

Assessing the Impact of Mobile Crisis Teams: A Review of Research

Academic Training to Inform Police Responses

Best Practice Guide



Prepared by the IACP / UC Center for Police Research and Policy

University of Cincinnati

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Best Practice Guide on Responses to People with Behavioral Health Conditions or Developmental Disabilities:

A Review of Research on First Responder Models

The role of law enforcement in the United States has been characterized by a delicate balance between providing public safety, serving the community, and enforcing laws. Inherent in this work are public expectations for law enforcement officers to fill many roles, such as problem-solving, community relations, public health, and social work. Among their responsibilities, police officers have been increasingly tasked with responding to crisis situations, including those incidents involving people with behavioral health (BH) conditions and/or intellectual and developmental disabilities (IDD). These situations can present significant challenges for community members and officers, highlighting the need for clear policy direction and training in the law enforcement community to effectively serve these populations. The need for training and resources to facilitate effective responses also applies to routine activities and interactions between police officers and individuals with BH conditions and IDD.

Supported by the Bureau of Justice Assistance, researchers from the University of Cincinnati, in collaboration with Policy Research Associates, The Arc of the United States' National Center on Criminal Justice and Disability, and the International Association of Chiefs of Police, are working to address the need for additional training and resources to enhance police encounters with individuals with BH conditions and IDD. Specifically, the [Academic Training to Inform Police Responses](#), is being developed to raise awareness in the policing community about the nature and needs of people living with BH conditions and/or IDD and to facilitate the use of evidence-based and best practices in police responses to these individuals.

As part of this work, the research team is gathering the available evidence documenting the effectiveness of various police, behavioral health, disability, and community responses to incidents involving individuals experiencing behavioral health crises. Collectively, this work will be assembled into a larger "Best Practice Guide" for crisis response, presenting chapters on existing response models, such as crisis intervention teams, co-responder teams, law enforcement assisted diversion, mobile crisis teams, disability response, EMS -based services, and more. The writing following this introduction was prepared as a single chapter to be included within the larger comprehensive guide. This chapter provides a review of the available research examining the implementation and impact of mobile crisis teams across communities. The review of this research is preceded by a list of key terms.

KEY TERMS

Behavioral health	A state of mental/emotional being and/or choices and actions that affect wellness.
Behavioral health condition	An umbrella term for substance use disorders, addiction, and mental health conditions.
Continuum of care	An integrated system of care that guides and tracks a person over time through a comprehensive array of health services appropriate to the individual's need. A continuum of care may include prevention, early intervention, treatment, continuing care, and recovery support.
Co-occurring disabilities	The presence of more than one disability, which may include disabilities across different categories, such as physical disabilities, sensory disabilities, and developmental disabilities.
Developmental disability	Physical and/or mental impairments that begin before age 22, are likely to continue indefinitely, and result in substantial functional limitations in at least three of the following key areas: self-care (dressing, bathing, eating, and other daily tasks learning); walking/moving around; self-direction; independent living; economic self-sufficiency; and language.
Disability	A physical or mental impairment, a history of such impairment, or, regarded as such, an impairment that substantially limits a major life activity.
Health care system	The World Health Organization defines a health care system as (1) all activities whose primary purpose is to promote, restore, and/or maintain health; and (2) the people, institutions, and resources, arranged together in accordance with established policies, to improve the health of the population they serve. The health care system is made up of diverse health care organizations ranging from primary care to specialty substance use disorder treatment (including residential and outpatient settings), mental health care, infectious disease clinics, school clinics, community health centers, hospitals, emergency departments, and others.
Intellectual disability	A disability characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. This disability originates before the age of 18.
Mental health condition	Patterns in moods, thinking, or behaviors that can affect daily functioning.
Mobile crisis team	A response model involving teams of behavioral health practitioners who can respond to a person experiencing a crisis.
Promising practice	A specific activity or process used that has an emerging or limited research base supporting its effectiveness. Promising practices are not considered "evidence-based" until additional evaluation research is completed to clarify short- and long-term outcomes and impact on groups going through the activity or process.
Service provider	Any individual (practitioner) or entity (provider) engaged in the delivery of services or aid and who is legally authorized to do so by the state in which the individual or entity delivers the services.

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EXECUTIVE SUMMARY

Mobile crisis teams (MCTs), also known as mobile crisis units or in-home crisis services, are a mental-health based response comprised of an interdisciplinary team of mental health professionals who rapidly respond to behavioral health crisis incidents in the community with a goal to provide the least restrictive and most effective response for an individual in crisis. The overarching goals of this response model include mitigating pressure on the mental health system [e.g., by reducing unnecessary emergency department (ED) visits and hospital admissions] and facilitating individuals' connection to services. MCTs operate within the mental health system and typically do not involve the formal integration of police officers within the mobile crisis team, though police involvement is not uncommon. Supporters of MCTs highlight the potential for increased connection to mental health services following a crisis situation as the MCT model is embedded within the larger mental health system. Furthermore, with the potential to reduce emergency department and hospital admissions and reduce law enforcement time spent on crisis calls, supporters highlight the cost effectiveness of the model. Overall, the limited available research suggests MCTs may have value as a component of a larger system of crisis response. Importantly, however, while it is likely that MCTs interact with individuals with IDD, our understanding of the frequency of these interactions and the impact of MCT services on individuals with IDD is limited.

This document provides a review of the available research on the implementation and impact of MCTs. This review is organized into the following four sections. First, Section II describes the implementation of the mobile crisis team model. Next, Section III outlines the research on the impact of mobile crisis teams on increasing connection to services, reducing pressure on the mental health system, and promoting cost effectiveness. Then, Section IV describes stakeholders' perceptions of mobile crisis teams, including benefits and challenges. Finally, Section V provides an overall discussion of available research and implications for research and practice.

Definition and Implementation of the Mobile Crisis Team Model

MCTs have been in operation since the 1960s in the United States following the deinstitutionalization movement and calls for an alternative community-based crisis response to provide services for individuals with behavioral health issues. The overall goals of this response model include providing crisis services in the community (e.g., at an individual's home or school), providing services to individuals who may be hard to reach and might not otherwise receive services, and reducing unnecessary hospitalizations and ED referrals by resolving situations in the community if possible. To accomplish these goals, mobile crisis teams offer (1) triage and screening to determine the most appropriate response; (2) assessments; (3) de-escalation and crisis resolution; (4) peer support; (5) coordination with behavioral health and medical services as appropriate; and (6) crisis planning and follow-up.

Mobile crisis teams can vary across several key programmatic elements, including staffing (e.g., the incorporation of peer and family support specialists), availability, target populations (e.g.,

children and adolescents), integration with other behavioral health services, and operating agency (e.g., community-based agency, hospital-based agency). This variation can be a result of community preferences, as well as community resource constraints. Despite this variation in program implementation, the overarching goals of responding to crisis situations in the community and promoting crisis de-escalation in the least restrictive environment largely are the same across different communities.

The Impact of Mobile Crisis Teams

Although mobile crisis teams have been in operation since the 1960s, there have been limited evaluations assessing the effectiveness of this approach. Specifically, research generally is lacking in terms of methodological rigor. Furthermore, the existing research does not examine the impact of MCTs on individuals with IDD. Despite these limitations and with a few exceptions, research generally suggests mobile crisis teams can increase connection to community-based services following a crisis incident, mitigate pressure on the mental health system by reducing unnecessary ED visits/hospital admissions, and promote cost effectiveness. The findings from this research are presented below.

Increasing Connection to Services: Following a crisis incident, enhancing an individual's connection to services is a primary goal of mobile crisis teams as a way to provide support and presumably prevent future crisis situations. As MCTs are embedded within the mental health system, it is presumed that MCTs can result in the improved use and the timelier use of services. Preliminary research supports this assumption and suggests that MCTs are effective in connecting individuals to care. A few more rigorous studies suggest MCTs are more effective in connecting individuals to services than other interventions (e.g., a hospital-based psychiatric service, outpatient psychiatric clinic). Though, additional research is needed to further provide evidence of MCT effectiveness in enhancing linkage to services.

Reducing Pressure on the Health Care System: It has been suggested that MCTs can mitigate the pressure on the health care system by reducing unnecessary ED visits and hospitalizations by resolving the crisis situation in the community, yet still ensuring individuals who need a higher level of care receive the services they need. Although not without exception, research primarily suggests MCTs can reduce hospitalizations and ED visits. Notably, there are considerations in this research that raise some caution in concluding MCTs are effective, including the potential that MCTs are reaching additional individuals which may be an explanation why overall hospitalization rates are not substantially affected by the provision of mobile crisis services. Furthermore, there is variation in the implementation of MCTs that may affect outcomes, if not accounted for in research. Also, it is difficult to make direct comparisons in hospital admission rates between MCTs and hospital-based services due to substantial differences in populations served and service delivery.

Promoting Cost Effectiveness: Presumably, MCTs can promote cost effectiveness by providing savings to police departments if law enforcement can spend shorter time on calls (or not need to respond at all) and providing savings to emergency medical services by avoiding unnecessary

ED visits/hospital admissions. Few studies have examined cost effectiveness, providing early support for this assumption. However, additional research is needed to demonstrate the cost effectiveness of MCTs.

Stakeholders' Perceptions of Mobile Crisis Teams

Studies that have assessed stakeholders' (i.e., police officers, individuals served, family members, and behavioral health professionals) perceptions have generally found positive outcomes, including client satisfaction and perceived benefits to patients, the mental health system, and the community. Notably, individuals have also expressed concerns related to mobile crisis teams, including a lengthy response time, limited service capacity, and stakeholders' unfamiliarity with crisis response services.

Benefits of Mobile Crisis Teams: Generally, stakeholders report satisfaction with the MCT and helpfulness of services offered. Overall, perceived benefits of mobile crisis teams include 1) advantages for individuals served and their families; 2) advantages for community providers; and 3) advantages for the mental health system. Other benefits include the ability for MCTs to provide follow-up services, 24/7 availability, and access to a psychiatrist. A few studies have assessed police officers' perceptions of mobile crisis teams, with the available research providing varying reports of officers' perceptions of the benefits and effectiveness of this approach. Still, officers generally perceived MCTs to be effective in their response to individuals with mental health issues and viewed as beneficial to the community.

Challenges of Mobile Crisis Teams: A fairly often-cited challenge is a lengthy response time related to the MCT serving a large area, increased demand for services, and/or limited staff/resources. Also, some stakeholders reported challenges with service availability and treatment options, unfamiliarity with MCT services, and the need to conduct community outreach and educate first responders about mobile crisis services.

Discussion

Mobile crisis teams are a mental-health based crisis response model that includes an interdisciplinary team of mental health professionals responding to behavioral health crises in the community. MCTs provide crisis services in the community to direct individuals in crisis to services, with a goal of reducing the frequency of unnecessary emergency department referrals and hospitalizations. Generally, although not without exception, research supports observations that mobile crisis teams can reduce pressure on the health care system (e.g., reducing unnecessary ED visits, reducing hospitalizations), may be effective in connecting individuals to services following a crisis situation, and may be cost effective. Despite the promising evidence suggesting MCT effectiveness, there are limitations in the methodological rigor of the available research, suggesting caution in our interpretation of findings. Specifically, available research typically uses descriptive data, unmatched treatment and control groups, and/or do not control for key variables that can impact outcomes. Also, the substantial variation across MCT programs makes it challenging to compare outcomes across communities and across studies. Future research should not only clearly specify the programmatic elements

of the model being evaluated, but also directly assess how variation affects outcomes. There is also a need for research to assess the effects of MCTs in specific populations, including individuals with developmental disabilities and individuals with co-occurring substance use and mental health issues.

Importantly, MCTs represent a single component of a larger continuum of care for crisis response and for mental health services, complementing existing emergency psychiatric services and police-based responses designed to alleviate pressure on the health care system and to potentially divert some calls from the criminal justice system. Though, notably absent from the MCT literature is an assessment of the impact of MCTs on criminal justice outcomes (e.g., arrests, officers' time spent on calls for service). The literature has typically focused mostly on the impact of MCTs on the health care system (e.g., reducing hospitalizations), while neglecting research about diversion from the criminal justice system. It is imperative that additional research assesses the effectiveness of MCTs on criminal justice diversion (e.g., a reduction in arrests) in addition to further research on stakeholder acceptability, connection to services following a crisis, the impact on the health care system, and cost effectiveness.

Key Takeaways

- Mobile crisis teams (MCTs) include an interdisciplinary team of mental health professionals who typically respond in pairs to behavioral health crisis situations in the community and have been widely implemented across the United States. This model aims to provide effective crisis intervention services in the community, reduce unnecessary emergency department visits and hospital admissions, and facilitate individuals' connections to services following a crisis.
- Notably, the mobile crisis team model is a mental-health based crisis response that does not involve the formal integration of police into MCTs. However, police involvement is not uncommon (e.g., MCTs may request police back-up if needed) and MCTs may have partnerships with police departments to facilitate effective crisis response.
- The limited available research suggests MCTs may be effective in connecting individuals to services following a crisis situation, reducing pressure on the health care system by reducing unnecessary emergency department visits and hospitalizations, and promoting cost effectiveness. However, there is a lack of methodological rigorous research that suggests caution in interpreting the available research findings.
- There needs to be investment in future research. Specifically, additional research needs to specify the programmatic elements of the program being evaluated and examine the effect of these elements on outcomes of interest. Furthermore, research should examine the effects of MCT response in specific populations, including individuals with developmental disabilities and individuals living with co-occurring mental health and substance use issues. Furthermore, notably absent from the MCT literature is an assessment of the impact of MCT response on criminal justice diversion (e.g., arrests, officers' time spent on calls for service) and is an important area for future research.

I. Introduction

Operating within the mental health system, mobile crisis teams (MCTs) consist of interdisciplinary groups of mental health professionals who respond to behavioral health crises in the community (Alexander & Zealberg, 1999; Guo et al., 2001; Kim & Kim, 2017; Watson et al., 2019). This mental health-based crisis response model aims to provide the least restrictive, but effective, response for individuals with behavioral health concerns by working in the community and enhancing access to care and services (Lord & Bjerregaard, 2014). MCTs provide rapid response to individuals experiencing behavioral health crises in the community, complete on-scene assessments to determine the needed level of care, and assist in connections to behavioral health services (Muehsam, 2019; SAMSHA, 2014; Stroul, 1993). Although it is likely that MCTs interact with individuals with IDD, as well, our understanding of the frequency of these interactions is limited. Further, MCTs often work with traditionally hard-to-reach individuals, providing case management to facilitate connection to services (Gillig, 1995; Lord & Bjerregaard, 2014; SAMSHA, 2014). The available research on mobile crisis teams generally suggests that MCTs can reduce the rate of emergency department visits and hospitalizations related to behavioral health crises and successfully connect individuals in crisis to services.

This document provides a review of the available research examining the implementation and impact of mobile crisis teams. For the purpose of this review, a mobile crisis team is defined as an interdisciplinary team of mental health professionals who respond to behavioral health crisis incidents in the community in an effort to reduce unnecessary hospital transports and to connect individuals to services (Watson et al., 2019). It should be noted that, although mobile crisis teams often work with local law enforcement, this response model typically does not involve the formal integration of police officers within the mobile crisis team. As such, this review is purposeful in highlighting response models involving teams of mental health professionals only who respond to behavioral health crises in the community.

This review is organized into the following four sections. First, **Section II** describes the development and implementation of mobile crisis teams, including variations observed across models. Next, **Section III** outlines the research on mobile crisis teams in terms of their impact on connecting individuals to services, reducing unnecessary emergency department visits and hospitalizations, and promoting cost effectiveness. **Section IV** describes stakeholders' perceptions of mobile crisis teams, including the benefits and challenges related to this response model. Finally, **Section V** provides a discussion of the research findings, identifying implications for practice and directions for future research.

II. Definition and Implementation of the Mobile Crisis Team Model

Mobile crisis teams were first developed in the United States during the 1960s in response to public demands for the provision of services for people with behavioral health issues (Chiu & Primeau, 1991; Engel et al., 2019). The deinstitutionalization movement, combined with nationwide cuts in funding for inpatient hospitalization and a philosophical shift in perceptions

of effective treatment delivery, motivated the consideration of community-based alternatives for hospital-based psychiatric emergency services (Alexander & Zealberg, 1999).¹ Mobile crisis teams were presented as one alternative, developed so mental health professionals – including social workers, nurses, case managers, psychiatrists, and psychologists – may offer immediate responses to behavioral health crises occurring within communities and facilitate individuals’ connection to care and services.

Table 1. Essential Functions of Mobile Crisis Teams (SAMSHA, 2020)

Function	Description
1. Triage/Screening	If contact is initiated by a phone call to a crisis hotline or by a provider, the MCT assesses the risk of the individual in crisis and determines the most appropriate response (e.g., phone consultation; face-to-face MCT intervention; police or EMS involvement).
2. Assessment	The mental health professionals conduct assessments, including assessments of suicide risk, strengths and resources, precipitating factors of the crisis event, and established connections with mental health providers.
3. De-escalation/Resolution	MCT staff engage individuals to de-escalate crisis situations. Staff attempt to resolve the situation and to prevent a higher level of care if not needed.
4. Peer Support	Some MCTs use peer support specialists or family support specialists with lived experiences to promote engagement with the individual/family members in crisis, and to promote continued care following the incident.
5. Coordination with Medical and Behavioral Health Services	MCTs connect individuals to behavioral health and medical services to resolve crisis incidents and to prevent future incidents.
6. Crisis Planning & Follow-up	MCTs may create a crisis plan, including a safety plan, and conduct follow-up with individuals to determine that they received needed services.

Generally speaking, there are three overarching goals of the MCT model for crisis response: First, to provide crisis services in the community and interact with individuals in their “natural environment.” Second, to provide crisis services to difficult to reach populations, such as individuals who are unable to access treatment services at a mental health facility; and third, to reduce the frequency of unnecessary hospitalizations by diverting individuals to less restrictive environments and connecting them to community resources (Stroul, 1993). Furthermore, mobile crisis teams aim to provide care, while avoiding unnecessary law enforcement

¹ The deinstitutionalization movement in the United States refers to a shift in mental health care policy from inpatient psychiatric hospitalization to community treatment in response to pervasive mistreatment and significant human rights violations, with the release of large numbers of individuals with mental health issues from hospitals into the community (see e.g., Lurigio & Swartz, 2000).

involvement (SAMSHA, 2020). Building upon these goals, Table 1 lists several essential functions of mobile crisis teams.

Although MCT programs operate independently of the police (Borum et al., 1998), partnerships between mental health and police agencies may be developed to facilitate crisis response. Indeed, police officers may request that mobile crisis teams co-respond to crisis incidents and vice versa—that is, mobile crisis teams can also request police to co-respond (Casey, 2015). Table 2, below, identifies several characteristics of mobile crisis team programs that vary across communities as a result of community preferences and/or community resource constraints. Specifically, MCT programs are found to differ in their policies, protocols, staffing, availability, eligibility criteria, and target populations (Alexander & Zealberg, 1999; Ferris et al., 2001; Zealberg et al., 1993).

Table 2. Mobile Crisis Team Program Variation

Characteristic	Description
1. Model Implementation	Some MCTs are co-located in agencies with other services (e.g., emergency department, outpatient service provider), while others operate as a stand-alone entity.
2. Target Populations	MCTs may have specific target populations (e.g., children and adolescents; individuals experiencing homelessness).
3. Staffing	MCTs vary in the type of mental health professional(s) employed (e.g., social workers, psychologists, Master’s level clinicians). Furthermore, some teams include peer support and/or family support specialists with lived experience. Teams may also include a psychiatrist or a psychiatrist on-call as needed.
4. Days/Hours of Operation	MCTs vary in terms of days and times they are available and some MCTs have 24/7 availability.
5. Operating Agency	Various agencies, including a community-based agency, a county or state, or a hospital-based psychiatric crisis service, may operate mobile crisis services.
6. Method of Referral	MCTs can be notified of crisis incidents through a crisis hotline, police, emergency medical services, behavioral health providers, schools, or referrals from family members or other concerned individuals.
7. Nature of Response	MCTs may be dispatched as a primary response to a crisis incident or may be dispatched to an incident as a secondary response after the police have already responded and determined MCT intervention is appropriate.
8. Level of Follow-Up Care	Although many MCTs provide some level of follow-up care (e.g., telephone consultation/follow-up; in-person visits), the number of visits, the length of time generally allowed for follow-up care, and the type of services offered (e.g., case management) vary.

Table 3. Mobile Crisis Team Programs in Practice

Site Example: Crisis Assistance Helping Out On The Streets (CAHOOTS), White Bird Clinic, Eugene, Oregon

Program Description:

In 1989, White Bird Clinic launched Crisis Assistance Helping Out On The Streets (CAHOOTS) as a community-based public safety approach to provide a mental health first response to individuals experiencing a crisis involving mental health issues, homelessness, and/or addiction. The CAHOOTS two-person team (i.e., a medic—a nurse, EMT, or paramedic, and a crisis worker with experience in the behavioral health field) respond to calls routed to CAHOOTS from Eugene’s 911 system or the police non-emergency number, including calls for welfare checks, public assistance, and/or transportation to services. CAHOOTS can also respond to non-emergency medical calls as a form of Emergency Medical Services (EMS) diversion. A team responds and provides assessment, stabilization, information, referral, and if needed, transportation to treatment.

For more information, see <https://whitebirdclinic.org/cahoots/> ; <https://whitebirdclinic.org/wp-content/uploads/2020/07/CAHOOTS-Media.pdf>

Site Example: Mobile Crisis Intervention Service, Connecticut

Program Description:

In 2002, Connecticut’s Mobile Crisis Intervention Service was first implemented and is funded by a grant from the Department of Children and Families (DCF). Accessed by 211, the program includes trained mental health professionals across the state who respond to youth ages 18 and younger (or older youth who are still attending high school) experiencing an emotional or behavioral crisis within 45 minutes either by phone or face-to-face. A program goal is to provide crisis services for children and their families in the community, reduce ED visits, and prevent hospitalization if a lower level of care is a safe and effective alternative. Clinicians provide assessment, crisis stabilization, safety planning, short-term treatment, and facilitate connection to services.

For more information, see Fendrich et al., 2018, 2019; Vanderploeg et al., 2016; <https://www.mobilecrisisempsc.org/about/>

Site Example: The Mental Health Center Greater Manchester’s Mobile Crisis Response Team (MCRT), New Hampshire

Program Description:

In 2015, the Mental Health Center Greater Manchester’s Mobile Crisis Response Team (MCRT) began its operations. Available 24/7, the team is comprised of Master’s-level clinicians and peer recovery coaches who are deployed in pairs to crisis calls involving mental health and/or substance use in the community. Goals include to de-escalate the situation and, if appropriate, divert individuals away from emergency rooms into more appropriate services.

For more information see <https://www.mhcg.org/status-update-and-impact-of-new-mobile-crisis-response-team/>, <https://www.mhcg.org/how-we-can-help/adult-services/>

For example, different agencies may lead the operation of mobile crisis teams, including community-based agencies, county or state agencies, or hospital-based psychiatric crisis services (Watson et al., 2019). Many MCTs are integrated with other services but can also serve

as a “stand-alone” program in which the MCT provides emergency crisis intervention services only, making referrals for treatment and support (Ferris et al., 2001). More commonly, however, these teams function as a part of a larger network of crisis services within a community mental health system and/or supplement specialized police responses to individuals with behavioral health issues (see e.g., Cornelius et al., 2003; Gillig, 1995; Ratsani, 2004).

In terms of target populations, many mobile crisis teams provide services to any individual in the catchment area who are experiencing a behavioral health crisis, yet some mobile crisis teams restrict their mobile services to certain populations (e.g., individuals experiencing homelessness; individuals experiencing persistent and severe mental illness; children and adolescents) (Stroul, 1993). Furthermore, some mobile crisis teams include peer support specialists or family support specialists with lived experiences to promote engagement with the individual experiencing a crisis and to provide support (Martin, 2005; SAMSHA, 2020). Table 3, presented above, highlights different MCTs and the variation in their implementation across communities.

In sum, mobile crisis teams are an interdisciplinary team of mental health professionals who provide rapid response, assessment, and crisis stabilization in the community. The objectives of MCTs include the reduction of unnecessary emergency department/hospital admissions and the connection of individuals experiencing a crisis to services with a goal of preventing future crisis incidents. Although MCTs operate out of the mental health system, police involvement is not uncommon and MCTs can serve as primary or secondary responders to crisis incidents. As demonstrated above, there is substantial variation in the implementation of mobile crisis team program. Importantly, this variation creates challenges for the assessment of the impact of this crisis response model.

III. The Impact of Mobile Crisis Teams

Although mobile crisis teams have been established for many years, there have been limited formal evaluations assessing the impact of this crisis response model (Kim & Kim, 2017; Lord & Bjerregaard, 2014; Warner & Chen, 2011; Watson et al., 2019). Evidence regarding youth-focused mobile crisis team programs is especially lacking (Braganza et al., 2019; Martin, 2005; Warner & Chen, 2011), and essentially non-existent for individuals with IDD. The significant variation in the implementation of MCT programs across jurisdictions makes it difficult to systematically assess the impact of this response. Still, evidence from the available evaluation literature suggests that MCTs may increase connections to community mental health services, reduce emergency department and hospital use for mental health services, and produce cost savings. The findings from this research are examined in greater detail below. A table of the studies discussed in this section can be found in Appendix A.

A. Increasing Connection to Services

A primary goal of mobile crisis teams is to connect individuals to services, with the underlying assumption that the use of MCTs can result in improved and timelier connections to services

due to their linkage with the broader mental health system (Dyches et al., 2002; Watson et al., 2019). There is preliminary evidence suggesting MCTs are effective in connecting individuals to care following a crisis incident, although findings vary across program evaluations. Specifically, in descriptive studies of MCTs, researchers find referrals to services are a common disposition, although rates of referral significantly vary across studies (see e.g., Braganza et al., 2019; Kim & Kim, 2017; Steadman et al., 2000). For example, in a descriptive comparison of outcomes across three different crisis response models, Steadman and colleagues (2000) observed a Knoxville, Tennessee mobile crisis team to have the largest percentage of cases referred to treatment (36%), compared to a crisis intervention team (CIT) program in Memphis, Tennessee (0%), and a community service officer team program in Birmingham, Alabama (13%).

Similarly, in their examination of the rate of community mental health services used by adults (N = 1,771) following MCT intervention in Cuyahoga County, OH, Kim and Kim (2017) found 44 percent of adults used community mental health services within 30 days of the MCT intervention. Importantly, Kim and Kim (2017) also identified several significant predictors of adults' use of these services. Specifically, individuals who had used mental health services in the year prior to their contact with the MCT, who had no reported substance use at intake, and/or who had a depressive disorder diagnosis, a mood disorder diagnosis, and/or a psychotic disorder diagnosis were more likely to engage with community mental health services post-MCT intervention. Furthermore, participants who were referred to services in medical settings (i.e., an emergency room, psychiatric hospital, or a crisis stabilization unit) were more likely than participants without those referrals to use community mental health services within 30 days of the MCT intervention.

Quasi-experimental research provides additional insight on the impact of MCTs on individuals' connection to services. For example, in their examination of outcomes between individuals that received mobile crisis team services and individuals that received a hospital-based intervention, Dyches and colleagues (2002) found a larger percentage of individuals in the MCT group received community mental health services within 90 days of their crisis incident (45% compared to 37% in the matched hospital-based intervention group). Specifically, an individual who received mobile crisis team services was 17 percent more likely to receive community mental health services post-crisis than an individual from the hospital-intervention cohort—a statistically significant difference.

In contrast, Casey (2015) found no significant differences in individuals' connection to services following different crisis interventions implemented in Travis County, Texas (N = 3,485). Specifically, when examining variation in these connections among individuals who had come into contact with a mobile crisis team (n = 424), a co-response team (n = 558), and a walk-in psychiatric emergency services clinic (n = 2,503), Casey (2015) observed a large percentage of individuals were connected to services within one year of the interventions (81%, 74%, and 80%, respectively), with no statistically significant differences across services. Notably, however, this year-long follow-up period is a longer time frame than what is traditionally considered in MCT research (e.g., 30 days; Kim & Kim, 2017; to six months; Currier et al., 2010).

Given the extended period of observation, it is possible that factors beyond the *type* of crisis intervention received affected individuals' connection to services within the year.

In addition to the use of mobile crisis teams as a primary response to individuals in crisis to facilitate diversion to services, MCTs can be used to extend psychiatric emergency services by connecting individuals to services after their discharge from an emergency department (Watson et al., 2019; see Currier et al. 2010). Preliminary research suggests that, in this role, MCTs may encourage additional connections to services. Specifically, a randomized controlled trial implemented in Rochester, New York found that following evaluation in an ED for suicidal thoughts, plans, or behaviors, a greater number of participants from an MCT intervention group completed their first clinical follow-up appointment (70%) when compared to participants in an outpatient psychiatric clinic group (30%) (Currier et al., 2010).² Although encouraging, it should be noted that there were no statistically significant differences in the clinical outcomes between the two groups. Nor were there differences in the average number of outpatient mental health contacts in the six months following individuals discharge from the ED (Currier et al., 2010).

B. Reducing Pressure on the Health Care System

It has been suggested that mobile crisis teams may reduce pressure on the health care system by resolving mental health crises within the community, minimizing unnecessary emergency department (ED) referrals and hospitalizations (Levin, 2003). Seeking to assess this capacity, research has examined rates of hospitalization and mental health-related visits to the ED among individuals who have received mobile crisis team services. Although not without exceptions, this literature suggests that MCTs can reduce the number of crisis incidents resulting in hospitalization as well as reduce individuals' subsequent visits to the ED for mental health-related concerns. Notably, however, there are several limitations of the available research that suggest caution in concluding that MCTs are effective in reducing pressure on the health care system. This research is discussed in greater detail below.

1. Rates of Emergency Department Referral and Hospitalization

As mentioned above, the available research suggests mobile crisis teams can reduce the rates of hospitalization following crisis incidents, while still ensuring that individuals desiring more intensive services receive the care they need. For example, several descriptive studies have found significant declines in psychiatric hospital admissions following the implementation of MCT services or changes to the structure and delivery of those services in the community (Reding & Raphelson, 1995; Reynolds et al., 1990). In New South Wales, Australia, for instance, Reynolds and colleagues (1990) observed an almost 50 percent reduction in psychiatric admissions following the implementation of a mobile crisis team (109 admissions in 1987

² Notably, the MCT intervention included clinical assessment in the community within 48-hours of discharge from the ED. The treatment as usual intervention included referrals to the crisis outpatient psychiatric clinic with a mandatory appointment offer within five business days of discharge (Currier et al., 2010).

compared to 210 admissions in 1985). Similarly, in a time series analysis examining rates of state and private hospital admissions following the addition of a psychiatrist on a mobile crisis team in Kalamazoo County, Michigan, Reding and Raphelson (1995) observed a significant decline in state hospital admissions during the program period compared to the same time period a year prior and a year after the program ended. No changes in private psychiatric hospital admissions were observed, however.

A few descriptive studies have specifically evaluated youth-focused mobile crisis teams and have found preliminary evidence that MCTs effectively divert youth from emergency departments and hospitals (Herbert, 2007; Warner & Chen, 2011). For instance, in an evaluation of the Capital Region Child and Adolescent Mobile Crisis Team (CAMT), the overall hospitalization was 15 percent (following subsequent hospitalizations after psychiatric evaluations and a safety plan disposition) and the diversion rate was indicated to be 85 percent (Warner & Chen, 2011).

Importantly, a mobile crisis team needs to be able to effectively identify individuals who need to be admitted to the hospital from individuals who may be more appropriately served in the community. It has been suggested that MCTs may be more effective in identifying individuals in need of hospitalization than police-only teams. In San Francisco (CA), for example, Levin (2003) found that a significantly greater percentage of individuals referred by a mobile crisis team to psychiatric emergency services were subsequently hospitalized than individuals referred by the police (58% and 41% respectively). Relatedly, in a suburban county of Pennsylvania, Muehsam (2019), found individuals were more likely to be recommended by the MCT for voluntary or involuntary hospitalization if they had been seen by the mobile crisis team more than once, expressed homicidal ideation, exhibited self-injurious behaviors, exhibited psychotic symptoms, and had increased scores on a suicide severity rating scale. Notably, however, not everyone recommended by the MCT for hospitalization was actually admitted—56 percent of individuals recommended for voluntary psychiatric hospitalization were admitted and 78 percent of individuals recommended for involuntary psychiatric hospitalization were admitted.

Additional evidence of reductions in hospitalization rates is provided by a few quasi-experimental evaluations comparing outcomes associated with MCT services and hospital-based psychiatric services (Guo et al., 2001; Hugo et al., 2002). For instance, when comparing differences in the rate of hospitalizations between a cohort of individuals who received MCT services and a matched cohort of individuals who received hospital-based crisis services, Guo and colleagues (2001) found the hospital-based cohort was 51 percent more likely to be hospitalized than the mobile crisis intervention cohort. Importantly, although the mobile crisis intervention was less likely to result in hospitalization, the approach was not observed to increase the risk of *subsequent* hospitalization.

Similar findings have been presented in research assessing the impact of MCT services on outcomes for youth (Fendrich et al., 2019; Martin, 2005). For example, in their examination of Connecticut's mobile crisis services for children and adolescents (n = 2,532), Fendrich and colleagues (2019) observed a significant difference in the total number of behavioral health ED

visits among youth who received mobile crisis services (n = 2,532) when compared to a matched group of youth who received behavioral health ED services only (n = 3,961).³ Specifically, Fendrich and colleagues (2019) observed a significant decrease in youths' odds of a subsequent behavioral health ED visit in the 18 months following their interaction with the mobile crisis service, with youth who received mobile crisis services experiencing a 25 percent reduction in risk for a subsequent behavioral health ED visit. Notably, longer lengths of contact with the mobile crisis service were associated with a reduced probability of behavioral health ED visits in an 18-month follow-up period (Fendrich et al., 2018).

Findings related to reductions in rates of hospitalization are not universal, however. For example, in a pre/post-comparison of the outcomes of three distinct crisis intervention services in Travis County, Texas, including two MCTs and a psychiatric emergency service, no significant differences in the number of emergency department visits, inpatient hospitalization days, and residential stay days among individuals receiving these services were found over a three-year period (Casey, 2015). Similarly, in their examination of state hospital rates across Massachusetts locations with mobile crisis services (n = 20) and locations without (n = 20), Fisher and colleagues (1990) found no statistically significant differences when controlling for per capita expenditures for non-emergency community-based resources and emergency expenditures.

2. Limitations of Available Research

Although the available literature suggest MCTs can mitigate the pressure on the health system by reducing unnecessary ED referrals and hospitalizations, there are several considerations that impact our interpretation of these findings. First, variation in observed effects of MCTs on rates of ED referral and hospitalization could be affected by the reach of these teams within the community. That is, although MCTs may prevent unnecessary ED visits and hospitalizations, they may also increase the overall sample of individuals receiving crisis services. Specifically, the accessibility of MCTs allows for some individuals to receive treatment services who may not otherwise have received care, which may explain why *overall* emergency department referrals and hospitalization rates in a community may not be reduced (see Fisher et al., 1990).

Second, the substantial variation in the implementation of MCTs, including the make-up of the teams, available community services for referral, and characteristics of service users, can make it difficult to compare outcomes across models and service delivery. For example, in Toronto and the Peel Region in Canada, Ferris and colleagues (2003) described significant differences in individuals served, referrals, and dispositional outcomes across two MCT programs, despite both programs having similar staffing, program philosophies, services, and jurisdictions.

³ Propensity scores were created based on the probability of receiving mobile crisis services, given the specified covariates (Fendrich et al., 2018, 2019). Youth in the two groups were stratified into five groups based on their propensity score values. A series of logistic analyses were conducted to predict behavioral health ED visits and were stratified within each quintile. There were significant odds ratios in three of the five quartiles, which suggested a trend for risk reduction for subsequent behavioral health ED visits in the mobile crisis group.

Furthermore, there are potentially different populations served and dispositional outcomes based on referral source to MCTs (e.g., police referrals versus other referral sources, including self-referrals, crisis line, and school) (Lord & Bjerregaard, 2014). Differences in the source of MCT referrals and individuals served highlight the need for research to account for multiple case characteristics when examining MCT outcomes (e.g., ED referral, hospitalization). Finally, comparisons of outcomes for MCT users and users of hospital-based services are difficult given the significant differences in the implementation of these two types of services and the characteristics of the individuals they serve. Specifically, MCT users and hospital-based service users can differ in their presenting problem, diagnosis, overall functioning, and referral sources, which, in turn, may affect the decision to hospitalize an individual experiencing a crisis (see e.g., Gillig et al., 1990; Hugo et al., 2002).

In sum, it cannot be suggested that MCTs are more appropriate than hospital-based services for crisis response, but rather that MCTs provide the opportunity to deliver services in the community to reduce the number of individuals who are presented to the ED and then are subsequently hospitalized. The available research suggests that MCTs show promise in reducing the pressure on the mental health system by reducing unnecessary ED visits/hospitalizations, while ensuring that individuals who need more intensive services receive a higher level of care. Granted, this finding is not universal. There are limitations to the available research that highlight the need for additional, more rigorous evaluations before concluding that MCTs are effective in reducing pressure on the mental health system.

C. Promoting Cost Effectiveness

It is suggested that MCTs may provide cost savings to police agencies and emergency medical services when MCTs' response to crisis incidents prevent the need for police involvement, transport to the emergency department, and/or hospitalization (Alexander & Zealberg, 1999; Geller et al., 1995; Engel et al., 2019; Zealberg et al., 1993). However, only a few studies have examined the cost effectiveness of this crisis response. The limited research observes that MCTs may produce cost savings. For example, Bengelsdorf and colleagues (1993) examined the cost savings for patients who would have been hospitalized if mobile crisis team services were not available. Bengelsdorf et al. (1993) found that, by increasing rates of diversion from the hospital, the mobile crisis services produced costs savings that exceeded the costs of the services. In a separate cost-effectiveness evaluation conducted by Warner and Chen (2011), a child and adolescent mobile crisis team (CAMT) was compared to a police crisis response and another adult mobile crisis team that did not specialize in child assessment and found that CAMT was a more cost-effective crisis intervention (Warner & Chen, 2011). Specifically, the CAMT had a 15 percent probability of hospitalization, based on the total number of youths who were hospitalized during intervention and subsequent hospitalization. Although the actual probability of hospitalization when the adult MCT or the police responded was not known, the

researchers estimated a 26 percent probability of hospitalization when other crisis responders were involved.⁴

IV. Stakeholders' Perceptions of Mobile Crisis Teams

Studies assessing stakeholders' (i.e., police officers, behavioral health professionals, service users, family members) perceptions of mobile crisis team services generally find positive outcomes, including client satisfaction and perceived helpfulness to service users and benefits to the community. Notably, however, stakeholders have also expressed concerns of barriers to the use of mobile crisis team services, including long response times and limited service capacity (e.g., Borum et al., 1998; Daggenvoorde et al., 2017; Steadman et al., 2000). The findings from this research are discussed in greater detail below.

A. Benefits of Mobile Crisis Teams

Interviews, focus groups, and surveys generally reveal stakeholders' overall satisfaction with mobile crisis team services and perceptions of substantial benefits for service users and their family members, as well as the broader mental health system (Braganza et al., 2019; Daggenvoorde et al., 2017; Hussey et al., 2018; Reynolds et al., 1990; Vogel-Stone, 1999; Warner & Chen, 2011). For example, in a 1993 national survey of state mental health agency directors, 95 percent of states with mobile crisis service capacity reported positive effects on the state's crisis services (Geller et al., 1995). Overall, this national survey found the reported benefits of MCTs to fit into three categories: (1) advantages for patients and their families (e.g., taught coping skills; provided family support); (2) advantages for community providers and staff (e.g., increased assistance from police departments; improved access to patients with transportation issues); and (3) advantages for the mental health system (e.g., reduced inpatient admissions; economic savings). Notably, the reduction of hospitalization, the ability to provide earlier interventions and improved access to services, the ability to conduct patient evaluations in their natural environment, and reductions in crisis severity were the most often reported effects of mobile crisis team programs.

Focus groups conducted with mental health professionals and service users have also identified several additional benefits of mobile crisis team programs, including the 24-hour availability of teams, access to psychiatric professionals for consultation, and the provision of follow-up services (Fendrich et al., 2018; Hussey et al., 2018; Reynolds et al., 1990). Few studies have assessed police officers' perceptions of mobile crisis teams, with the available research providing varying reports of officers' perceptions of the benefits and effectiveness of this approach (Borum et al., 1998; Casey, 2015; Deane et al., 1999). For example, a survey of Austin (TX) police officers about their collaboration with a Mobile Crisis Outreach Team found 85 percent of officers to perceive their collaboration as helpful to their department, with another

⁴ The probability estimate of hospitalization when other crisis responders were involved (i.e., a local adult mobile crisis team or the police) was based off disposition data for youth who presented to the Capital District Psychiatric Center Crisis Unit (Warner & Chen, 2011).

89 percent suggesting the program was beneficial to the community (Casey, 2015). In contrast, a comparison of officers' perceptions of three crisis response models, found officers who coordinated with a mobile crisis team in Knoxville, TN provided the lowest rating of mental health system effectiveness in assisting officers during "mental disturbance" calls (15%) (Borum et al., 1998). Additionally, only seven percent of Knoxville police officers rated the MCT as moderately or very effective in minimizing the amount of time patrol officers spend on these calls. Still, among these officers, MCTs were generally perceived to be effective in responding to individuals with mental health issues and viewed as beneficial to the community (Borum et al., 1998; Casey, 2015; Deane et al., 1999).

B. Challenges of Mobile Crisis Teams

In survey and focus group research, the most commonly cited concern related to mobile crisis teams by police officers, service users, and service providers is MCTs' lengthy response times to crisis incidents. Notably, the delay in MCT response is often related to the allocation of mobile crisis team services across large areas, the increased demand for services within the community, and/or due to limited mental health staff (see Borum et al., 1998; Daggenvoorde et al., 2017; Hussey et al., 2018; Steadman et al., 2000; Stroul, 1993). Some providers also report challenges related to the MCT referral process and stakeholders' unfamiliarity with crisis response services. In this vein, service providers discussed the need to conduct community outreach to educate community members, schools, police, and other first responders about 211 and mobile crisis services (Fendrich et al., 2018; Hussey et al., 2018; Stroul, 1993). Furthermore, challenges with service availability and treatment options, communication between emergency departments and mobile crisis teams, and navigating insurance-related issues were also mentioned (Fendrich et al., 2018; Hussey et al., 2018). Safety is also a concern with mobile crisis teams, highlighting the need for a careful assessment of risk, the need for mental health professionals to respond in pairs, and the potential for law enforcement to be called to a scene (before the arrival of the MCT, to accompany an MCT to a scene, or called as back-up) (Stroul, 1993).

V. Discussion

Mobile crisis teams are a mental-health based crisis response that involve an interdisciplinary team of mental health professionals responding to behavioral health crises occurring within communities. MCTs provide crisis services in the community to divert individuals in crisis to services, reducing the frequency of unnecessary emergency department referrals and hospitalizations. Generally, evaluations of MCT services support the anecdotal observations that these programs can reduce unnecessary emergency department and hospital admissions (for exception, see Casey, 2015; Fisher et al., 1990). Furthermore, outcomes of the available research suggest that mobile crisis teams can connect individuals to mental health services following a crisis incident (Currier et al., 2010; Dyches et al., 2002) and potentially provide cost savings (Bengelsdorf et al., 1993; Warner & Chen, 2011). These positive findings are joined by qualitative observations of stakeholders' satisfaction with mobile crisis services and perceptions of the benefits of MCTs to service users, communities, and the mental health system. Notably,

however, the literature discusses some challenges with mobile crisis teams, including a lengthy response time, limited capacity for response (e.g., limited availability in days/times, limited staff), and safety concerns for mental health professionals. Although the available research suggests promise in the effectiveness of mobile crisis teams in reducing pressure on the health care system, limitations in the available research prevent strong conclusions of the effectiveness of this approach. Given these considerations, the mobile crisis team model is most appropriately labeled as a *promising practice* in mental health-based behavioral health crisis response.

Table 5. Summary of Findings from Quantitative Evaluations of MCT Programs

Outcome	Findings
Increasing Connection to Services	The limited available research suggests that MCTs can be effective in connecting individuals to services following a crisis situation, though findings vary across studies. Generally, descriptive studies cite referrals to services as a common disposition. Additional more rigorous research is needed to provide further evidence of MCT effectiveness in connecting individuals to services and if contact with mental health services is sustained over time.
Reducing Pressure on the Health Care System	The available research suggests MCTs may reduce emergency department visits and hospitalization following crisis incidents, though these findings are not universal. Several descriptive studies have found significant declines in psychiatric hospital admissions following the implementation of mobile crisis team services or changes to the structure/delivery of those services in the community. Additional evidence of reductions in hospitalization rates is provided by a few quasi-experimental evaluations comparing outcomes associated with MCT services and hospital-based psychiatric services. There are limitations to the available research that highlight the need for additional, more rigorous evaluations before concluding that MCTs are effective in reducing pressure on the health care system.
Promoting Cost Effectiveness	There are only a few studies that specifically examine cost effectiveness of MCTs, though the available research suggests MCTs may provide cost savings greater to or equal to program costs. Additional research is needed to provide estimates of cost savings to both emergency medical services and police departments.

The available evidence suggests that mobile crisis teams may effectively serve as an addition to emergency department psychiatric services to reduce unnecessary hospitalization, reduce inappropriate referrals to emergency departments, and improve connections to community-based mental health services, while still having traditional hospital-based emergency services for individuals who desire a higher level of care (Watson et al., 2019). Additionally, the evidence suggests that MCTs may be an effective supplement to other crisis intervention services, including police and emergency departments, to relieve the burden placed on these services and to improve patient outcomes. Based upon these findings, MCTs are increasingly being recognized as a key component of a larger continuum of care for mental health services.

A. Research Implications

The research findings outlined above should be considered in light of several methodological factors and remaining gaps in knowledge. Studies assessing the impact of MCTs use primarily descriptive or self-report data, have small sample sizes, and/or do not control for key factors that may impact the outcomes of interest (Engel et al., 2019; Scott, 2000). Furthermore, some studies have unbalanced control and treatment groups, in terms of sample size and/or patient and incident characteristics, introducing alternative explanations for the observed intervention effects. Additionally, many studies presented in this review are dated. It is possible advances in the implementation of MCTs and in the behavioral health field, more generally, may affect the relevance of their findings. Collectively, these limitations encourage caution in the interpretation of findings and development of conclusions from the MCT literature.

Future evaluations would benefit from the clear identification of the structure and delivery of the MCT programs under consideration to allow for the distinction of effective components of the programs. Differences in programmatic elements across sites should be documented to facilitate systematic comparisons of the outcomes in different jurisdictions. Furthermore, future research should directly assess the effects of program variation (e.g., staffing, level of follow-up services) on outcomes of interest. For instance, researchers should directly examine variations in outcomes based the type of professional involved in the MCT (e.g., peer support specialist, psychiatrist) and training received, particularly as it relates to the populations served (e.g., individuals with IDD, dual diagnoses, co-occurring substance use and mental health issues). Additional research is needed to conduct cost effectiveness analyses to support anecdotal observations and early preliminary evidence that mobile crisis teams provide cost savings at a level equal to or greater than program costs. Limitations of current research include limited program descriptions, challenges with identifying the unique effect of mobile crisis services when MCTs are integrated within larger programs (e.g., case management), and challenges with comparing outcomes across programs when there is wide variation.

Future descriptive research should measure MCT service delivery specifically to individuals with IDD (e.g., number of individuals served, type of services received), as research on MCT service provision to individuals with IDD is non-existent. Furthermore, evaluation research is needed to examine the impact of mobile crisis teams on the experiences and outcomes of specific service user populations, including individuals with IDD and individuals with co-occurring mental health and substance use issues. Additionally, MCT program evaluations do not examine variation in outcomes among individuals with substance use issues, other than to control for a substance use history and/or current substance use at the time of crisis intervention (for an exception see Min et al., 2005).

Importantly, generally absent in the research on MCTs is the effect on criminal justice outcomes, particularly the use of arrest. A comparison between groups of individuals referred to a mobile crisis team by law enforcement to individuals experiencing a behavioral health crisis who did not receive MCT response is needed to better assess MCTs impact on arrest. The

inclusion of a matched group of encounters with law enforcement without a mobile crisis team allows for the researcher to better identify the role of the MCT in influencing police decision-making and dispositional outcomes (e.g., arrest, hospitalization, connection to community-based services) (Lord & Bjerregaard, 2014). Furthermore, case characteristics, services received, and outcomes should be directly compared between police crisis response [e.g., crisis intervention teams (CIT)] and MCT. A direct comparison in outcomes across different models of crisis response (e.g., police responses, including CIT and co-responder models) with behavioral health only response (e.g., MCT) will assist in the triage of crisis calls to determine the most effective and appropriate response to particular crisis calls. Also, as the literature has mainly focused on descriptive analyses with limited quasi-experimental and experimental research (see Currier et al., 2010 for an RCT), additional rigorous research is needed to better understand the specific effects of MCTs on these outcomes.

B. Conclusion

Mobile crisis teams within the mental health system were created to provide immediate crisis assessment and intervention services in the community to individuals experiencing a behavioral health crisis (which can include those with mental health and developmental disabilities). Although these teams operate independently from police departments, some believe that coordination and collaboration with law enforcement is essential and in reality, law enforcement involvement is not uncommon (e.g., mobile crisis teams may call the police to provide security, support, and/or to transport individuals to hospitals). The existing research suggests the mobile crisis team model is a promising approach to reduce unnecessary emergency departments and hospital admissions and connect individuals to needed services. Generally, the limited research on stakeholder perceptions suggests that providers, police officers, and consumers (i.e., patients and their family members) view the team positively and have high rates of overall satisfaction. However, a common complaint is a significant wait time for MCT services. With significant variations across models in terms of programmatic elements (e.g., staffing, availability), populations served, and main referral sources, it is challenging to draw broad conclusions across studies in terms of the model's effectiveness. Additional research regarding their effectiveness and impact is needed.

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Appendix A. Mobile Crisis Team Research

Author(s) / Year	Publication Type	Mobile Crisis Team Program	Location	Methodology	Outcomes of Interest
Bengelsdorf et al. (1993)	Peer-Reviewed Article	Mobile Psychiatric Crisis Intervention Service	United States	Descriptive Analysis	<ul style="list-style-type: none"> • Cost Effectiveness
Borum et al. (1998)	Peer-Reviewed Article	Multiple Models of Crisis Response	United States	Survey Analysis	<ul style="list-style-type: none"> • Perceptions of Program
Braganza et al. (2019)	Peer-Reviewed Article	Child and Youth Crisis Service (CYCS)	Canada	Mixed Methods: Descriptive Analysis and Survey Analysis	<ul style="list-style-type: none"> • Perceptions of Program • Connection to Services
Casey (2015)	Doctoral Dissertation	Multiple Models of Crisis Response	United States	Model Comparison	<ul style="list-style-type: none"> • Pressure on the Health Care System • Connection to Services
Currier et al. (2010)	Peer-Reviewed Article	An MCT operated out of the Comprehensive Psychiatry Emergency Program (CPEP) at the University of Rochester Medical Center	United States	Randomized Controlled Trial	<ul style="list-style-type: none"> • Connection to Services
Daggenvoorde et al. (2017)	Peer-Reviewed Article	Multiple Mobile Crisis Teams	Netherlands	Qualitative: Interviews	<ul style="list-style-type: none"> • Perceptions of Program
Dyches et al. (2002)	Peer-Reviewed Article	Multiple Models of Crisis Response	United States	Quasi-Experimental	<ul style="list-style-type: none"> • Connection to Services

Author(s) / Year	Publication Type	Mobile Crisis Team Program	Location	Methodology	Outcomes of Interest
Fendrich et al. (2019)	Peer-Reviewed Article	Connecticut's Mobile Crisis Intervention Services	United States	Quasi-Experimental	<ul style="list-style-type: none"> • Pressure on the Health Care System
Fendrich et al. (2018)	Report	Connecticut's Mobile Crisis Intervention Services	United States	Quasi-Experimental and Qualitative: Focus Groups	<ul style="list-style-type: none"> • Pressure on the Health Care System • Perceptions of Program
Ferris et al. (2003)	Peer-Reviewed Article	Mobile Crisis Programs in Metropolitan Toronto and the Peel Region	Canada	Descriptive Analysis	<ul style="list-style-type: none"> • Pressure on the Health Care System
Fisher et al. (1990)	Peer-Reviewed Article	Multiple Mobile Crisis Teams	United States	Quasi-Experimental	<ul style="list-style-type: none"> • Pressure on the Health Care System
Geller et al. (1995)	Peer-Reviewed Article	Multiple Mobile Crisis Teams	United States	Survey Analysis	<ul style="list-style-type: none"> • Perceptions of Program
Gillig et al. (1990)	Peer-Reviewed Article	Mobile Crisis Team at the University of Cincinnati	United States	Descriptive Analysis	<ul style="list-style-type: none"> • Pressure on the Health Care System
Guo et al. (2001)	Peer-Reviewed Article	A Community-Based Mobile Crisis Intervention	United States	Quasi-Experimental	<ul style="list-style-type: none"> • Pressure on the Health Care System

Author(s) / Year	Publication Type	Mobile Crisis Team Program	Location	Methodology	Outcomes of Interest
Herbert (2007)	Doctoral Dissertation	Connecticut's Emergency Mobile Psychiatric Services	United States	Descriptive Analysis	<ul style="list-style-type: none"> • Pressure on the Health Care System
Hugo et al. (2002)	Peer-Reviewed Article	Western Regional Assessment and Crisis Intervention Service (WACIS)	Australia	Quasi-Experimental: Model Comparison	<ul style="list-style-type: none"> • Pressure on the Health Care System
Hussy et al. (2018)	Report	Cuyahoga County Crisis Response System (including an MCT)	United States	Mixed Methods: Survey Analysis & Qualitative Focus Groups	<ul style="list-style-type: none"> • Perceptions of Program
Kim & Kim (2017)	Peer-Reviewed Article	Cuyahoga County Mobile Crisis Team	United States	Descriptive Analysis	<ul style="list-style-type: none"> • Connection to Services
Levin (2003)	Doctoral Dissertation	Mobile crisis team in San Francisco, California	United States	Descriptive Analysis	<ul style="list-style-type: none"> • Pressure on the Health Care System
Martin (2005)	Doctoral Dissertation	Mobile Response Team (MRT) and Psychiatric Emergency Services in Contra Costa County, California	United States	Descriptive Analysis	<ul style="list-style-type: none"> • Pressure on the Health Care System
Reding & Raphelson (1995)	Peer-Reviewed Article	Mobile Psychiatric Crisis Intervention in Kalamazoo County, Michigan	United States	Time Series Analysis	<ul style="list-style-type: none"> • Pressure on the Health Care System
Reynolds et al. (1990)	Peer-Reviewed Article	Ryde-Hunters Hill Crisis Team	Australia	Mixed Methods: Survey Analysis, Pre/Post Comparisons, & Qualitative Interviews	<ul style="list-style-type: none"> • Pressure on the Health Care System • Perceptions of Program
So et al. (2020)	Peer-Reviewed Article	Multiple Mobile Crisis Teams	Netherlands	Descriptive Analysis	<ul style="list-style-type: none"> • Reducing Pressure on the Health System

Author(s) / Year	Publication Type	Mobile Crisis Team Program	Location	Methodology	Outcomes of Interest
Steadman et al. (2000)	Peer-Reviewed Article	Multiple Programs	United States	Descriptive Analysis	<ul style="list-style-type: none"> • Connection to Services
Stroul (1993)	Report	Multiple Programs and Multiple Crisis Response Services	United States	Mixed Methods: Qualitative Interviews and Descriptive Analysis	<ul style="list-style-type: none"> • Perceptions of Program
Vogel-Stone (1999)	Doctoral Dissertation	Berkeley Mental Health Mobile Crisis Team	United States	Qualitative: Interviews	<ul style="list-style-type: none"> • Perceptions of Program
Warner & Chen (2011)	Report	Capital Region Child and Adolescent Mobile Crisis Team (CAMT)	United States	Descriptive Analysis	<ul style="list-style-type: none"> • Cost Effectiveness