Assessing the Impact of Crisis Resolution and Home Treatment Teams: A Review of Research

Academic Training to Inform Police Responses

Best Practice Guide

Prepared by The IACP / UC Center for Police Research & Policy

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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 crisis resolution and home treatment teams across communities. The review of this research is preceded by a list of key terms.

KEY TERMS

Behavioral health	A state of mental and emotional wellbeing and/or choices and actions that affect wellness.
Behavioral health condition	An umbrella term for substance use disorders 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	A wide range of conditions that can affect mood, thinking, and/or behavior.
Crisis resolution and home treatment teams	A crisis response and treatment model involving teams of mental health professionals who provide response, assessment, and short-term, intensive treatment to individuals living with serious mental illness who experience mental health crises in the community.
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

Crisis resolution and home treatment teams (CRHTTs) are a mental health-based crisis response and treatment model consisting of teams of mental health professionals who provide response, assessment, and short-term, intensive treatment to individuals living with serious mental illness (SMI) who experience mental health crises in the community. Primarily implemented in the United Kingdom, the CRHTT model was developed as an extension to acute mental health services, providing an alternative to inpatient psychiatric hospitalization in the management of mental health crises. Research examining CRHTT programs suggests they may be effective in reducing hospital admissions and length of stay for individuals who experience acute crises. However, there are several notable methodological limitations within this research that encourage caution in making these conclusions. Although it is observed that CRHTTs may interact with individuals with intellectual and developmental disabilities (IDD), our understanding of the nature, frequency, and outcomes of these interactions is limited.

This document provides a review of the research examining the implementation and impact of crisis resolution and home treatment teams. This review is organized into four primary sections. First, the definition and delivery of CRHTT programs are described. Next, the available research on the impact of CRHTTs is discussed. Then, stakeholders' perceptions of CRHTTs are considered. Finally, a discussion of key research findings and implication for future research and practice is presented.

Definition & Implementation of the Crisis Resolution & Home Treatment Team Model

CRHTTs are mobile teams of mental health professionals who provide response, assessment, and short-term, intensive in-home and community-based treatment to individuals who experience acute mental health crises. Implemented internationally, CRHTTs often act as "gatekeepers" to acute mental health services by providing response and treatment in the community to reduce hospital admissions, mitigate pressure on inpatient units, and facilitate service users' transition from the hospital to reduce their time spent within clinical settings.

The CRHTT model was originally developed to serve adults with serious mental illness (SMI) who experience an acute crisis. However, the guidelines on the types of patients deemed appropriate for CRHTT response and services has expanded over time [e.g., to include children and young people, to include patients with less severe mental illness, to no longer exclude patients based on diagnosis or learning disability (intellectual and developmental disabilities)].[1]

[1] The term learning disability is synonymous with intellectual disability and the terms are used interchangeably throughout the document. In the United Kingdom, the term learning disability is often used, which refers refers to a "significantly reduced ability to understand new or complex information, to learn new skills (impaired intelligence), with a reduced ability to cope independently (impaired social functioning), which started before adulthood, with a lasting effect on development" (Department of Health, 2001b, p. 14). In the United States, an "intellectual disability is a disability characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills" (American Association on Intellectual and Developmental Disabilities, n.d.).

Researchers find significant variation in the implementation of CRHTT programs across communities, including differences in key programmatic elements, such as the role of the CRHTT in the larger mental health system; the number/type of staff employed; the services provided by the teams; average caseloads and service duration; hours of operation; and the characteristics of patients served. The variation in the implementation of CRHTT programs often reflect differences in the needs of the community, innovations at the local level, and/or resource constraints or the availability of other crisis services.

Impact of Crisis Resolution & Home Treatment Teams

Evaluations of CRHTTs tend to examine the impact of these programs on health care system outcomes. Specifically, researchers examine the effects of CRHTT responses on service users' hospital-based experiences, including admission rates and length of stay in inpatient settings. To a lesser extent, researchers have examined clinical outcomes for CRHTT service users and the cost effectiveness of this approach. To date, no research has been conducted to examine the impact of CRHTT programs on criminal justice system outcomes. Notably, the substantial variation in the implementation of CRHTT programs makes it challenging to systematically assess program effects. Still, evidence of the effectiveness of CRHTTs in reducing hospitalizations, improving clinical outcomes for service users, and promoting cost effectiveness is promising. These findings are presented below.

Hospital-Based Outcomes: The CRHTT response model was developed to provide an alternative to the hospitalization of individuals who experience mental health crises and to facilitate the timely discharge of these individuals from inpatient hospitals. Some research suggests the implementation of CRHTTs is associated with reductions in psychiatric hospital admissions and reduced inpatient stays. However, CRHTT effects on hospital-based outcomes can vary greatly across programs and locations, which could be attributed to differences in community resources, program admission thresholds and other practices, and/or area populations.

Hospital Admissions & Length of Stay: Some research suggests CRHTTs are associated with reduced hospital admissions and reduced bed days. However, there are notable exceptions and methodological limitations that reduce confidence in these findings. CRHTTs may only reduce voluntary hospital admissions and have no effect on involuntary admissions. Additional research is needed to better understand CRHTT impact on compulsory admissions.

Facilitated Discharge: CRHTTs also are intended to facilitate discharges from inpatient units and promote early discharge by providing care in the individual's home environment. There is some evidence that facilitated discharge by CHRTTs can reduce individuals' hospitalization time. However, further study is needed to understand the prevalence of facilitated discharge by CRHTTs and its impact on patients' length of stay, clinical outcomes, and risk for hospital readmission.

Service Users' Clinical Outcomes: The limited available evidence on clinical outcomes is promising with some research reporting clinical improvements in patients who received CRHTT interventions (e.g., overall functioning, symptom severity). Concerns have been raised about some reports that suicide rates are higher for patients receiving CRHTT care as compared to inpatient care, though, others found no differences. However, these reports do not account for patient characteristics or differences in CRHTT service delivery. Additional research is needed to better identify risk factors and interventions to improve patient safety.

Cost Effectiveness: The limited studies that have examined CRHTT cost effectiveness show promise that CRHTTs may produce cost savings as compared to other services. CRHTTs may result in cost savings by shifting care from inpatient care to services in the community. Though, additional research is needed before concluding CRHTTs are cost effective.

Stakeholder's Perceptions of Crisis Resolution & Home Treatment Teams

Several studies have examined stakeholder views of CRHTT programs, including stakeholder perceptions of key programmatic elements for CRHTT response. Stakeholders' descriptions of the key elements for program implementation and barriers to delivery of care generally fall into one of three categories: (1) the organization of CHRTT programs; (2) the content of CRHTT interventions; and (3) the role of CRHTTs.

Organization of Crisis Resolution & Home Treatment Teams: Consideration of the organization of CRHTTs is a consistent theme in stakeholder discussions of the programmatic elements that may act as barriers or facilitators to effective implementation. Stakeholders highlight CRHTT response time, frequency of contact, staffing, criteria for program involvement, and resource management as key areas to consider in the organization of CRHTT programs.

Content of Crisis Resolution & Home Treatment Team Interventions: In addition to the organization of CRHTT programs, the preferred content of CRHTT interventions is often discussed among stakeholders. Researchers find that stakeholders view several aspects of CRHTT interventions as particularly critical, including family and caregiver involvement in treatment plans, the provision of practical/emotional support, and risk management by CRHTT staff.

Primary Roles of Crisis Resolution & Home Treatment Teams: Finally, researchers have examined stakeholder views on the role of CRHTTs. CRHTT stakeholders typically identify the role of gatekeepers to acute inpatient care as a primary responsibility for CRHTTS. However, the specific nature of CRHTT's gatekeeping role is found to vary considerably across different programs.

Discussion & Conclusion

Crisis resolution and home treatment teams (CRHTTs) have been implemented internationally as an alternative to hospitalization for individuals with severe mental illness who experience mental health crises. A CRHTT is comprised of a multi-disciplinary team of mental health professionals who respond to crisis situations in the community and provide assessment and short-term, intensive home treatment in lieu of hospitalization when appropriate. Additionally, CRHTTs facilitate individuals' discharge from inpatient hospitalization by providing discharge planning and intensive care at home. The available research examining the impact of CRHTTs provides preliminary evidence of the promising effects of this response model. However, the research findings must be considered in light of several methodological limitations and remaining gaps in knowledge on the effects of CRHTT programs.

Research limitations include insufficient control of factors that may affect the outcomes of interest, a lack of comparison groups, small sample sizes resulting in insufficient statistical power to detect changes across outcomes, and unclear specification on the calculation of hospital admission rates. The available literature also raises several notable concerns related to the CRHTT model that require further research. Specifically, future research should focus on factors that are associated with suicide risk among patients in CRHTT care, including both longitudinal studies and follow-up in randomized controlled trials to better understand the relationship between CRHTT interventions and suicide risk over time. Additionally, researchers must invest in the study of CRHTT effects on involuntary hospital admissions to inform our understanding of the best methods to reduce the reliance on compulsory care (when appropriate).

A notable gap in CRHTT evaluations is the lack of consideration of the impact of these programs across different populations. For example, the extent to which CRHTT programs interact with people with intellectual and/or developmental disabilities (IDD) as well as people with co-occurring IDD and mental health disabilities and the impact of CRHTT services on these individuals is largely unknown. Furthermore, researchers must assess the appropriateness of the original adult CRHTT model for children and adolescents and for older adults, as the evidence of the effectiveness of CRHTTs developed specifically for other populations than adults is lacking. Finally, CRHTT research has largely ignored the role of police in interacting with CRHTTs (e.g., police referrals) and the impact of CRHTTs on criminal justice outcomes. Future research should investigate police decision-making in referring individuals experiencing a mental health crisis to a CRHTT versus other dispositions and what factors can facilitate effective partnerships with police. Furthermore, it is crucial to understand CRHTT impact on criminal justice diversion (e.g., reduction of arrests, officers' time spent on calls for service).

Key Takeaways

- Crisis resolution and home treatment teams (CRHTTs) are a mental health-based approach to acute crisis response consisting of mobile teams of mental health professionals who provide response, assessment, and short-term, intensive in-home and community-based treatment to individuals who experience acute mental health crises. Developed as an extension of acute mental health services, CRHTTs have been most extensively implemented in the United Kingdom.

- Evaluations suggest that CRHTTs may reduce pressure on and costs to the health care system by reducing hospital admissions and individuals' length of stay in inpatient settings. Limited evidence also suggests that CRHTT services may produce clinical improvements in service users (e.g., overall function, symptom severity), although more research is needed to understand the characteristics of CRHTT service users and the impact of CRHTT interventions on their health and wellbeing.

- We do not know how CRHTTs impact the frequency or nature of police response to individuals living with serious mental illness. To date, no research has examined the affects of CRHTT implementation on criminal justice outcomes.

- Stakeholders highlight several key elements for the planning and delivery on CRHTT programs, including the consideration of program organization (e.g., staffing, patient eligibility criteria, resource management), the content of CRHTT interventions (e.g., risk management, practical/emotional support), and the primary roles of CRHTTs (i.e., gatekeepers to acute crisis services).

- Research findings must be considered in light of several methodological limitations. Limitations include the insufficient control of factors that may affect outcomes of interest, a lack of comparison groups, and small sample sizes resulting in insufficient statistical power to detect changes across outcomes.

- There remain many gaps in knowledge on the effects of CRHTT programs. The extent to which CRHTT programs interact with people with intellectual and/or developmental disabilities (or co-occuring disabilities) and the impact of CRHTT services on these individuals is largely unknown. Furthermore, researchers must assess the appropriateness of the original adult CRHTT model for children and adolescents and for older adults, as the evidence of the effectiveness of CRHTTs developed specifically for other populations than adults is lacking.

I. Introduction

Crisis resolution and home treatment teams (CRHTTs) – also known as crisis resolution teams, crisis assessment and treatment teams, or home treatment teams – are a mental health-based crisis response and treatment model consisting of teams of mental health professionals who provide response, assessment, and short-term treatment to individuals living with severe mental illness who experience crises in the community (Johnson, 2013; Lamb et al., 2020).[2] Developed as an extension of acute mental health services (Rhodes & Giles, 2014), CRHTTs have been most extensively implemented in the United Kingdom, with the national development and delivery of the CRHTT model mandated in countries such as England (Department of Health, 2000; Hunt et al., 2014).

The CRHTT model for acute crisis response was created as a rapid response for individuals with severe mental illness who experience mental health crises. Importantly, the CRHTT model includes short-term intensive home treatment in addition to rapid response and crisis assessment. Research examining CRHTT programs suggests they may be effective in reducing hospital admissions and length of stay for individuals who experience mental health crises. However, there are several notable methodological limitations within this research that encourage caution in making these conclusions. Further, although it is observed that CRHTTs may interact with individuals with intellectual and developmental disabilities (IDD) or co-occuring disabilities, our understanding of the nature, frequency, and outcomes of these interactions is limited.

This document provides a review of the research examining the implementation and impact of crisis resolution and home treatment teams.[3] This review is organized into the following four sections. First, Section II describes the definition and implementation of the CRHTT model, including identifying key model characteristics and variation across programs implemented in different communities. Section III outlines the available research on the impact of CRHTTs on hospital admissions for service users, clinical outcomes for service users, and cost effectiveness for the health care system. Section IV describes stakeholders' perceptions of CRHTTs, as well as identified key elements for effective program implementation. Finally, Section V provides a discussion of the research findings and implications for practice and future research.

[2] CRHTT programs are sometimes categorized alongside mobile crisis team (MCT) programs because both programs involve the mobile response of teams of mental health professionals to crisis situations. However, CRHTTs differ from MCTs by providing (1) response to acute mental health crises, (2) conducting mental health assessments, AND (3) *providing short-term, intensive in-home and/or community-based treatment with regular follow-up visits with services users*.

[3] This document provides a review of research related to CRHTTs who provide response, assessment, and treatment to individuals experiencing mental health crises in the community. Evaluations of teams who provide intensive home treatment, but do not perform crisis response or assessment functions are not considered.

II. Definition and Implementation of the Crisis Resolution & Home Treatment Team Model

Crisis resolution and home treatment teams (CRHTTs) are mobile teams of mental health professionals who provide response, assessment, and short-term, intensive in-home and community-based treatment to individuals who experience acute mental health crises (Lamb et al., 2020; Morant et al., 2017). Implemented internationally (e.g., United Kingdom, Norway, Australia, Belgium), this crisis response and treatment model is founded upon the observation that most crisis response service users would prefer to engage with community-based mental health services over hospital-based services (Department of Health, 2001a; Johnson, 2004, 2013; Lamb et al., 2020; Morant et al., 2017). As such, CRHTT programs provide people who experience mental health crises an alternative to inpatient psychiatric hospitalization through the provision of support in service users' home environment (Klevan et al., 2016).

In many communities, CRHTTs act as "gatekeepers" to acute mental health services by providing response and treatment in the community to reduce hospital admissions, mitigate pressure on inpatient units, and facilitate service users' transition from the hospital to reduce their time spent within clinical settings (Hunt et al., 2016; Johnson, 2013; Johnson et al., 2005a; Tulloch et al., 2015). CRHTTs may receive referrals from Accident and Emergency (A&E) departments, primary care practitioners, community mental health teams, the criminal justice system, service users and their caregivers, and other health care professionals. Following referral, CRHTTs provide rapid response, conduct an initial screening to assess appropriateness of CRHTT intervention, and provide a comprehensive assessment of service needs (Department of Health, 2001a). CRHTTs then determine an appropriate course of action that may include home treatment by CRHTT staff, hospitalization, and/or referrals to other mental health or social services (Sjøle et al., 2010).

The CRHTT model was originally developed to serve adults with serious mental illness (SMI) who experience an acute crisis (Department of Health, 2001a). Original guidelines for CRHTT implementation indicated this response is not usually appropriate for individuals with learning disabilities, mild anxiety disorders, a primary diagnosis of substance use disorders, dementia, an exclusive personality disorder diagnosis, and/or crises solely related to relationship issues. However, the guidelines on the types of patients deemed appropriate for CRHTT response and services has expanded over time (e.g., to include children and young people, to include patients with less severe mental illness, to no longer exclude patients based on diagnosis or learning disability) (Baugh et al., 2019; National Health Service, 2019a; While et al., 2012).

Several studies have examined the implementation of CRHTT programs across communities. In particular, these studies focus on how closely programs adhere to the CRHTT model and align with best practice guidelines (see Department of Health, 2001a). Across these evaluations, researchers find significant variation in the implementation of CRHTT programs—with many programs deviating from best practice guidelines and/or experiencing limitations in their full implementation of the CRHTT model. For example, researchers observe wide variation in the implementation of key programmatic elements, including the role of the CRHTT in the larger mental health system; the number/type of staff employed; the services provided by the teams;

Table 1. Key Characteristics of the Crisis Resolution & Home Treatment Team Model*

Characteristic	Description
1. Target Populations	Target populations include adults (ages 16-65) with severe mental health disorders who experience an acute psychiatric crisis that otherwise would require hospitalization without CRHTT services. Recent guidelines also call for the specific provision of CRHTT services for children and young people. Some teams indicate they provide services to individuals ages 18 or older. Other teams exclusively focus on children and young people. CRHTTs may also see patients living with less severe mental illness.
2. Staffing	CRHTTs are ideally comprised of a multidisciplinary team of staff, including psychologists, nurses, social workers, and psychiatrists. Based on a caseload of 20-30 service users, the Department of Health (2001a) guidelines recommended 14 full-time staff per team. The composition of the team varies across programs, with relatively few programs being fully multidisciplinary.
3. Referrals	Referrals for CRHTT intervention can come from many sources, including community mental health teams, the criminal justice system, inpatient hospitals, primary care, accident and emergency departments, former service users, and family. Though, accepted referral sources vary across programs.
4. Availability and Rapid Response	CRHTTs are typically available 24/7. Although best practice guidelines recommend CRHTTs aim to provide a response within one hour of referral, individual CRHTT programs' target response time varies in practice (ranging from four to 24 hours)
5. Intensive Intervention and Support	CRHTTs provide short-term intensive home treatment in lieu of hospitalization when appropriate. The aim is to remain involved until the crisis has been resolved or the individual has been connected to ongoing treatment services, with a goal of discharging the individual to continuing care within six weeks. The target discharge time (e.g., a few weeks) and the intensity of support varies across programs, often diverging from the recommended frequency and duration of visits.
6. Range of Interventions	Core interventions include a comprehensive assessment; emotional support; medication administration and monitoring; practical interventions to support daily living (e.g., assistance with obtaining food, housing, childcare); interventions to increase resilience (e.g., stress management, problem-solving skills); and relapse prevention/crisis planning. The nature of interventions provided varies in part due to available resources, with some programs mainly focusing on medication management to the neglect of other interventions.
7. Involvement of Caregivers	CRHTTs should actively involve the family and other caregivers in interventions and decision-making. The frequency/degree that caregivers are involved varies in practice.
8. Gatekeeping Role	The CRHTT can act as a "gatekeeper" to acute inpatient hospitalization with patients only being admitted following a rapid emergency assessment by the CRHTT to determine if hospitalization is necessary and their suitability for home treatment. A goal is to provide care in the least restrictive environment. Though, programs vary in the extent they fulfill this gatekeeping role.

*Department of Health (2001a); Johnson (2013); Lamb et al. (2020); Morant et al. (2017); National Health Service (2019a)

Table 2. Crisis Resolution & Home Treatment Team Programs in Practice

Site Example: Islington Crisis Team, Islington, London, England

Program Description:

The Islington Crisis Team is a multi-disciplinary team who provides a rapid assessment of individuals experiencing a mental health crisis in the community. If appropriate, the home treatment team provides treatment as an alternative to acute hospital admission. Referrals can be from social services, the police, general practitioners, emergency services, mental health community teams, and self-referrals. Service users are usually seen within 24 hours of referral and the service operates 24 hours a day, 365 days a year. The multi-disciplinary team includes a psychiatrist, social worker, nurses, and support workers who also provide a needs assessment of basic supports (e.g., food, shelter, finances) before conducting a mental state examination and risk assessment. On average, service users receive care for two weeks from the team but can vary based on the individual's needs.

For more information, see https://www.candi.nhs.uk/services/islington-crisis-resolution-team; https://www.candi.nhs.uk/service-users-and-carers/crisis-care-residents-camden-and-islington

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Site Example: Sandwell Crisis Resolution and Home Treatment Team, Oldbury, England

Program Description:

The Sandwell Crisis Resolution and Home Treatment Team provides services for people experiencing a mental health crisis. The team only accepts referrals from mental health professionals, including general practitioners, mental health teams, or the Sandwell Hospital Accident & Emergency. After receiving a referral, one or two members of the team will meet the individual and/or their caregiver to assess the individual's needs. If the CRHTT decides they are the appropriate team to provide services, they will make a care plan with the individual and potentially the person's caregiver. The CRHTT provides support to the service user to help them manage their symptoms themselves and provide practical help (e.g., housing) with a goal of preventing someone from having to go to the hospital.

For more information, see https://www.bcpft.nhs.uk/services/mental-health/83-for-adults/community-services/14-crisis-resolution-and-home-treatment-team

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Site Example: Crisis Resolution and Home Treatment Team (CRHTT), Central Norfolk

Program Description:

The CRHTT provides assessment and short-term intensive community treatment for individuals experiencing a mental health crisis who otherwise would need to be admitted to the hospital or who cannot be discharged from a hospital without intensive support. The team serves as a gatekeeper to other mental health services, including acute inpatient care. The team consists of experienced mental health staff, including nursing, social care, psychology, pharmacy, and psychiatric staff. Referrals include general practitioners, emergency services (e.g., police, ambulance services), other health services, and service users and their families who are known to the CRHTT. After referral, a mental health professional will provide assessment in the individual's home, community setting, or at their base in the hospital and agree to a plan with the service user. The plan of care may include receiving ongoing support, a referral to a more suitable service, a recommendation to the referrer for a plan of care, or in some cases, hospital admission. They encourage family involvement and offer support for caregivers, including clinics where caregivers can access one on one time with a staff member.

For more information, see https://www.nsft.nhs.uk/Our-services/Pages/Crisis-Resolution-and-Home-Treatment-Team-Central-Norfolk.aspx

average caseloads and service duration; hours of operation; and the characteristics of patients served (Hasselberg et al., 2011a; Jones & Jordan, 2010; Karlsson et al., 2011; Morant et al., 2017; Onyett et al., 2008; Wheeler et al., 2015). The variation in the implementation of CRHTT programs can reflect differences in the needs of the community, innovations at the local level, and/or resource constraints or the availability of other crisis services (Odejimi et al., 2020; Lloyd-Evans et al., 2018a; Sjolie et al., 2010).

Table 1, above, provides information on these key characteristics of crisis resolution and home treatment team programs. In turn, Table 2 provides examples of these programs in practice.

III. The Impact of Crisis Resolution & Home Treatment Teams

Evaluations of crisis resolution and home treatment teams tend to examine the impact of these programs on health care system outcomes. Specifically, researchers examine the effects of CRHTT responses on service users' hospital-based outcomes, including admission rates and length of stay in inpatient settings. To a lesser extent, researchers have examined clinical outcomes for CRHTT service users and the cost effectiveness of this approach. To date, no research has been conducted to examine the impact of CRHTT programs on criminal justice system outcomes. Notably, the substantial variation in the implementation of CRHTT programs makes it challenging to systematically assess program effects. Still, evidence of the effectiveness of CRHTTs in reducing hospitalizations, improving clinical outcomes for service users, and promoting cost effectiveness is promising. These findings are discussed in greater detail below. A table of the studies reviewed to inform this section can be found in Appendix A.

A. Hospital-Based Outcomes

The CRHTT response model was developed to provide an alternative to the hospitalization of individuals who experience mental health crises and to facilitate the timely discharge of these individuals from inpatient hospitals (Keown et al., 2007). Some research suggests the implementation of CRHTTs is associated with reductions in psychiatric hospital admissions and reduced inpatient stays. However, research demonstrates that CRHTT effects on hospital-based outcomes can vary greatly across programs and locations, which could be attributed to differences in community resources, program admission thresholds and other practices, and/or area populations (Cotton et al., 2007). The findings from this research are presented below.

1. Hospital Admissions & Length of Stay

Providing early support for CRHTT intervention, a randomized controlled trial in Australia found that patients who received care from the CRHTT experienced significantly fewer hospital admissions and, in the event of hospitalization, shorter lengths of stay than patients in a control group who received standard hospital care (Hoult et al., 1984). Similarly, using a randomized controlled trial in England, researchers observed that individuals who received CRHTT services were significantly less likely to be voluntarily admitted to a hospital both eight weeks and six

months following a crisis than the control group who received care from community mental health teams, inpatient units, and crisis houses (Johnson et al., 2005b). Notably, the CRHTT group also had significantly fewer days in the hospital eight weeks and six months following the crisis incident than the control group.

The findings from these experimental evaluations are supported by empirical observations from quasi-experimental studies conducted across several countries (Barker et al., 2011; Blæhr et al., 2017; Dibben et al., 2008; Jethwa et al., 2007; Johnson et al., 2005a; Keown et al., 2007). For example, in Spain, CRHTT patients were significantly less likely to be admitted to a hospital than a matched cohort of patients seen by the Psychiatric Emergency Department (Córcoles et al., 2015). In Denmark, Blæhr and colleagues (2017) found significantly fewer admissions and readmissions in a group of CRHTT service users, when compared to a matched control group, one- and two-years post-crisis incident. In England, CRHTT service users were less likely to be admitted to the hospital than a group of non-CRHTT patients in the six weeks following their crisis (49% - CRHTT; 71% - pre-CRHTT; Johnson et al., 2005a). By six months after the crisis, 60 percent of the CRHTT cohort had been admitted to the hospital at least once compared to 75 percent of the pre-CRHTT cohort. On average, the CRHTT cohort were hospitalized 12.9 days, compared to 19.1 days in the pre-CRHT cohort (Johnson et al., 2005a).[4] Furthermore, in a study of hospital admission rates before and after the implementation of two CRHTTs in Edinburgh, Scotland, there was a 24 percent reduction in admission rates following the implementation of the programs—compare this to an average reduction of 8 percent in the five years prior to CRHTT implementation (Barker et al., 2011).

Collectively, this research suggests CRHTT programs can be successful in reducing both the prevalence and length of hospitalization of individuals who experience mental health crises. However, there are both exceptions (see Adesanya, 2005; Jacobs & Barrenho, 2011) and important qualifications to these findings. Specifically, there is some evidence that the impact of CRHTT programs may be limited to reductions in *voluntary* hospital admissions. Indeed, across several studies, researchers report significant differences in voluntary hospitalizations, but observe either no difference or an unexpected increase in *involuntary* hospitalizations (Furminger & Webber, 2009; Johnson et al., 2005a, 2005b; Tyrer et al., 2010; see Carpenter et al., 2013, Hubbeling & Bertram, 2012 for review). In explaining these findings, some scholars suggest that, although CRHTTs may prevent the initial involuntary hospitalization of individuals who experience mental health crises, heightened symptoms and/or deterioration in functioning

[4] Although the authors do not explicitly state an explanation for the shorter length of stay in the CRHTT group than the pre-CRHTT group, there are several potential reasons. First, there could be differences between the pre-CRHTT and CRHTT cohort that are not accounted for in analyses. For instance, 90 percent of the pre-CRHTT cohort had been previously hospitalizaed, whereas 70 percent of the CRHTT cohort had been previously admitted, suggesting there are significant differences in the two cohorts that could affect length of stay. Second, it is plausible that the CRHTT helped facilitate discharges for the CRHTT cohort, resulting in decreased length of stay as the patient will continue to receive services at home following discharge. Third, decreases in the average number of days in the hospital could be related to decisions to reduce the number of inpatient beds available prior to the introduction of the CRHTT, resulting in decreased bed usage and length of stay (Tyrer et al., 2010). Others found an *increase* in the length of stay following the introduction of a CRHTT, which they suggested is due to a reduction in short admissions (Keown et al., 2007).

following individuals' initial contact with the CRHTT can ultimately require hospitalization (see Carpenter et al., 2013; Furminger & Webber, 2009; Keown et al., 2007; Tyrer et al., 2010). Though, Barker and colleagues (2011) found no significant differences in compulsory admissions after the introduction of a CRHTT and concluded CRHTTs can maintain patients in the community without later requiring involuntary hospitalization.

Notably, researchers identify several other factors that may influence the likelihood of hospitalization among individuals who experience mental health crises—including the characteristics of the specific CRHTT program and characteristics of CRHTT service users. For example, Hasselberg and colleagues (2013) observed that service users in Norway that were seen by a CRHTT that had availability outside office hours were less likely to be admitted than patients seen by a CRHTT only available during office hours. This remained true despite the CRHTT's engagement with individuals living with more serious mental illness (Hasselberg et al., 2011a). In England, the location of the CRHTT's assessment was found to influence the likelihood of hospital admission (Cotton et al., 2007). Specifically, individuals who were assessed by CRHTT staff in an emergency department (ED) were more likely to be admitted to the hospital within eight weeks of their crisis incident. Potential reasons for this difference include time pressues in EDs; patient expectations that if they go to the ED, they will be admitted; unmeasured differences in the severity of symptoms; and/or the inability to assess the patients' home environment and suitability for home treatment in the ED setting. In turn, Werbeloff and colleagues (2017) observed that older individuals (> 65 years of age) and individuals with a diagnosis of a non-affective psychotic disorder were more likely to be admitted to acute crisis services in London. In contrast, individuals who had their first contact with a CRHTT, had an anxiety disorder, and had longer contact with the CRHTT during their crisis were less likely to be admitted to acute services.

2. Facilitated Discharge from Inpatient Hospitals

In addition to hospital diversion, CRHTT programs aim to facilitate individuals' discharge from inpatient hospitals by providing discharge planning and intensive care at home. CRHTTs productivity in this area is not well understood, however, with the limited available research suggesting CRHTTs spend only a fraction of their time in this role. For example, in an examination of data from several CRHTTs in London, Tulloch and colleagues (2015) found that facilitated discharges occurred in only 29 percent of admissions, with 36 percent of CRHTT activity involving facilitated discharges. Notably, facilitated discharge was found to produce a shorter length of stay (i.e., four days shorter on average) when compared to hospital stays without facilitated discharge, even when controlling for relevant variables (e.g., diagnosis, being under the care of another community mental health team at discharge). Nonetheless, the effect size was small and the reduction in the number of bed days was small in comparison to the mean length of stay of 40 days. Furthermore, the readmission rates were not different between patients who received facilitated discharge versus patients who did not. Taken together, these results suggest facilitated discharges by CRHTTs may be effective in reducing the length of hospitalization without increasing the subsequent risk for readmission. However, additional research is needed to better understand the CRHTT role in facilitating discharge from

inpatient admissions and their impact on length of stay, clinical outcomes, and risk for readmission.

B. Service Users' Clinical Outcomes

In addition to providing response to and assessment of individuals who experience mental health crises, CRHTTs provide short-term, in-home or community-based treatment. Given this role, several studies have examined the impact of CRHTT programs on clinical outcomes among service users, including the prevalence and severity of mental health symptoms and the quality of life of individuals following CRHTT intervention.

Research examining the impact of CRHTT intervention on individuals' clinical outcomes provides mixed findings, with some scholars observing positive clinical outcomes among CRHTT service users (Alba Palé et al., 2019; Biong et al., 2012; Hasselberg et al., 2011b; Johnson et al., 2005b) and others reporting no effects (Johnson et al., 2005a). For example, in one randomized controlled trial, individuals who had received CRHTT response in Islington (England) were found to have less severe clinical and social problems in the eight weeks following their initial crisis incident, when compared to a control group of patients who received alternate forms of care (e.g., inpatient units, community mental health teams; Johnson et al., 2005b). This difference, however, was not maintained in the study's six-month follow-up, suggesting the short-term effects of CRHTT interventions. In contrast, a pre- and post- comparison of the same CRHTT found no clear differences in symptom severity, social functioning, and quality of life between a pre-CRHTT group and CRHTT group (Johnson et al., 2005a). The differences between the two studies examining the same CRHTT program are likely due to the characteristics of the sample. The quasi-experimental study compared all adult patients experiencing a crisis who presented to secondary mental health services, whereas in the randomized controlled trial, a substantial group of patients (n = 104) were not included in the trial for various reasons (e.g., lacked capacity to provide consent). The excluded patients likely had more severe symptoms and impairments in social functioning than patients included in the trial (e.g., excluded patients were more likely to be involuntarily admitted than included patients).

In another comprehensive examination of eight CRHTT programs in Norway (N = 680 patients), clinical staff reported that service users experienced statistically significant improvements in their symptoms and daily levels of functioning (e.g., psychological and social functioning) from baseline to discharge (mean = 19 days of treatment) from the CRHTT program (Hasselberg et al., 2011b). Notably, there was significant variation in the magnitude of change observed in patients' levels of functioning. This variation was attributed to differences in the implementation of the respective CRHTT programs (e.g., staffing, mean treatment days). Longer treatment duration was a significant predictor of more favorable clinical outcomes. Patients' depressive symptoms had the greatest improvements. In contrast, symptoms of psychosis and substance use issues had the least improvements. Patients with psychotic symptoms received shorter treatment, were the most often referred to other parts of the mental health system, and showed less improvement than other patients.

With the inherent risks associated with mental health crises and inconsistencies in the continuity of care in many communities, concerns have been raised about the ability of CRHTTs to effectively serve individuals with serious mental illness. The prevalence of suicide among CRHTT service users have highlighted these concerns. Patients at high risk include patients living alone, recently discharged from the hospital, and experiencing adverse life events (Hunt et al., 2014). Notably, however, the research on the rate of suicide among CRHTT users provides mixed findings on this issue, likely in part due to differences in research methodology (e.g., comparing suicide rates among CRHTT users to inpatient service users; examining suicide rates pre- and post-CRHTT implementation at a local level or national level) (Blæhr et al., 2017; Hunt et al., 2014; Johnson et al., 2005b; Kapur et al., 2016; Keown et al., 2007; While et al., 2012).

Notably, a longitudinal study (2003–2011) of suicide in England suggests that suicide rates among CRHTT service users are higher than inpatient suicide rates and rates in the community[5]—although CRHTT suicide rates have declined over the years (Hunt et al., 2014). At the last contact with mental health services, significantly more patients who died by suicide under CRHTT care showed symptoms of depression (45% - CRHTT; 30% - inpatient) and emotional distress (46% - CRHTT; 28% - inpatient) than patients who died under inpatient care. Furthermore, at their last appointment, clinicians were more likely to rate patients under CRHTT care as being at moderate to high short-term risk of suicide than patients under inpatient care (27% - CRHTT; 18% - inpatient). Collectively, these findings suggest the home environment may not be the most appropriate care setting for patients at highest risk for suicide. Furthermore, 29 percent of individuals who died by suicide under CRHTT care died within two weeks of discharge from the hospital (National Confidential Inquiry into Suicide and Safety in Mental Health, 2019), which warrants consideration of the role of CRHTT in facilitating early discharges for patients at the highest risk (Hunt et al., 2016). In comparison, researchers did not observe significant differences in suicide rates between a cohort of CRHTT patients and a matched control group in Denmark (Blæhr et al., 2017).

A few studies found lower aggregate suicide rates for National Health Service (NHS) trusts follolwing CRHTT implementation as compared to before implementation (Kapur et al., 2016; While et al., 2012). For instance, a study that examined service provision in NHS mental health services (n = 62) in England found that the aggregate suicide rate per 10,000 contacts with mental health services was significantly lower following CRHTT implementation (average rate before implementation = 12.98; after implementation = 9.46) (Kapur et al., 2016). Despite the methodological limitations in examining CRHTT impact on suicides (e.g., insufficient power, challenges in comparing suicide rates across services/in the community), the high number of suicides per year and higher suicide rates for patients under CRHTT care than inpatient care call for an increased attention to the assessment and monitoring of risk to enhance patients' safety (see Keown et al. 2007).

[5] The rate of suicide in the community was calculated using the number of people in contact with NHS secondary mental health services (excluding admissions) as the denominator (Hunt et al., 2014).

C. Cost Effectiveness

Fewer studies have examined the cost effectiveness of CRHTT programs. Among those that do, researchers typically observe CRHTTs produce cost savings for the health care system when compared to the costs of other mental health services (Ford et al., 2001; Hubbeling & Bertram, 2012; McCrone et al., 2009a, 2009b). Specifically, CRHTTs are observed to reduce overall costs by diverting service users to community-based services in lieu of more expensive inpatient care (McCrone et al., 2009a). Furthermore, the shorter lengths of stay within inpatient facilities by CRHTT service users have been found to decrease the costs for each service user (Ford et al., 2001; McCrone et al., 2009a, 2009b). However, researchers note that the overall cost of CRHTT interventions can vary depending on a myriad of other factors, such as the number of CRHTT service users, the availability of community-based services, and the capacity of inpatient facilities. Although these initial findings are promising, additional research examining the costs of CRHTT interventions is needed before making strong conclusions about the cost effectiveness of this approach.

IV. Stakeholders' Perceptions of Crisis Resolution & Home Treatment Teams

Several studies have examined stakeholder views of CRHTT programs, including client satisfaction with CRHTT services and stakeholder perceptions of key programmatic elements for CRHTT response. Regarding client satisfaction, researchers suggest that individuals who engage with CRHTTs are typically happy with CRHTT services (see e.g., Carter et al., 2018). Indeed, many service users identified the value of in-home treatment (Giménez-Díez et al., 2020; Morant et al., 2017; for reviews, see Carpenter et al., 2013; Winness et al., 2010). In a survey of service user- and caregiver-satisfaction, for example, 93 percent of service users reported improved mental health functioning after CRHTT intervention and 31 percent reported feeling totally recovered after discharge (Barker et al., 2011). Notably, service users have also reported higher satisfaction with CRHTT care than with other services (Johnson et al., 2005a, b). These findings are not universal, however (see Hopkins & Niemec, 2007; Lyons et al., 2009).

Qualitative research studies with various stakeholder groups have also identified several programmatic elements that may serve as either facilitators or barriers to the effective implementation of CRHTT programs. Stakeholders' descriptions of the key elements for program implementation and barriers to delivery of care generally fall into one of three categories: (1) the organization of CHRTT programs; (2) the content of CRHTT interventions; and (3) the role of CRHTTs (see Morant et al., 2017). These categories are described in greater detail below.

A. Organization of Crisis Resolution & Home Treatment Teams

Consideration of the organization of CRHTTs is a consistent theme in stakeholder discussions of the programmatic elements that may act as barriers or facilitators to effective implementation. Specifically, stakeholders highlight CRHTT response time, frequency of contact, staffing, criteria

for program involvement, and resource management as key areas to consider in the organization of CRHTT programs.

Stakeholders consistently identify rapid response as a critical component of CRHTT intervention (Klevan et al., 2017; Morant et al., 2017; Wheeler et al., 2015). For example, in a study of CRHTTs in England, service users and caregivers advocated for a same-day response from CRHTTs, while CRHTT staff suggested setting target response times, such as responding within four hours of a referral (Morant et al., 2017). In addition to rapid response, many CRHTT service users and caregivers identify the importance of regular contact with CRHTT staff following their initial response, suggesting visits should occur daily. In turn, CRHTT staff highlight the benefit of regular contact with service users to facilitate observations of clinical changes and the monitoring of risks. In instances where resource limitations prevent regular in-person connections, stakeholders acknowledge the utility of a 24-hour CRHTT line that allows service users to contact CRHTT staff at any time (Giménez-Díez et al., 2020; Hopkins & Niemac, 2007).

Regarding CRHTT staffing, many service users report that they prefer to work with a single CRHTT worker or a small team of workers (Morant et al., 2017). Indeed, a principal complaint of service users is the inconsistency in the specific CRHTT staff conducting home visits, which is viewed to hinder the development of therapeutic relationships (Carpenter & Tracy, 2015; Hopkins & Niemec, 2007; Morant et al., 2017). In turn, CRHTT practitioners acknowledge the importance of balancing multi-disciplinary care with providing staff continuity to build these relationships. In this vein, CRHTT practitioners recommend routine information sharing among CRHTT staff to facilitate the planning/preparation of CRHTT visits and open communication with service users regarding the benefits of incorporating multi-disciplinary perspectives in their treatment and care (Morant et al., 2017; Titheradge & Galea, 2019).

Stakeholders have identified additional challenges related to the organization of CHRTT programs, including the strict criteria guiding CRHTT engagement with service users. Specifically, service users and caregivers note that an individual's mental health must deteriorate to a severe level before qualifying for CRHTT intervention (Lyons et al., 2009). Furthermore, individuals highlight the difficulty of accessing alternative services when not accepted by CRHTT programs (Lyons et al., 2009). Ultimately, the reactive nature of this treatment approach is found to preclude effective intervention prior to crisis escalation.

Finally, CRHTT leaders report challenges in sustaining and balancing resources across the crisis response/assessment and home treatment roles of the CRHT—reporting that crisis response and assessment often take priority, particularly when demands for CRHTT services are high (Rhodes & Giles, 2014). In some instances, these demands are enhanced inappropriate referrals from general practitioners and emergency departments of patients that do not meet CRHTT risk thresholds (Morant et al., 2017). In turn, CRHTT staff highlight resource constraints in local inpatient facilities (e.g., bed availability) that may impact CRHTT response.

B. Content of Crisis Resolution & Home Treatment Team Interventions

In addition to the organization of CRHTT programs, the preferred content of CRHTT interventions is often discussed among stakeholders. Researchers find that stakeholders view several aspects of CRHTT interventions as particularly critical, including family and caregiver involvement in treatment plans, the provision of practical/emotional support, and risk management by CRHTT staff (Johnson, 2013; Morant et al., 2017).

Specifically, caregivers are found to place high value in collaboration and ongoing communication with CRHTT staff on home treatment plans, but often reported being excluded from these interventions (Klevan et al., 2016; Morant et al., 2017). Although CRHTT implementation guidelines prescribe family inclusion as a critical ingredient for effective CRHTT intervention, CRHTT practitioners suggest that, while family/caregiver input is considered for initial mental health assessments and determination of the appropriateness of home treatment, family/caregiver involvement in the treatment of services users is not always a priority (Morant et al., 2017). CRHTT practitioners identified numerous barriers to increased family involvement, including the time-limited nature of CRHTT interventions; a focus on medication over social factors to manage future crises; and resource limitations that limit the number of visits (Morant et al., 2017).

In addition to family/caregiver involvement, many service users describe the provision of practical support—including assistance with daily routines, housing difficulties, and transportation—and emotional support, communication, and therapy as some of the most helpful aspects of CRHTT intervention (Carter et al., 2018; Carpenter & Tracy, 2015; Hopkins & Niemec, 2007; Klevans et al., 2017; Morant et al., 2017; Wheeler et al., 2015). Some service users suggest that receiving practical and emotional support reduced the likelihood of future mental health crises. However, others note that this type of support is not always emphasized in CRHTT responses (Klevan et al., 2017). Indeed, a common concern among CRHTT stakeholders is the narrow focus of CRHTT interventions on the administration of medication rather than practical and/or emotional support (Lloyd-Evans et al., 2018b; Morant et al., 2017). CRHTT practitioners suggest that staffing and other resource constraints may influence the focus on medication, supervision, and other brief interventions they may provide.

Concerns have also been raised related to CRHTTs management of risk, with an audit of CRHTT programs' risk management indicating overall poor fidelity to the model (Lamb et al., 2020). As defined in the model fidelity review, risk management included comprehensive risk assessment and risk management procedures in place. Service users have also reported unsatisfactory experiences with CRHTTs, particularly describing concerns when there was a lack of communication at the time of discharge (e.g., not negotiating a specific plan to prevent future crises) (Hopkins & Niemiec, 2007). Discharge planning and clear communication about a relapse prevention plan is viewed as a critical component to CRHTT intervention (Department of Health, 2001a).

C. Primary Roles of Crisis Resolution & Home Treatment Teams

Finally, researchers have examined stakeholder views on the role of CRHTTs. CRHTT stakeholders typically identify the role of gatekeepers to acute inpatient care as a primary responsibility for CRHTTs (Morant et al., 2017; Wheeler et al., 2015). However, the specific nature of CRHTT's gatekeeping role is found to vary considerably across different programs.

Despite general agreement on the importance of the gatekeeping role, researchers note discussion among other mental health practitioners regarding the appropriateness of CRHTT assessment and response (Rhodes & Giles, 2014). Specifically, these professionals express concern about the limitations in CRHTT staff knowledge of patients' history when providing response, assessment, and treatment recommendations. Stakeholders also acknowledge the resource limitations that constrain CRHTT capacity to fulfill their gatekeeping role in addition to their home treatment responsibilities. To address these concerns, some CRHTTs have allocated crisis response/assessment and home treatment to different teams or reduced the gatekeeping role to preserve resources for home treatment. Alternatively, some CRHTTs reduce their capacities in facilitated discharge to focus their resources elsewhere.

Service users, caregivers, and CRHTT staff report the value of home-based treatment for several reasons, including perceptions of quicker recovery among service users, practitioners' preference for allowing service users to maintain their daily routines and social contacts, and a general preference for treating patients in the least restrictive environment (Morant et al., 2017; Wheeler et al., 2015). CRHTT stakeholders also frequently discuss the importance of clear communication and integration with other services (e.g., inpatient units, community mental health services), although stakeholders recognize that, in practice, there are challenges to effective inter-service communication and continuity of care (Morant et al., 2017).

V. Discussion

Crisis resolution and home treatment teams (CRHTTs) have been implemented internationally as an alternative to hospitalization for individuals with severe mental illness who experience mental health crises. A CRHTT is comprised of a multi-disciplinary team of mental health professionals who respond to crisis situations in the community and provide assessment and short-term, intensive home treatment in lieu of hospitalization when appropriate. Additionally, CRHTTs facilitate individuals' discharge from inpatient hospitalization by providing discharge planning and intensive care at home.

The available research examining the impact of CRHTTs provides preliminary evidence of the promising effects of this response model. Summarized in Table 3 below, this research suggests CRHTTs may be effective in reducing voluntary hospital admissions and length of stay within inpatient facilities, although this is not a universal finding. The limited research on clinical outcomes and cost effectiveness suggests CRHTTs are a promising practice, yet additional research is needed. A significant concern of CRHTT implementation is the high rate of suicides

that occur among patients in CRHTT care (see Hunt et al., 2014). As such, it is imperative for CRHTT practitioners and researchers to make concerted efforts in the identification of patients most at risk for suicide and provide appropriate interventions.

Table 3. Summary of Findings from Quantitative Evaluations of CRHTTs

Outcome	Findings
Hospital-Based Outcomes	*Hospital Admissions & Length of Stay* Some research suggests CRHTTs are associated with reduced hospital admissions and reduced bed days. However, there are notable exceptions and methodological limitations that reduce confidence in these findings. CRHTTs may only reduce voluntary hospital admissions and have no effect on involuntary admissions. Additional research is needed to better understand CRHTT impact on compulsory admissions. *Facilitated Discharge* CRHTTs also are intended to facilitate discharges from inpatient units and promote early discharge by providing care in the individual's home environment. There is some evidence that facilitated discharge by CHRTTs can reduce individuals' hospitalization time. However, further study is needed to understand the prevalence of facilitated discharge by CRHTTs and its impact on patients' length of stay, clinical outcomes, and risk for hospital readmission.
Service Users' Clinical Outcomes	The limited available evidence on clinical outcomes is promising with some research reporting clinical improvements in patients who received CRHTT interventions (e.g., overall functioning, symptom severity). Concerns have been raised about some reports that suicide rates are higher for patients receiving CRHTT care as compared to inpatient care, though, others found no differences. However, these reports do not account for patient characteristics or differences in CRHTT service delivery. Additional research is needed to better identify risk factors and interventions to improve patient safety.
Cost Effectiveness	The limited studies that have examined CRHTT cost effectiveness show promise that CRHTTs may produce cost savings as compared to other services. CRHTTs may result in cost savings by shifting care from inpatient care to services in the community. Though, additional research is needed before concluding CRHTTs are cost effective.

Qualitative examinations of CRHTT programs suggest service users and caregivers are generally satisfied with CRHTT services and value in-home crisis assessment and treatment. Several studies have examined stakeholder perceptions of critical ingredients for effective program

implementation. Notably, stakeholders identify several challenges, including limited resources, inconsistent staff conducting home visits, delays in receiving CRHTT care as well as delays in referrals to other services, and a narrow focus on medication management to the neglect of other interventions (e.g., practical support).

A common finding across studies is the substantial variation of CRHTT program implementation and the divergence of these programs from the original CRHTT model. With the recent call for expansion of CRHTTs in England to provide national 24/7 coverage of community-based crisis response and intensive home treatment by the National Health Service (NHS) (2019), it is important to identify effective resources (e.g., service improvement programs, learning communities) to support program implementation based on best practices (Lloyd-Evans et al., 2020).

A. Research Implications

The research findings highlighted above should be considered in light of several methodological limitations and remaining gaps in knowledge on the effectiveness of CRHTT programs. Research limitations include insufficient control of factors that may affect the outcomes of interest, a lack of comparison groups, small sample sizes resulting in insufficient statistical power to detect changes across outcomes, and unclear specification on the calculation of hospital admission rates.

CRHTTs vary substantially in their implementation across different programs. In addition to the differences in CRHTT structure and the interventions delivered by these teams, the local context of acute crisis services also varies (Lloyd-Evans et al., 2018a). Collectively, this variation can affect CRHTT outcomes. To date, however, we remain uncertain of the exact nature of these effects. To address this gap in knowledge, future research must account for variation across programs and differences in local communities when evaluating the impact of CRHTTs.

The available literature also raises several notable concerns related to the CRHTT model that require further research. Specifically, future research should focus on factors that are associated with suicide risk among patients in CRHTT care, including both longitudinal studies and follow-up in randomized controlled trials to better understand the relationship between CRHTT interventions and suicide risk over time. Additionally, researchers must invest in the study of CRHTT effects on involuntary hospital admissions to inform our understanding of the best methods to reduce the reliance on compulsory care (when appropriate).

A notable gap in CRHTT evaluations is the lack of consideration of the impact of these programs across different populations, including individuals with learning disabilities (also known as intellectual and developmental disabilities). For example, the extent to which CRHTT programs interact with people with intellectual and/or developmental disabilities (IDD) or co-occuring disabilities and the impact of CRHTT services on these individuals is largely unknown. Although the original CRHTT model proposed by the England Department of Health (2001a) indicated CRHTT service is not generally appropriate for individuals with learning disabilities, national

survey data indicate some CRHTTs are serving these populations (Lloyd-Evans et al., 2018a, b). Also, the recent National Health Service (NHS) (2019) guidelines and the NHS (2019) Long Term Plan emphasize the importance of enhancing available mental health support for individuals with learning disabilities. Recent guidelines no longer specifically exclude patients based on a learning disability, yet, the extent to which CRHTT programs interact with people with IDD or co-occuring disabilities and the impact of CRHTT services on these individuals is largely unknown. It is therefore critical for future research to examine the number of individuals served, interventions provided, and patient outcomes specifically for individuals with IDD.

Researchers must also assess the appropriateness of the original adult CRHTT model for children and adolescents and for older adults, as the evidence of the effectiveness of CRHTTs developed specifically for other populations than adults is lacking (Lloyd-Evans et al., 2018; Toot et al., 2011). It is unclear how appropriate the original adult CRHTT model is for CRHTTs designed specifically for other populations (e.g., children and adolescents; older adults) (Lloyd-Evans et al., 2011).

Finally, CRHTT research has largely ignored the role of police in interacting with CRHTTs (e.g., police referrals) and the impact of CRHTTs on criminal justice outcomes. Future research should investigate police decision-making in referring individuals experiencing a mental health crisis to a CRHTT versus other dispositions and what factors can facilitate effective partnerships with police. Furthermore, it is crucial to understand CRHTT impact on criminal justice diversion (e.g., reduction of arrests, officers' time spent on calls for service).

B. Conclusion

Crisis resolution and home treatment teams (CRHTTs) are an international crisis response model that provide crisis response, community-based assessments, and short-term intensive home treatment for individuals who experience mental health crises. Embedded within the acute mental health system, CRHTTs were developed to provide a direct alternative to inpatient hospitalization. The existing research suggests CRHTTs are a promising approach as a larger part of the continuum of crisis response services and can potentially reduce voluntary hospitalizations. Service users fairly consistently report satisfaction with CRHTT services, although, service users and other stakeholders have identified several challenges with service delivery (e.g., inconsistency in staff conducting home visits). Despite these preliminary findings, the substantial variation across CRHTT programmatic elements, populations served, and local community contexts makes it challenging to draw strong conclusions about the impact of CRHTT programs. Additional research on effectiveness is needed, particularly on hospital admissions, clinical outcomes, patient safety, and the cost effectiveness of this approach.

VI. References

Adesanya, A. (2005). Impact of a crisis assessment and treatment service on admissions into an acute psychiatric unit. *Australasian Psychiatry, 13*(2), 135-139.

Alba Palé, L., León Caballero, J., Córcoles Martínez, D., González Fresnedo, A. M., Bellsolà Gonzalez, M., Martín López, L. M., & Pérez Solà, V. (2019). Psychiatric home hospitalisation unit of the hospital del mar. A crisis resolution and home treatment team in Barcelona. *Revista De Psiquiatria y Salud Mental (English Ed.), 12*(4), 207-212.

American Association on Intellectual and Developmental Disabilities. (n.d.). *Definition.* Retrieved May 4, 2021, from https://www.aaidd.org/intellectual-disability/definition

Barker, V., Taylor, M., Kader, I., Stewart, K., & Le Fevre, P. (2011). Impact of crisis resolution and home treatment services on user experience and admission to psychiatric hospital. *The Psychiatrist, 35*, 106-110.

Baugh, C., Blanchard, E., Hopkins, I., & Singh, P. (Eds.). (2019). *Home treatment accreditation scheme (HTAS): Standards for home treatment and crisis resolution teams* (4th Ed.). Royal College of Psychiatrists Centre for Quality Improvement.

Biong, S., Ness, O., Karlsson, B., Borg, M., & Kim, H. S. (2012). A crisis resolution and home treatment team in Norway: A longitudinal survey study Part 3. Changes in morbidity and clinical problems from admission to discharge. *International Journal of Mental Health Systems, 6*, 17-30.

Blæhr, E. E., Madsen, J. V., Christiansen, N. L. S., & Ankersen, P. V. (2017). The influence of crisis resolution treatment on employment: A retrospective register-based comparative study. *Nordic Journal of Psychiatry, 71*(8), 581-588.

Carpenter, R. A., Falkenburg, J., White, T. P., & Tracy, D. K. (2013). Crisis teams: Systematic review of their effectiveness in practice. *The Psychiatrist, 37*(7), 232-237.

Carpenter, R. A., & Tracy, D. K. (2015). Home treatment teams: What should they do? A qualitative study of patient opinions. *Journal of Mental Health, 24*(2), 98-102.

Carroll, A., Pickworth, J., & Protheroe, D. (2001). Service innovations: An Australian approach to community care – the Northern Crisis Assessment and Treatment Team. *Psychiatric Bulletin, 25*, 439-441.

Carter, F. A., Taylor, M. J., Weston, M. J., Quigley, T. A., Beveridge, J. H., Green, R. A. J., Duffy, S., & Boden, J. M. (2018). Crisis resolution: Consumer, family and referrer perspectives on care. *New Zealand Medical Journal, 131*(1476), 40-49.

Chiu, T. L., & Primeau, C. (1991). A psychiatric mobile crisis unit in New York City: Description and assessment, with implications for mental health care in the 1990s. *International Journal of Social Psychiatry, 37*, 251-258.

Córcoles, D., Malagón, Á., Martín, L. M., Bulbena, A., & Pérez, V. (2015). Home treatment in preventing hospital admission for moderate and severe mentally ill people. *Psychiatry Research, 230*(2), 709-711.

Cotton, M. A., Johnson, S., Bindman, J., Sandor, A., White, I. R., Thornicroft, G., Nolan, F., Pilling, S., Hoult, J., McKenzie, N., & Bebbington, P. (2007). An investigation of factors associated with psychiatric hospital admission despite the presence of crisis resolution teams*. BMC Psychiatry, 7*, 52-62.

Department of Health. (2000). *The NHS plan: A plan for investment, a plan for reform*. Department of Health.

Department of Health. (2001a). *The mental health policy implementation guide.* Department of Health.

Department of Health. (2001b). *Valuing people: A new strategy for learning disability for the 21st century.* The Stationery Office.

Dibben, C., Saeed, H., Stagias, K., Khandaker, G. M., & Rubinsztein, J. S. (2008). Crisis resolution and home treatment teams for older people with mental illness. *Psychiatric Bulletin, 32*, 268-270.

Engel, R. S., Worden, R. E., Corsaro, N., McManus, H. D., Reynolds, D., Cochran, H., Isaza, G. T., & Calnon Cherkauskas, J. (2019). *The power to arrest: Lessons from research*. Springer.

Furminger, E., & Webber, M. (2009). The effect of crisis resolution and home treatment on assessments under the 1983 Mental Health Act: An increased workload for approved social workers? *British Journal of Social Work, 39*, 901-917.

Giménez-Díez, D., Maldonado Alía, R., Rodríguez Jiménez, S., Granel, N., Torrent Solà, L., Dolors Bernabeau-Tamayo, M. (2020). Treating mental health crises at home: Patient satisfaction with home nursing care. *Journal of Psychiatric and Mental Health Nursing, 27*(3), 246-257.

Glover, G., Arts, G., & Babu, K. S. (2006). Crisis resolution/home treatment teams and psychiatric admission rates in England. *British Journal of Psychiatry, 189*, 441-445.

Hasselberg, N., Gråwe, R. W., Johnson, S., Salyté-Benth, J., & Ruud, T. (2013). Psychiatric admissions from crisis resolution teams in Norway: A prospective multicentre study. *BMC Psychiatry, 13*, 117-127.

Hasselberg, N., Gråwe, R. W., Johnson, S., & Ruud, T. (2011a). An implementation study of the crisis resolution team model in Norway: Are the crisis resolution teams fulfilling their role? *BMC Health Services Research, 11*, 96-104.

Hasselberg, N., Gråwe, R. W., Johnson, S., & Ruud, T. (2011b). Treatment and outcomes of crisis resolution teams: A prospective multicentre study. *BMC Psychiatry, 11*, 183-194.

Hollander, Y., Lee, S. J., Tahtalian, S., Young, D., & Kulkarni, J. (2012). Challenges relating to the interface between crisis mental health clinicians and police when engaging with people with a mental illness. *Psychiatry, Psychology and Law, 19*(3), 402-411.

Hopkins, C., & Niemiec, S. (2007). Mental health crisis at home: Service user perspectives on what helps and what hinders. *Journal of Psychiatric and Mental Health Nursing, 14*, 310-318.

Hoult, J., Rosen, A., & Reynolds, I. (1984). Community oriented treatment compared to psychiatric hospital orientated treatment. *Social Science and Medicine, 18*, 1005-1010.

Hubbeling, D., & Bertram, R. (2012). Crisis resolution teams in the UK and elsewhere. *Journal of Mental Health, 21*(3), 285–295.

Hunt, I. M., Appleby, L., & Kapur, N. (2016). Suicide under crisis resolution home treatment – a key setting for patient safety. *BJPsych Bulletin, 40*, 172-174.

Hunt, I. M., Rahman, M. S., While, D., Windfuhr, K., Shaw, J., Appleby, L., & Kapur, N. (2014). Safety of patients under the care of crisis resolution home treatment services in England: A retrospective analysis of suicide trends from 2003 to 2011. *Lancet Psychiatry, 1*, 135-141.

Jacobs, R., & Barrenho, E. (2011). Impact of crisis resolution and home treatment teams on psychiatric admissions in England. *The British Journal of Psychiatry, 199*, 71-76.

Jethwa, K., Galappathie, N., & Hewson, P. (2007). Effects of a crisis resolution and home treatment team on in-patient admissions. *Psychiatric Bulletin, 31*, 170-172.

Johnson, S. (2004). Crisis resolution and home treatment teams. *Psychiatry, 3*, 22-25.

Johnson, S. (2007). Crisis resolution and intensive home treatment teams. *Psychiatry, 6*, 339-342.

Johnson, S. (2013). Crisis resolution and home treatment teams: An evolving model. *Advances in Psychiatric Treatment, 19*, 115–123.

Johnson, S., Nolan F., Hoult, J., White, I. R., Bebbington, P., Sandor, A., McKenzie, N., Patel, S. N., & Pilling, S. (2005a). Outcomes of crises before and after introduction of a crisis resolution team. *British Journal of Psychiatry, 187*, 68–75.

Johnson, S., Nolan, F., Pilling, S., Sandor, A., Hoult, J., McKenzie, N., White, I. R., Thompson, M., & Bebbington, P. (2005b). Randomised controlled trial of acute mental health care by a crisis resolution team: The north Islington crisis study. *British Medical Journal, 331*, 599-603.

Jones, R., & Jordan, S. (2010). The implementation of crisis resolution home treatment teams in Wales: Results of the National Survey 2007-2008. *The Open Nursing Journal, 4*, 9-19.

Kapur, N., Ibrahim, S., While, D., Baird, A., Rodway, C., Hunt, I. M., Windfuhr, K., Moreton, A., Shaw, J., & Appleby, L. (2016). Mental health service changes, organizational factors, and patient suicide in England in 1997-2012: A before-and-after study. *Lancet Psychiatry, 3*(6), 526-534.

Karlsson, B., Borg, M., Eklund, M., & Kim, H. S. (2011). Profiles and practices in crisis resolution and home treatment teams in Norway: A longitudinal survey study. *International Journal of Mental Health Systems, 5*, 19-29.

Keown, P., Tacchi, M. J., Niemiec, S., & Hughes, J. (2007). Changes to mental healthcare for working age adults: Impact of a crisis team and an assertive outreach team. *Psychiatric Bulletin, 31*, 288-292.

Klevan, T., Davidson, L., Ruud, T., & Karlsson, B. (2016). “We are different people”: A narrative analysis of carers’ experiences with mental health crisis and support from crisis resolution teams*. Social Work in Mental Health, 14*(6), 658-675.

Klevan, T., Karlsson, B., & Ruud, T. (2017). “At the extremities of life” – Service user experiences of helpful help in mental health crises. *American Journal of Psychiatric Rehabilitation, 20*(2), 87-105.

Lamb, D., Lloyd-Evans, B., Fullarton, K., Kelly, K., Goater, N., Mason, O., Gray, R., Osborn, D., Nolan, F., Pilling, S., Sullivan, S. A., Henderson, C., Milton, A., Burgess, E., Churchard, A., Davidson, M., Frerichs, J., Hindle, D., Paterson, B., . . . Johnson, S. (2020). Crisis resolution and home treatment in the UK: A survey of model fidelity using a novel review methodology. *International Journal of Mental Health Nursing, 29*, 187-201.

Lloyd-Evans, B., Osborn, D., Marston, L., Lamb, D., Ambler, G., Hunter, R., Mason, O., Sullivan, S., Henderson, C., Onyett, S., Johnston, E., Morant, N., Nolan, F., Kelly, K., Christoforou, M., Fullarton, K., Forsyth, R., Davidson, M., Piotrowski, J., . . . Johnson, S. (2020). The CORE service improvement programme for mental health crisis resolution teams: Results from a cluster-randomised trial. *The British Journal of Psychiatry, 216*, 314-322.

Lloyd-Evans, B., Lamb, D., Barnby, J., Eskinazi, M., Turner, A. & Johnson, S. (2018a). Mental health crisis resolution teams and crisis care systems in England: A national survey. *British Journal of Psychiatry Bulletin, 42*, 146–151.

Lloyd-Evans, B., Paterson, B., Onyett, S., Brown, E., Istead, H., Gray, R., Henderson, C., & Johnson, S. (2018b). National implementation of a mental health service model: A survey of crisis resolution teams in England. *International Journal of Mental Health Nursing, 27*, 214– 226.

Lombardo, C., Santos, M., Van Bortel, T., Croos, R., Arensman, E., & Ray, M. K. (2019). Decision-making in crisis resolution and home treatment teams: The AWARE framework. *BJPsych Bulletin, 43*(2), 61-66.

Lyons, C., Hopley, P., Burton, C. R., & Horrocks, J. (2009). Mental health crisis and respite services: Service user and carer aspirations. *Journal of Psychiatric and Mental Health Nursing, 16*, 424-433.

McCrone, P., Johnson, S., Nolan, F., Pilling, S., Sandor, A., Hoult, J., McKenzie, N., Thompson, M., & Bebbington, P. (2009a). Economic evaluation of a crisis resolution service: A randomized controlled trial. *Epidemiologia e Psichiatria Sociale, 18*(1), 54-58.

McCrone, P., Johnson, S., Nolan, F., Sandor, A., Hoult, J., Pilling, S., White, I. R., Bebbington, P., & McKenzie, N. (2009b). Impact of a crisis resolution team on service costs in the UK. *Psychiatric Bulletin, 33*, 17-19.

Morant, N., Lloyd-Evans, B., Lamb, D. et al. (2017). Crisis resolution and home treatment: Stakeholders' views on critical ingredients and implementation in England. *BMC Psychiatry, 17*, 254-266.

National Confidential Inquiry into Suicide and Safety in Mental Health. (2019). *Annual Report: England, Northern Ireland, Scotland and Wales*. University of Manchester.

National Health Service. (2019a). *NHS mental health implementation plan 2019/20 – 2023/24.* National Health Service.

National Health Service. (2019b). *The NHS long term plan*. National Health Service.

Nelson, L. J., Miller, P. K., & Ashman, D. (2016). 'Dale': An interpretive phenomenological analysis of a service user's experience with a crisis resolution/home treatment team in the United Kingdom. *Journal of Psychiatric and Mental Health Nursing, 23*, 438-448.

Odejimi, O., Bagchi, D., & Tadros, G. (2020). Typology of psychiatric emergency services in the United Kingdom: A narrative literature review. *BMC Psychiatry, 20*, 587-596.

Onyett, S., Linde, K., Glover, G., Floyd, S., Bradley, S., & Middleton, H. (2008). Implementation of crisis resolution/home treatment teams in England: National survey 2005-2006. *Psychiatric Bulletin, 32*, 374-377.

Onyett, S., Pillinger, T., & Muijen, M. (1995). *Making community mental health teams work: CMHTs and the people who work in them.* The Sainsbury Centre for Mental Health.

Rhodes, P., & Giles, S. J. (2014). "Risky business": A critical analysis of the role of crisis resolution and home treatment teams. *Journal of Mental Health, 23*(3), 130-134.

Sjøle, H., Karlsson, B., & Kim, H. S. (2010). Crisis resolution and home treatment: Structure, process, and outcome – a literature review. *Journal of Psychiatric and Mental Health Nursing, 17*, 881-892.

Titheradge, D., & Galea, A. (2019). Continuity of care in a crisis resolution home treatment team. *Progress in Neurology and Psychiatry, 23*(1), 23-27.

Toot, S., Devine, M., & Orrell, M. (2011). The effectiveness of crisis resolution/home treatment teams for older people with mental health problems: A systematic review and scoping exercise. *International Journal of Geriatric Psychiatry, 26*, 1221-1230.

Tulloch, A. D., Khondoker, M. R., Thornicroft, G., & David, A. S. (2015). Home treatment teams and a facilitated discharge from psychiatric hospital. *Epidemiology and Psychiatric Sciences, 24*, 402-414.

Tyrer, P., Gordon, F., Nourmand, S., Lawrence, M., Curran, C., Southgate, D., Oruganti, B., Tyler, M., Tottle, S., North, B., Kulinskaya, E., Kaleekal, J. T., & Morgan, J. (2010). Controlled comparison of two crisis resolution and home treatment teams. *The Psychiatrist, 34*, 50–54.

Watson, A. C., Compton, M. T., & Pope, L. G. (2019, October). *Crisis response services for people with mental illnesses or intellectual and developmental disabilities: A review of the literature on police-based and other first response models*. Vera Institute of Justice.

Werbeloff, N., Chang, C-K., Broadbent, M., Hayes, J. F., Stewart, R., & Osborn D. P. J. (2017). Admission to acute mental health services after contact with crisis resolution and home treatment teams: An investigation in two large mental health-care providers. *Lancet Psychiatry, 4*, 49-56.

Wheeler, C., Lloyd-Evans, B., Churchard, A. et al. (2015). Implementation of the Crisis Resolution Team model in adult mental health settings: A systematic review. *BMC Psychiatry, 15*, 74-87.

While, D., Bickley, H., Roscoe, A., Windfuhr, K., Rahman, S., Shaw, J., Appleby, L., & Kapur, N. (2012).Implementation of mental health service recommendations in England and Wales and suicide rates, 1997-2006: A cross-sectional and before-and-after observational study. *The Lancet, 379*(9820), 1005-1012.

Winness, M. G., Borg, M., & Kim, H. S. (2010). Service users' experiences with help and support from crisis resolution teams: A literature review. *Journal of Mental Health, 19*(1), 75-87.

Yaqub, M. (2020). International models of psychiatric emergency care: United Kingdom. In M. J. Fitz-Gerald & J. Takeshita (Eds.), *Models of emergency psychiatric services that work* (pp. 227-241). Springer.

Appendix A. Crisis Resolution and Home Treatment (CRHTT) Team Research

Author(s) / Year	Publication Type	CRHTT Program	Location	Methodology	Outcomes of Interest
Adesanya (2005)	Peer-Reviewed Article	Grampians Psychiatric Services (GPS)	Australia	Quasi-Experimental	• Hospital Admissions
Alba Palé et al. (2019)	Peer-Reviewed Article	Psychiatric Home Hospitalization Unit of the Hospital del Mar (HADMar)	Spain	Descriptive Analysis	• Clinical Outcomes
Barker et al. (2011)	Peer-Reviewed Article	Multiple CRHTTs in Edinburgh	Scotland	Quasi-Experimental	• Hospital Admissions • Stakeholders' Perceptions
Blæhr et al. (2017)	Peer-Reviewed Article	CRHTT at Frederiksberg Hospital	Denmark	Quasi-Experimental	• Hospital Admissions • Clinical Outcomes
Biong et al. (2012)	Peer-Reviewed Article	Single CRHTT	Norway	Descriptive Analysis	• Clinical Outcomes
Carpenter et al. (2013)	Peer-Reviewed Article	Multiple CRHTTs	Multiple Countries	Systematic Review	• Hospital Admissions • Cost Effectiveness • Stakeholders' Perceptions
Carpenter & Tracy (2015)	Peer-Reviewed Article	CRHTT in London	England	Qualitative: Interviews	• Stakeholders' Perceptions
Carter et al. (2018)	Peer-Reviewed Article	Multiple CRHTTs	New Zealand	Qualitative: Interviews	• Stakeholders' Perceptions
Córcoles et al. (2015)	Peer-Reviewed Article	Hospital del Mar (HADMar)	Spain	Quasi-Experimental	• Hospital Admissions

Author(s) / Year	Publication Type	CRHTT Program	Location	Methodology	Outcomes of Interest
Cotton et al. (2007)	Peer-Reviewed Article	Multiple CRHTTs	England	Descriptive Analysis	• Hospital Admissions
Dibben et al. (2008)	Peer-Reviewed Article	CRHTT in West Suffolk	England	Quasi-Experimental	• Hospital Admissions
Furminger & Webber (2009)	Peer-Reviewed Article	Single CRHTT	England	Quasi-Experimental; Qualitative: Focus Groups	• Hospital Admissions
Giménez-Díez et al. (2020)	Peer-Reviewed Article	CPB Serveis de Salut Mental - Hospital de la Santa Creu i Sant Pau (UHPAD)	Spain	Survey Analysis; Qualitative: Interview	• Stakeholders' Perceptions
Glover et al. (2006)	Peer-Reviewed Article	Multiple CRHTTs	England	Quasi-Experimental	• Hospital Admissions
Hasselberg et al. (2011a)	Peer-Reviewed Article	Multiple CRHTTs	Norway	Descriptive Analysis	• Model Fidelity
Hasselberg et al. (2011b)	Peer-Reviewed Article	Multiple CRHTTs	Norway	Descriptive Analysis	• Clinical Outcomes • Model Fidelity
Hasselberg et al. (2013)	Peer-Reviewed Article	Multiple CRHTTs	Norway	Descriptive Analysis	• Hospital Admissions

Author(s) / Year	Publication Type	CRHTT Program	Location	Methodology	Outcomes of Interest
Hollander et al. (2012)	Peer-Reviewed Article	Crisis Assessment and Treatment Team (CATT) of Alfred Psychiatry	Australia	Survey Analysis	• Stakeholders' Perceptions
Hopkins & Niemiec (2007)	Peer-Reviewed Article	Crisis Assessment and Treatment Service (CATS) in Newcastle	England	Qualitative: Interview	• Stakeholders' Perceptions
Hoult et al. (1984)	Peer-Reviewed Article	Community Treatment Team at Macquarie Hospital	Australia	Randomized Controlled Trial	• Hospital Admissions
Hubbeling & Bertram (2012)	Peer-Reviewed Article	Multiple CRHTTs	Multiple Countries	Systematic Review	• Hospital Admissions • Cost Effectiveness • Stakeholders' Perceptions
Hunt et al. (2014)	Peer-Reviewed Article	Multiple CRHTTs	England	Descriptive Analysis	• Clinical Outcomes
Jacobs & Barrenho (2011)	Peer-Reviewed Article	Multiple CRHTTs	England	Quasi-Experimental	• Hospital Admissions
Jethwa et al. (2007)	Peer-Reviewed Article	CRHTT in Leeds	England	Quasi-Experimental	• Hospital Admissions
Johnson et al. (2005a)	Peer-Reviewed Article	CRHTT in Islington	England	Quasi-Experimental	• Hospital Admissions • Stakeholders' Perceptions • Clinical Outcomes
Johnson et al. (2005b)	Peer-Reviewed Article	CRHTT in Islington	England	Randomized Controlled Trial	• Hospital Admissions • Stakeholders' Perceptions • Clinical Outcomes

Author(s) / Year	Publication Type	CRHTT Program	Location	Methodology	Outcomes of Interest
Jones & Jordan (2010)	Peer-Reviewed Article	Multiple CRHTTs	Wales	Survey Analysis	• Model Fidelity
Kapur et al. (2016)	Peer-Reviewed Article	Multiple CRHTTs	England	Descriptive Analysis	• Clinical Outcomes
Karlsson et al. (2011)	Peer-Reviewed Article	Multiple CRHTTs	Norway	Survey Analysis	• Model Fidelity
Keown et al. (2007)	Peer-Reviewed Article	CRHTT and Assertive Outreach Team (AOT)	England	Quasi-Experimental	• Hospital Admissions
Klevan et al. (2016)	Peer-Reviewed Article	Multiple CRHTTs	Norway	Qualitative: Interviews	• Stakeholders' Perceptions
Klevan et al. (2017)	Peer-Reviewed Article	Multiple CRHTTs	Norway	Qualitative: Interviews	• Stakeholders' Perceptions
Lamb et al. (2020)	Peer-Reviewed Article	Multiple CRHTTs	United Kingdom	Qualitative: Interviews; Examination of Data, Policies, and Procedures	• Model Fidelity
Lloyd-Evans et al. (2018a)	Peer-Reviewed Article	Multiple CRHTTs	England	Survey Analysis	• Model Fidelity

Author(s) / Year	Publication Type	CRHTT Program	Location	Methodology	Outcomes of Interest
Lloyd-Evans et al. (2018b)	Peer-Reviewed Article	Multiple CRHTTs	England	Survey Analysis	• Model Fidelity
Lloyd-Evans et al. (2020)	Peer-Reviewed Article	Multiple CRHTTs	England	Randomized Controlled Trial	• Hospital Admissions • Stakeholders' Perceptions • Model Fidelity
Lombardo et al. (2018)	Peer-Reviewed Article	CRHTT in East Anglia	England	Qualitative: Interviews	• Stakeholders' Perceptions
Lyons et al. (2009)	Peer-Reviewed Article	CRHTT in Lancashire	England	Qualitative: Focus Groups and Interviews	• Stakeholders' Perceptions
McCrone et al. (2009a)	Peer-Reviewed Article	CRHTT in Islington	England	Randomized Controlled Trial	• Cost Effectiveness
McCrone et al. (2009b)	Peer-Reviewed Article	CRHTT in Islington	England	Quasi-Experimental	• Cost Effectiveness
Morant et al. (2017)	Peer-Reviewed Article	Multiple CRHTTs	England	Qualitative: Interviews and Focus Groups	• Stakeholders' Perceptions

Author(s) / Year	Publication Type	CRHTT Program	Location	Methodology	Outcomes of Interest
Onyett et al. (2008)	Peer-Reviewed Article	Multiple CRHTTs	England	Qualitative: Interviews; Survey Analysis	• Model Fidelity
Rhodes & Giles (2014)	Peer-Reviewed Article	Multiple CRHTTs	England	Qualitative: Interviews	• Stakeholders' Perceptions
Sjøle et al. (2010)	Peer-Reviewed Article	Multiple CRHTTs	Multiple Countries	Literature Review	• Hospital Admissions • Cost Effectiveness
Titheradge & Galea (2019)	Peer-Reviewed Article	CRHTT in Eastbourne, East Sussex	England	Descriptive Analysis	• Stakeholders' Perceptions
Tulloch et al. (2015)	Peer-Reviewed Article	Multiple CRHTTs	England	Descriptive Analysis	• Hospital Admissions
Tyrer et al. (2010)	Peer-Reviewed Article	CRHTT in Cardiff	Wales	Quasi-Experimental	• Hospital Admissions • Stakeholders' Perceptions • Clinical Outcomes
Werbeloff et al. (2017)	Peer-Reviewed Article	Multiple CRHTTs	England	Descriptive Analysis	• Hospital Admissions
Wheeler et al. (2015)	Peer-Reviewed Article	Multiple Crisis Response Models	Multiple Countries	Systematic Review	• Stakeholders' Perceptions

Author(s) / Year	Publication Type	CRHTT Program	Location	Methodology	Outcomes of Interest
While et al. (2012)	Peer-Reviewed Article	Multiple CRHTTs	Multiple Countries	Descriptive Analysis	• Clinical Outcomes
Winness et al. (2010)	Peer-Reviewed Article	Multiple Crisis Response Models	Multiple Countries	Literature Review	• Stakeholders' Perceptions