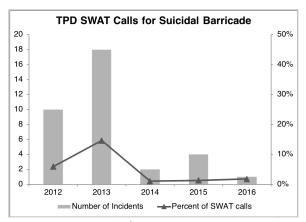


Figure 2: SWAT Calls for Suicidal Barricade. Calls to SWAT to respond to a barricaded subject reported to be suicidal.

Mental Health Investigations

In 2015, TPD reviewed 533 cases, 127 of which were assigned for further investigation. In Q1-2 2016 TPD cases increased to 2,961 (295 assigned) after moving from a referral-based system to routine review of circumstance codes. Case examples of threats to public safety (e.g. planned mass casualty events at a church or place of employment) that were averted without use-of-force or criminal court involvement are shown in Table 1.

DISCUSSION

The Tucson MHST model moves beyond crisis response towards a more proactive and preventative approach to mental health crises and public safety. This model achieves its primary goal of connecting people to needed mental health services as evidenced by a 90% completion rate for civil commitment transport orders and case examples in which potential threats to public safety were averted by instead connecting individuals to needed mental health services. Risk to both law enforcement and service recipients was improved with uses of force approaching zero. In addition, the decreased use of SWAT for suicide-related calls resulted in financial savings of approximately \$10,000 for each averted incident.

Table 1. Mental Health Investigation Representative Case Examples

Mr. J is a Marine veteran and an alternative student at a local community college. While using a computer at a campus library, he became frustrated when the librarian questioned whether he was an actual student. College police were summoned and escorted him off campus. Over the following weeks and months, Mr. J became fixated on this event and took his complaint to various officials, culminating in an email to his Congressman, threatening to "go Loughner." MHST was activated and engaged with him with the help of a Crisis Mobile Team. He was transported to the Crisis Response Center and found to be suffering from severe PTSD. He was re-connected to services at the VA, where he had not been for over a year. MHST detectives collaborated with the court and criminal proceedings were avoided. MHST continues to regularly check on Mr. J, who remains engaged in treatment and is attending classes at the college.

Mrs. P. had been recently fired from her job. Neighbors called 911 reporting various disturbances. MHST reached out to her family and discovered she was (legally) purchasing firearms and making statements that she believed her co-workers had conspired to get her fired. With the help of a Crisis Mobile Team, MHST safely facilitated her transport to the Crisis Response Center for psychiatric evaluation. In part due to the information MHST collected, the CRC staff determined she was paranoid due to new onset bipolar disorder and had been planning a mass shooting at her former workplace. She was admitted for treatment via the civil commitment process. A mass casualty was averted without the need for criminal proceedings, and she is prohibited from possessing firearms per ARS 13-3101(A)(7).

Law Enforcement's Role in Civil Commitment

Law enforcement is often tasked with transporting individuals under civil commitment orders, yet their role in these processes has not been well studied. The MHST Transport function demonstrates that with a dedicated team and single point of accountability, transport order completion rates are high, uses of force are low, and SWAT deployments are decreased. This strategy becomes increasingly relevant as more localities adopt or strengthen implementations. AOT can be an effective intervention for a subset of patients when accompanied by processes that ensure adequate treatment [17]. Recently enacted federal legislation has appropriated funding to implement new AOT programs [1] and potentially more incentives may be realized with the passage of pending Congressional bills with AOT provisions [2].

Preventing Criminal Justice Involvement and Critical Incidents

People with mental illness are more likely to be victims rather than perpetrators of violent acts [4]. Nevertheless there are high-profile cases in which people with untreated illness do commit violent acts, and people with mental illness may represent a quarter of officer-involved shooting fatalities [9]. These events result in tragic consequences for all involved and further perpetuate the stereotypes of mentally ill people as inherently dangerous [10]. Furthermore, the disproportionate representation of people with mental illness in the criminal justice system has been identified as a public health crisis [6].

The MHST Investigative function takes a unique approach to these problems. While law enforcement's role in preventing or mitigating criminal justice involvement is typically limited to pre-booking diversion at the point of the emergency response [11], MHST moves "upstream" with interventions designed to prevent the situation from developing to the point of requiring an emergency response. By

investigating "nuisance" cases typically marginalized by law enforcement, MHST is often able to recognize emerging patterns and facilitate connection with the behavioral health system before the situation escalates to a crisis or more serious criminal act. In many cases, criminal activity is avoided altogether. When criminal charges are necessary, MHST remains involved, collaborating with both the courts and behavioral health system to assist both in making decisions that best balance the individual's treatment needs and public safety. In addition to case examples of averted crises, critical incidents such as suicide-related SWAT deployments have decreased.

Relationship to CIT and Mental Health First Aid

MHST is not intended to be a replacement for CIT but rather an additional component in a continuum of solutions. The Tucson Model supports the recommendations of CIT International and the National Council for Behavioral Health that all officers/deputies

participate in an eight-hour Mental Health First Aid (MHFA) for Public Safety course to ensure a baseline level of competence throughout the organization. Then, a selective process identifies a critical mass officers/deputies for CIT training in order to ensure a safe and effective crisis response [5].

Finally, MHST enhances this continuum with the addition of highly specialized MHST teams that focus on the prevention of behavioral health crises and related threats to public safety (Figure 3). In the Tucson Model, MHST is responsible for organizing and facilitating both the CIT and MHFA training programs. Currently, over 70% of each agency's first responders and 911 call takers are CIT trained. MHFA has been incorporated into the training academy so that 100% of each agency receive this foundational mental health training. In addition, MHST serves as a regional training center of excellence, providing training to thirteen urban and rural law enforcement agencies across southern Arizona.



Figure 3: The Tucson MHST Training Model. All officers receive basic training in Mental Health First Aid (MHFA). Select officers receive intermediate Crisis Intervention Training (CIT) and focus on response to behavioral health crises. A specialized MHST team receives advanced training and focuses proactive recognition, investigation, and prevention of potential behavioral health crisis and associated threats to public safety. MHST team members serve as a resource for both CIT and non-CIT officers/deputies in the field who have questions or need help with complex cases. MHST also supports the modern paradigm of community policing [14], as team members forge positive relationships with citizen, advocacy, business, behavioral health, and criminal justice system stakeholders.

Conclusions

The Mental Health Investigative Support Team model was developed to be scalable and exportable to any law enforcement agency, regardless of size. Law Enforcement agencies seeking to establish a team should consider the following:

Compliance with the International Association of Chiefs of Police One Mind Campaign, which includes collaboration with behavioral health providers, a policy for interacting with persons in crisis, 100 percent of personnel trained in Mental Health First Aid, and at least 20 percent of personnel trained in the Memphis Model Crisis Intervention Team Training.

- A mental health team should be comprised of Officers, Detectives, and Sergeants, and should be dedicated, not designated, i.e. personnel should not be responding to regular patrol calls for service, or have an investigative case load outside of mental health incidents.
- Strong partnership with organizations such as the National Alliance on Mental Illness, Crisis Intervention Training International, and the National Council on Behavioral Health.
- Partnership and engagement with community mental health professionals and access to crisis services (crisis centers, psychiatric urgent care, walk-in clinics, etc.) as an alternative to incarceration.

In summary, the Tucson MHST model adds to the continuum of solutions available for law enforcement to address the behavioral health needs of the community it serves and suggests that earlier intervention mitigates adverse outcomes of behavioral health crises including use-of-force, criminal justice involvement, and threats to public safety.

REFERENCES

- 1 Protecting Access to Medicare Act. Pub.L. 113–93. 2014.
- 2 2016. Helping Families in Mental Health Crisis Act. H.R.2646.
- Balfour, M. E., K. Tanner, P. J. Jurica, R. Rhoads, and C. A. Carson. 2015. "Crisis Reliability Indicators Supporting Emergency Services (CRISES): A Framework for Developing Performance Measures for Behavioral Health Crisis and Psychiatric Emergency Programs." Community Mental Health Journal 52 (1):1-9. doi: 10.1007/s10597-015-9954-5.
- 4 Choe, J. Y., L. A. Teplin, and K. M. Abram. 2008. "Perpetration of violence, violent victimization, and severe mental illness: balancing public health concerns." *Psychiatr Serv* 59 (2):153-64. doi: 10.1176/appi.ps.59.2.153.
- 5 CIT International. 2016. Mental Health First Aid or CIT: What Should Law Enforcement Do? .
- 6 Dumont, D. M., B. Brockmann, S. Dickman, N. Alexander, and J. D. Rich. 2012. "Public health and the epidemic of incarceration." *Annu Rev Public Health* 33:325-39. doi: 10.1146/annurev-publhealth-031811-124614.
- 7 Dupont, R., S. Cochran, and S. Pillsbury. 2007. Crisis Intervention Team Core Elements.
- Governing. 2010. "Mental Health Spending: State Agency Totals for FY2010." Accessed June 11, 2016. http://www.governing.com/gov-data/health/mental-health-spending-by-state.html.
- 9 Lowery, W., K. Kindy, K.L. Alexander, J. Tate, J. Jenkins, and S. Rich. 2015. "Distraught People, Deadly Results." The Washington Post, June 30, 2015. http://www.washingtonpost.com/sf/investigative/20 15/06/30/distraught-people-deadly-results/.
- Metzl, J. M., and K. T. MacLeish. 2015. "Mental illness, mass shootings, and the politics of American firearms." Am J Public Health 105 (2):240-9. doi: 10.2105/AJPH.2014.302242.
- 11 Munetz, M. R., and P. A. Griffin. 2006. "Use of the Sequential Intercept Model as an approach to decriminalization of people with serious mental illness." *Psychiatr Serv* 57 (4):544-9. doi: 10.1176/ps.2006.57.4.544.
- 12 NAMI. 2009. National Alliance on Mental Illness Grading the States Report.
- 13 Patrila, J., and H. Fader-Towe. 2010. Information Sharing in Criminal Justice-Mental Health Collaborations: Working with HIPAA and Other Privacy Laws. Council of State Governments Justice Center.
- 14 President's Task Force on 21st Century Policing. 2015. Final Report of the President's Task Force on 21st Century Policing. Washington, D.C.: Office of Community Oriented Policing Services.
- Steadman, H. J., M. W. Deane, R. Borum, and J. P. Morrissey. 2000. "Comparing outcomes of major models of police responses to mental health

- emergencies." *Psychiatr Serv* 51 (5):645-9. doi: 10.1176/appi.ps.51.5.645.
- 16 Steadman, H. J., K. A. Stainbrook, P. Griffin, J. Draine, R. Dupont, and C. Horey. 2001. "A specialized crisis response site as a core element of police-based diversion programs." *Psychiatr Serv* 52 (2):219-22. doi: 10.1176/appi.ps.52.2.219.
- 17 Swartz, M.S., S.K. Hoge, D.A. Pinals, E. Lee, L. Lee, M. Sidor, T. Bell, Ford. E., and R.S. Johnson. 2015. Resource Document on Involuntary Outpatient Committment and Related Programs of Assisted Outpatient Treatment. American Psychiatric Association.
- 18 Treatment Advocacy Center. 2016. "Report card on quality and use of Arizona laws." Accessed June 11, 2016. http://tacreports.org/state-survey/arizona.

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Additional Resources

Learning Site

The Tucson Police Department is part of the Department of Justice Mental Health – Law Enforcement Learning Site Program. Contact Dr. Balfour or Sgt. Winsky for information about the possibility of securing federal funding for a learning visit to Tucson to experience the program in action.

Arizona Crisis System Demonstration Video

http://bit.ly/crisisnowvideo