

April 2022

Public Safety Response for Persons with Serious Mental Illness: A Systematic Review of Literature

Ashley Bailey

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_theses



Part of the [Policy History, Theory, and Methods Commons](#), [Social Justice Commons](#), and the [Social Policy Commons](#)

Recommended Citation

Bailey, Ashley, "Public Safety Response for Persons with Serious Mental Illness: A Systematic Review of Literature" (2022). *LSU Master's Theses*. 5564.

https://digitalcommons.lsu.edu/gradschool_theses/5564

This Thesis is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Master's Theses by an authorized graduate school editor of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.

**PUBLIC SAFETY RESPONSE FOR PERSONS WITH SERIOUS
MENTAL ILLNESS: A SYSTEMATIC REVIEW OF
LITERATURE**

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
In partial fulfillment of the
Requirements for the degree of
Master of Social Work

in

The School of Social Work

by
Ashley Bailey
BSW, Louisiana State University, 2021
May 2022

Table of Contents

Abstract.....	iii
Chapter 1. Introduction.....	1
Chapter 2. Literature Review	6
Chapter 3. Methodology.....	15
Chapter 4. Findings	20
Chapter 5. Discussion.....	39
Vita	46

Abstract

There are 13.1 million adults living with serious mental illness (SMI) in the United States, and it is estimated that 356,000 of this population are incarcerated. Many advocates believe that police reform/alternatives to traditional policing could assist in lowering incarceration rates among persons with SMI and improve outcomes for both the officer and the person with SMI during police contact. This systematic review examines current literature on models for public safety response for persons with serious mental illness.

Chapter 1. Introduction

There are 13.1 million adults living with serious mental illness in the USA. NIMH defines serious mental illness [SMI] as “a mental, behavioral, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities” (*NIMH » Mental Illness*, n.d.). Of this population, 34.5% had not received mental health treatment in the last year (*Mental Illness*, n.d.). Living with a serious mental illness can impact many areas of an individual’s life, including access to insurance, employment opportunities, housing security, physical health, and more. Individuals with SMI also experience increased emergency department visits, poverty, homelessness, interactions with law enforcement, and incarceration compared to the general population (Steadman et al., 2009). Because of the integral role that police officers play in the coordination of care for the seriously mentally ill, this thesis aims to identify what current research shows is the best model for public safety response for persons with serious mental illness.

In the US, 20.8% of people with SMI are homeless, and 356,000 are in jail or prison (*Mental Illness Policy*, n.d.). The life expectancy for people with serious mental illness is an average of 10-25 years less than the general population (World Health Organization). Interventions like therapy and psychiatric medications improve outcomes for individuals with SMI, but they may have difficulty accessing and maintaining treatment for many reasons. For example, limited insight regarding their illness complicates treatment for the SMI population. Those with anosognosia, an impaired ability to understand or recognize their own illness, have high rates of treatment nonadherence (National Alliance on Mental Illness, 2020).

This common symptom amongst various serious mental illnesses means that many are unable to recognize their own need for treatment, so family, friends, doctors, and other state

emergency response agencies (most commonly police officers) often need to ensure that the individual receives appropriate supportive care (National Alliance on Mental Illness, 2020).

Notably, even those with insight into their SMI may have episodes of crisis that require intervention. Involuntary commitment and treatment policies may pose as a barrier for intervention for those with anosognosia, because friends and family members are unable to navigate the difficult involuntary commitment process on their own. Therefore, police officers with no professional mental health training often have the responsibility to respond to and properly refer these individuals to supportive services.

The SMI population experiences a high likelihood of encountering the police through dispatch calls and through street contact. Many of these contacts are not crime-related and can be attributed to homelessness, substance abuse, and non-criminal public disturbance behaviors (Livingston, 2016). People with mental illness are sixteen times more likely to be killed by police (Treatment Advocacy Center). Mental health training has been on the forefront of the conversation on ways to improve police and SMI outcomes during encounters.

National Department of Justice data from 2018 showed that about 98% of recruits received 16 hours of mental health training (Buehler, 2021). In some cases, dispatchers brief the responding officer that the individual is in a psychiatric crisis, and in those cases, existing response teams can be sent out. In other cases, dispatch operators are unable to brief the responding officer on the individual's conditions, which mental health advocates fear can attribute to negative outcomes for the person with SMI.

This is just one contributing factor to prisons being the largest providers of psychiatric services for people with serious mental illness in the US. An estimated 15-25% of incarcerated people are adults with serious mental illness ("Incarceration Nation"). One study looking at the

Iowa prison systems cited that 29% of inmates had a serious mental illness diagnosis (Al-Rousan et al.). Many professionals attribute this to a lack of adequate police officer training on how to identify, de-escalate, and refer a person with SMI to the appropriate services (Mental Health First Aid USA, 2018).

Understanding the historic attitudes, beliefs and policies surrounding the treatment of the mentally ill can help us to better understand how police officers gained their role as gatekeeper of the criminal justice system for the seriously mentally ill. In addition, it helps us to better understand the barriers to long term treatment that felt by persons with mental illness in the past, present, and future.

Project Motivation

Cries for systemic change erupted across the country following the death of George Floyd at the hands of former police officer Derek Chauvin on May 25, 2020. As of September 30, 2021, 937 persons have had fatal confrontations with the police. The prospect of police violence affects not only racial minorities, but also persons with mental health problems, substance misuse problems, or disabilities. People with mental health problems are sixteen times more likely than the general population to die during a police contact (Police Need More Mental Health Training, 2018). People of color who suffer from mental illness are at an even higher risk of being killed by police. Many activists have proposed measures such as police abolition, police reform, defunding the police, and dissolving the police (Kessler, 2020). One popular narrative that emerged from this discourse was that police department funding should be decreased, and funds should be reallocated into social services that prevent crime rather than policing the crime as it takes place.

A study examining first-episode psychosis (FEP) interactions with the police found that 39% of people experiencing FEP were incarcerated before they ever received supportive services for their mental illness (Leah G. Pope & Stephanie Pottinger, Vera Institute of Justice, n.d.) The availability of adequate social services and intervention programs would not only make early intervention more accessible for people with SMI, but also other groups at risk for incarceration (Manning, Smith & Homel, 2013). In addition to an increase in accessible social services, many are advocating for the creation of specialized task forces to respond to calls in scenarios where traditional policing is not deemed necessary (Westervelt, 2020). These scenarios may involve homelessness, substance abuse, or mental health crises.

Depending on a community's needs, the plan for crisis response could differ. Special considerations should be taken in communities with historically negative police relations, who may identify law enforcement involvement as a barrier to mental health intervention. SAMSHA's 2018 National Survey on Drug Use and Health reported that sixteen percent (4.8 million) of Black and African American people had a mental illness, and 22.4 percent of those (1.1 million people) reported a serious mental illness over the past year (Substance Abuse and Mental Health Services Administration, U.S Department of Health and Human Services, 2018). National organizations such as National Alliance on Mental illness (NAMI) and Mental Health America have been advocating for the establishment of a national mental health and suicide hotline as an alternative to police crisis response. The proposed 988 hot-line, which is scheduled to be implemented on July 16, 2022, aims to bridge the gap of services for people with SMI as well as other at-risk groups.

Given the public interest in this problem and the plethora of solutions emerging to respond to it in the policy arena, a systematic review of the evidence accumulated about these

interventions is needed. This study will contribute to practice, policy, and academic discourse by identifying all models examined in the peer-reviewed literature and identify gaps in this research.

Chapter 2. Literature Review

Societal attitudes towards mental illness throughout history shaped the policies and systems that evolved into our current system that manages persons living with serious mental illness in the United States today. The history of the treatment of the mentally ill in America helps to explain why the current-system of response for the mentally ill functions the way that it does and illuminates systemic problems requiring examination.

Serious Mental Illness (SMI)

Serious mental illness (SMI) is often used as an umbrella term to refer to people living with schizophrenia spectrum and related disorders, psychotic disorders, or bipolar disorders, although any person living with a mental disorder can have “serious mental illness.” Terms also commonly used to describe this population include severe mental illness and chronic mental illness. According to 2020 data published by Mental Health America, 18.57% of adults live with mental illness. Of that population, 4.38% are classified as having a serious mental illness (*2020 Adult Data*, 2020). The main determinant for a mental illness being considered a “serious mental illness” is the individual’s level of functional impairment (*NIMH » Mental Illness*, n.d.)

Although the DSM-V lists the WHODAS 2.0 scale as the official tool for measuring functional impairment, widespread adoption of this scale has not occurred (Bovin et al., 2019). Therefore, whether a person is categorized as having SMI can differ from provider to provider. This leaves some gray areas in diagnosis that should be taken into consideration when examining relevant studies.

History of Interventions and Policies

This history of public interventions related to mental illness provide a fundamental context for how police became the main entity responsible for persons with serious mental illness

in the United States.- In the early days of colonial America, colonists viewed mental health issues more as an individual/family level issue than a social issue, as we do today. The model of care for the mentally ill during this time was reminiscent of the Elizabethan Poor Law model of caring for the sick (“English Poor Laws”). The community was held responsible for the person with mental illness. Attitudes towards mental illness were extremely negative and demeaning. Any person displaying more “disruptive” symptoms of mental illness was labeled as “satanic,” assumed to be possessed, or given a “disease” by God for a horrible sin (Rochefort 1989). As a result, people with mental illness suffered cruel physical punishment from community members. They were often housed in jails, kennels, and almshouses as a means of restriction and maintenance (Rochefort, 1989).

In 1773, the first mental asylum specifically for the mentally ill was established in Williamsburg Virginia. During the early days of these institutions, mental health “treatment” practices such as bloodletting and blistering (which would be seen as torturous in present times) were commonly used. The mentally ill endured excessive body restraints; were made to sleep in dirty straw; and were chained to walls nearly naked in unheated basement cells. Black persons with mental illness held in this facility were segregated by race (Rochefort, 1989).

As societal attitudes towards altruism and humankind began to shift, so did the treatment of the mentally ill. In 1792, hospitals began utilizing the “moral treatment approach”, which encouraged good behavior among patients in the hospital through a system of reward for “good” behaviors, and threats and/or restraints for bad behaviors (Rochefort, 1989). By the mid-1830s, the popularity of public asylums for the “insane” began increasing, and the social importance of asylum in America was established. The first public asylum, the State Lunatic Hospital at Worcester, Massachusetts opened in 1833 (Rochefort, 1989).

Dorthea Dix, a well-known American advocate for the mentally ill, played a significant role in the expansion of mental health facilities in the 1840s. She hoped to provide better treatment alternatives for persons with mental illness than those being practiced in jails. Although President Pierce vetoed her attempt to secure ten million acres of public land for the “indigent” insane in 1848, mental health practitioners recognize her legacy as a pioneer in the fight for the persons with mental illness (Ridenour, 1961).

The state of mental health treatment in America was grim in the years following. The 1850s were defined by overcrowded wards, decreased individualized treatment, as well as an increase in immigrants, the impoverished, people with developmental disabilities, and geriatric patients in facilities. All patients were kept in one unit regardless of diagnoses, and the severe overcrowding began to cause hygienic issues (Rochefort, 1986).

By 1876, there were 29,558 patients in asylums in the US (Ridenour, 1961). The number of patients in asylums across the United States only increased, and treatment conditions did not get much better with passing time. One account of a visit to a mental asylum in 1913 described conditions of patients locked up in iron cages with stone floors, no lighting, heat, windows, or access to any space outside of their cages, even in the case of a medical emergency (Ridendour, 1961).

The 1920s and 1930s brought about some change in treatment. Facilities remained overcrowded, though many patients went to psychopathic hospitals, which were not run by the state. These had some aspects of rehabilitative care, such as job skills training (e.g. sewing, constructing furniture). However, cruel experimental treatments like fever therapy, organ removal, and hydrotherapy were utilized frequently during this time period (Rochefort, 1989). During the Great Depression, funding for the expansion of state mental health facilities was cut

severely, but one federal grant funded improvements for many existing institutions. In result, more educational, occupational, and recreational therapy programs emerged. These recreational programs did not replace other “therapeutic” methods being utilized during this time, like electroconvulsive shock therapy and lobotomies (Rochefort, 1989). Additionally, funding was scarce through the 1930s, leading to the deteriorating conditions of the facilities throughout the decade.

World War II was a turning point for mental health care in the United States. Society began to view mental illness an important societal issue at this time, and the emergence of war-related mental health problems led to the creation of group therapy. This was a significant step towards the destigmatizing of mental health issues (Rochefort, 1989). Those living institutions continued to suffer unsanitary, overcrowded living conditions through the late 1940s. The publication of various articles following World War II addressed the inhumane state of living in which the mentally ill were being kept. The National Mental Health Act of 1946 appointed the National Institute of Mental Health (NIMH) as America’s leader in mental health research, treatment, and training (Rochefort, 1989). These were the beginning stages of the deinstitutionalization movement.

Contributing Factors to Deinstitutionalization

American state mental health hospitals housed a significant number of patients in 1955, with about 559,000 patients in total. In the 1960s, mental health began releasing their patients to seek community-based care and participate in society. This movement can be attributed to The Community Mental Health Centers Act (CMHC) of 1963, which was signed into law by John F. Kennedy. The goal of this act was for federal funding dollars to create these community mental health centers for every community in the state. States were to provide outpatient services,

emergency, and hospitalization services that catered to their specific community's needs (*Reflecting on JFK's Legacy of Community-Based Care*, 2021).

For those who studied deinstitutionalization, there was hope that the closure of state hospitals would allow patients to receive treatment in their own communities and participate in society. However, there was also concern that communities would not be adequately equipped to meet the needs of patients entering the local mental health care system (Amehd and Plog, 5). In 1965, Lyndon B Johnson provided financial stimulus to the CMHC Act, boosting its effectiveness for the next several years. NIMH allocated this additional funding instead of the states in order to ensure that these social programs reached those in most in need (Rochefort 132). Lyndon B Johnson's introduction of the Medicaid and Medicare programs in 1966 also expanded mental health service accessibility. The federal government became the insurer, payer, and regulator of all public health services, including mental health services. This shift led to an increase in people treated by specialty mental health care providers and opened a dialogue about privatization of mental health care (Frank). In addition, the federal government committed to a 50% price match for nursing home treatment costs, thus incentivizing states to transfer eligible patients to nursing homes for cost-efficient treatment (Frank). Though the quality of community mental health services exceeded previous times, it still struggled to meet the demand for services as formerly hospitalized people reentered the community (Wood and Watson).

The shift in power to the Nixon Administration, and its negative attitudes towards mental health, derailed JFK's vision for CMHC. The lack of federal support in creating community-based resources may have contribute to many persons with mental illness being re-institutionalized into the criminal justice system. This concept is known as trans-institutionalization (Raphael & Stoll, 2013). Unfortunately, there is no way to know for sure

whether the number of mentally ill persons in jail actually increased (or why) following deinstitutionalization because no statistics on the number of mentally ill persons in jail before this time exist (Lamb & Weinberger, 1998).

This trans-institutionalization went relatively unnoticed until the 1970s when reports began highlighting the large numbers of mentally ill persons in American jails and prisons. Not only had the rate of mentally ill persons in jail increased, but studies also showed that the arrest rate for former psychiatric hospital patients was higher than the general population (Lamb and Weinberger, 1998). One theory to explain this was that people who needed mental health services were falling through the cracks, unable to find the community-based mental services necessary to stabilize (Lamb & Weinberger, 1998). Another theory called the “psychiatrization of criminals” explains why hospitals were more frequently admitting people who had previous interactions with the criminal justice system. The theory suggested that prison overcrowding was causing an uptick in violence following discharge from the hospital. The relationship between hospital and jail populations was described as the “criminalization of the mentally ill” by Dr. Marc Abramsom in 1972 (Lamb and Weinberger, 1998). Regardless of the causes, people with mental disorders were still being arrested at a higher rate than the general population for both serious and minor crimes.

Another contributing factor to the decreasing institution rates was the 1975 *O'Connor v. Donaldson* U.S. Supreme Court decision, which found that one could not be involuntarily committed on the grounds of mental illness alone. Therefore, many current state commitment laws require appointed personnel (eg a judge, coroner, police officer) to determine the individual to be a danger to self, danger to others, and/or grave disability for involuntary commitment

(Raphael & Stoll, 2013). Over the next decades, institutionalization rates continued to steadily decrease over time, as incarceration rates in the country continued to increase.

Historic Relations Between Police and PSMI

The police's role in society involves providing services and responding to calls at any time of day. This legal duty extends to citizens with mental health issues. In the 1960s, police commonly encountered persons with mental illness who had been released from psychiatric hospitals but had not yet accessed a community mental health center. The increase of persons with mental illness in society had advocates looking to reform the way that officers interacted with this population (Wood and Watson, 2016). The 1980s are known as the first wave of reform for policing the mentally ill (Wood and Watson, 2016).

Police received an insignificant amount of training regarding tactics to respond to persons in mental health crises until the 1980s when the Crisis Intervention Trained Police Officer model emerged. The death of 27-year-old Joseph Dewayne Robinson during a 911 dispatch response in 1987 sparked the creation of the Memphis Crisis Intervention Team model. In September of 1987, Mr. Robinson's mother called 911 and notified the operator of her son's history of mental illness and substance abuse and let them know that he had been using cocaine, cutting himself, and threatening people. Upon the arrival of the police, Mr. Robinson gave no response to verbal requests, then lunged at the officers, who then shot him multiple times. In response to this event, civil administrators, community organizers, the Universities of Memphis and Tennessee, and the Memphis Police department organized the Memphis Police Department's Crisis Intervention Team. The goal of this new team was to reduce lethality during police encounters with individuals living with substance abuse and mental health disorders. This model is known as the "Memphis Model of CIT" and serves as a template for other CIT programs (Rogers et al., 2019).

Problems

The disproportionate arrest rates of people with serious mental illness can be explained by officers simply not recognizing certain behaviors as a symptom of mental illness (Teplin, 2000). One study showed that police departments feel overwhelmed and unequipped to handle issues with persons with mental illness (*National Survey: Police, Sheriffs Overwhelmed by Mentally Ill*, n.d.). This is problematic because mishandling of these cases can be fatal. People with SMI are 16 times more likely to be killed by police in fatal shootings (Treatment Advocacy Center).

This issue contributes to high rates of incarceration among persons with serious mental illness. For instance, 15-25% of incarcerated people have a serious mental illness and jails and prisons provide care for more mentally ill individuals than the state's largest hospitals in 44 states (Treatment Advocacy Center). Notably, prisons are the largest providers of mental health services in this country (Treatment Advocacy Center). Although there are current programs in place to account for mental illness-related calls, general protocol for street interaction is not showing great efficacy in connecting individuals to mental health resources (Livingston, 2016).

Summary

People with serious mental illness living in the United States are at an increased risk for police contact, arrest, homelessness, incarceration, poor health outcomes, and premature death in comparison to the general population (Treatment Advocacy Center). A history of negative attitudes towards the mentally ill combined with failed policies meant to improve access to care for SMI created a unique situation where police are the main responding entity for adults with serious mental illness. By systematically reviewing research on intervention effectiveness, this

thesis will identify the most effective interventions to improve outcomes for people with SMI encountering police or other first responders.

Chapter 3. Methodology

This thesis performs a systematic review of studies of interventions designed to improve outcomes of persons with mental illness encountering public safety response entities.

Data sources and search strategy

I collected the data for this study by performing a systematic review across four databases. Databases included PsychInfo, Academic Search Complete, SocIndex, and Google Scholar. The selected keywords were "serious mental illness" AND police, or "law enforcement" or 911 or cop or "crisis", and intervention or training or policy. I chose "Serious mental illness" as a search term because it yielded a higher number of relevant search results than the previously selected terms, which were narrowed down to focus only on the schizophrenia spectrum and related disorders. Another reason for this change is that this term is inclusive of other illnesses that may cause a person to encounter the police. I organized articles in a table and sorted studies by database, intervention type, type of study design, and findings.

With these keyword and search filters, there were 116 hits in PsychInfo, 47 hits in Academic Search Complete, 28 hits in Soc Index, and 522 results in Google Scholar, totaling in 713 hits across the four databases.

Criteria for Inclusion

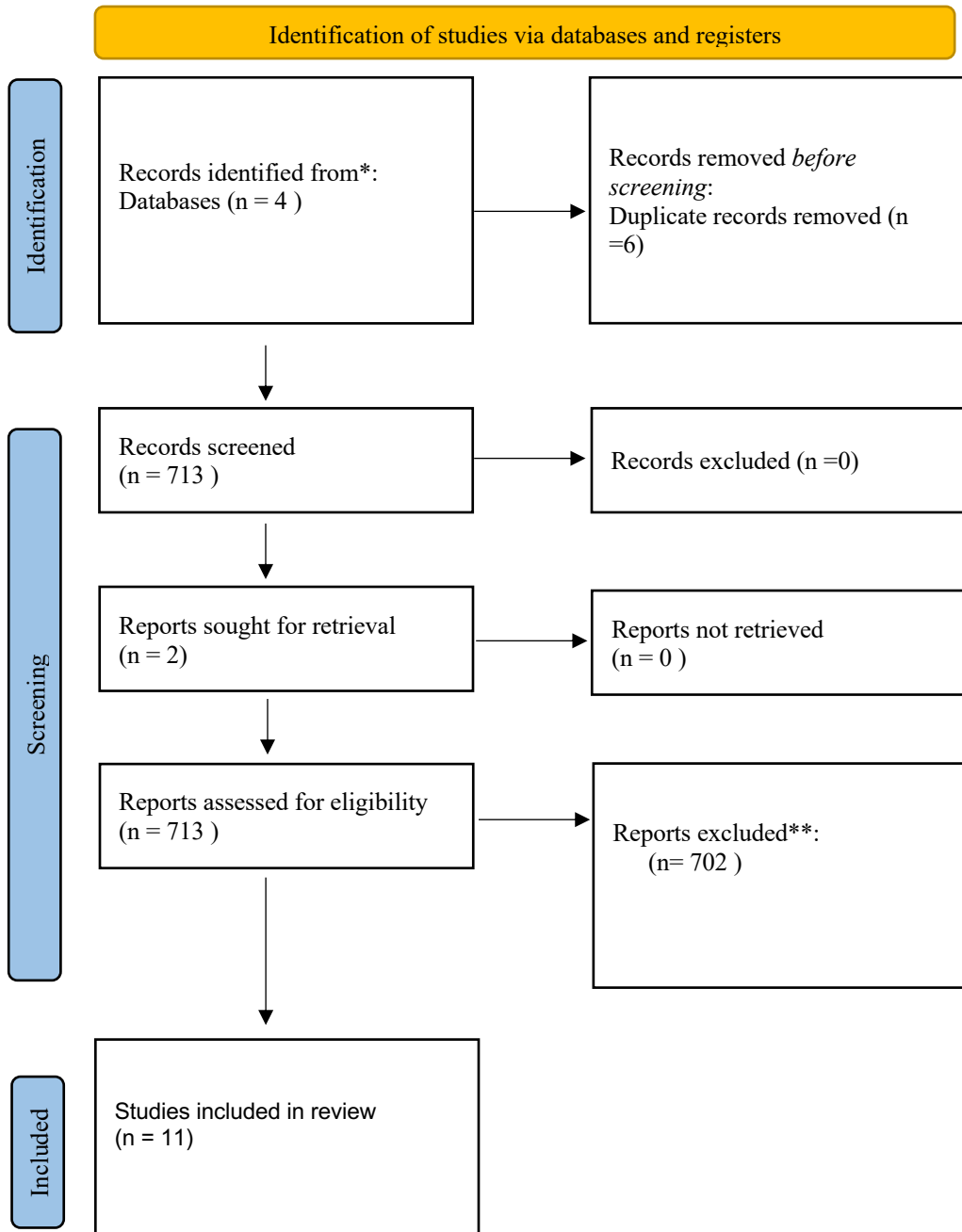
Inclusion criteria for this study was as follows:

1. The article must be scholarly/peer-reviewed
2. The article must study the effectiveness of an intervention for the point of contact of SMI with safety/crisis response entities
3. The article must be available for access at no cost, or through institutional access

Title and Abstract Relevance Screening

I searched for keywords in each database and reviewed the article titles to determine whether the abstract would be pulled for further review. In most cases, I reviewed the abstract to assure that no relevant studies were excluded, however, in some cases (such as studying the link between mass shootings and serious mental illness), I was able to exclude the article based on title only. Once the abstract was pulled for review, the article was either included based on adequate information in the abstract, or the full document was pulled to review the study design and methodology sections to determine if it met criteria. In some cases, particularly with the articles from Google Scholar, I had to assure that the article was peer-reviewed by identifying its publishing source before determining inclusion.

Of the yielded results, 6 were excluded for being duplicates across databases, and 702 were excluded for not meeting the criteria listed above. This left a total of 11 data points for reviewing in this study. Figure 1 presents a Prisma Flow diagram of this literature search and selection process. Table 1 includes examples of reasons for article exclusion. The average sample size of the studies reviewed is 317. When the study that reviewed 1,617 call reports were excluded from this calculation, the average sample size is 155.3. This included six quasi-experimental studies, of which one indicated that the intervention was successful, five noted some evidence of success, and none demonstrated complete lack of success. There was one meta-analysis and one exploratory study, each of which reported somewhat successful results. There was one naturalistic investigation, which was not successful, and one study that included semi-structured interviews, which demonstrated some effectiveness.



**Reasons for Exclusion: Not an Intervention, Not about Public Safety Response for PSMI, Not examining the effectiveness of a public safety response intervention for SMI

Figure 1. PRISMA flow diagram of literature search and selection.

Exclusion Decision Making Table Example:

Article Title	Reason For Exclusion
Acute day units for mental health crises: A qualitative study of service user and staff views and experiences	Not about public safety response
Promoting Resilience in persons with serious mental health conditions during the coronavirus pandemic	Not about public safety response
Working on and with relationships: relational work and spatial understandings of good care in community mental healthcare in Trieste	Not an intervention
Telehealth conversion of serious mental illness recovery services during the COVID-19 crisis.	Not about public safety response

Figure 2. Exclusion Decision Making Table Example

Data characterization and Synthesis

I organized and noted key elements of the articles that met inclusion criteria in the table. This included the intervention being reviewed, the study design utilized, the sample size, outcome measures, whether the intervention was successful, and the strength of the evidence being presented in the study. This enabled side-by-side comparisons of the studies and

consolidated information in such a way that the table could be used to quickly ascertain the findings of each study.

Dependent Variables

The studies measured success using several different dependent variables: officer use of force, injury to officer and/or subject, call disposition, general perceptions of emotionally disturbed persons, perceptions of the dangerousness of emotionally disturbed persons and perceptions of preparedness to handle encounters with emotionally disturbed persons, law enforcement call reports, jail booking data, mental health treatment engagement data, immediate booking, emergency detention, and subsequent jail bookings and EMS encounters, sensitivity to outcomes after follow up with a behavioral health unit, service user experiences and perceptions of crisis resolution teams, and various scales measuring subject psychosocial well-being (the Brief Psychiatric Rating Scale, the Global Assessment Scale, the Life Skills Profile ; Stein and Test's 18-item assessment of activity and social relationships; the Rosenberg Self-Esteem scale; Stein and Test's Satisfaction with Life Scale; and a semi structured questionnaire based on Hoult & Reynolds , which included questions on patient demographics, social functioning, social problems, medication, compliance with medication, side-effects, community adjustment and treatment satisfaction).

Chapter 4. Findings

Findings of this study include an analysis of eleven peer reviewed articles, with five models of public safety response studied. This chapter first describes each of the models identified in the literature. Next, it assesses the strength of the evidence in each of the articles reviewed and discusses the findings related to each model. Finally, it compares the outcome variables used across studies of different models.

Model Descriptions

Among the articles included in this analysis, six studied CIT, two studied co-response models, one studied the R-model, one studied crisis resolution teams, and one studied an extended-hours community mental health team.

CIT

Crisis Intervention Team (CIT) training was the first public safety response model created with the purpose of assuring the safety of SMI individuals and police officers. CIT training is a 40-hour course that includes de-escalation, mental health symptom recognition, and information about local mental health resources and civil commitment laws. Its goals are to reduce injury among officers and persons with mental illness, to increase referral to mental health services for SMI at the time of contact with police and reduce arrests among persons with mental illness.

Co-Response Model

The Co-response model utilizes a joint response team typically composed of a police officer and a behavioral health clinician (commonly a social worker). This model was created with the goal of reducing arrests and improving outcomes for individuals with mental illness encountering the police.

Crisis Resolution Team

Crisis Resolution Teams are a community based service that offer home-based mental health crisis treatment to users experiencing an acute mental health crisis. The program's goal is to serve as an alternative to hospitalization. Many crisis resolution teams offer home based care, thus making it easily accessible to service users who are experiencing a crisis.

Extended Hours Community Mental Health Team

The extended hours community mental health (EHCMH) team model outlined in the Habibis et. al. study provided services within Launceston and its suburbs. The program included a significant component of emergency assessments/crisis management, and ongoing case management. The goals of this program are to reduce inpatient utilization, rehabilitate, reduce symptomatology, and improve social functioning among service users. The EHCMH operated from 0800 hours to 2300 hours daily, and substance abuse management was held at another agency. One study included in this review examined the Extended Hours Community Mental Health Team model.

R Model

The R model is a new model developed in 2017-2018 in Minnesota to serve as an alternative to CIT training. It is an eight-hour training that aims to help officers recognize the impact of trauma, reduce mental health stigma, effectively de-escalate a person in crisis, identify local resources, and set up a decision-making tree for officers responding to crisis calls. This model was designed to be a more accessible, cost effective model that would use locally based resources to reach its goals of reducing arrests and unnecessary hospitalizations. In addition, the model focuses on police connecting people in crisis with service providers in their own communities (Peterson et al).

Strength of Evidence

Table 1 provides a brief overview of these articles reviewed in this study. It is sorted by the strength of research evidence with the strongest studies located at the top of the table. Strong studies used research design with high validity/reliability and had an insignificant risk of bias. Moderate studies used evidence-based research design with moderate some risk of bias. Weak study employed a research design with low validity/ reliability. There were three strong studies, six moderately strong, and one weak study. The following sections outline the response models reviewed in the studies.

Table 2. Characteristics of Public Safety Response Studies

Article Name	Intervention	Study Design	N=	Outcome Measures	Successful?	Strength of Evidence
Do Crisis Intervention Teams Reduce Arrests and Improve Officer Safety? A systematic Review and Meta-Analysis	CIT	Meta analysis	8	Arrest, Officer injury, Officer use of force	Somewhat	Strong
Mental Health Crisis Location and Police transportation decisions: the impact of crisis intervention training on crisis center utilization	CIT	Quasi-Experimental	1,617	Transportation to crisis center	Yes	Strong

Article Name	Intervention	Study Design	N=	Outcome Measures	Successful?	Strength of Evidence
Evaluation of a Police-Mental Health Co-response Team Relative to Traditional Police Response in Indianapolis	Co-Response Team	Quasi-experimental	628	Immediate booking, emergency detention, and subsequent jail bookings and EMS encounters. Sensitivity of outcomes to follow-up by a behavioral health unit (BHU) was also examined.	Somewhat	Strong
Police Response to People with Mental Illnesses in a Major U.S. City: The Boston Experience with the Co-Responder Model	Co-Response Team	Quasi-Experimental, interviews	1,127	Call disposition	Yes	Strong

Article Name	Intervention	Study Design	N=	Outcome Measures	Successful?	Strength of Evidence
Research in the real world: Studying Chicago Police Department's crisis intervention team program	CIT	Quasi-Experimental	216	Officer use of force, injury to officer and/or subject, call disposition	Yes; Somewhat	Moderate strength, risk of self-reporting bias
The impact of Crisis Intervention Team Training for police	CIT, with additional training	Mixed Methods; Quasi-Experimental	323	(a) general perceptions of emotionally disturbed persons, (b) perceptions of the dangerousness of emotionally disturbed persons and (c) perceptions of preparedness to handle encounters with emotionally disturbed persons	Yes; Somewhat	Moderate
Individuals with mental illness who have multiple encounters with law enforcement	CIT, including additional training	Exploratory	53	Law enforcement call reports, Jail data, Mental health treatment engagement data	Somewhat	Moderate

Article Name	Intervention	Study Design	N=	Outcome Measures	Successful?	Strength of Evidence
The Police-Based Crisis Intervention Team (CIT) model: II. Effects on level of force and resolution, referral, and arrest	CIT	Quasi-Experimental	180	Level of force, disposition (arrest, referral, resolution)	Somewhat	Moderate
R-model	R-model	Quasi-Experimental	57	Repeat calls	Somewhat	Moderate
A comparison of patient clinical and social outcomes before and after the introduction of an extended-hours community mental health team	Extended-Hours community mental health team	Naturalistic investigation	74	The Brief Psychiatric Rating Scale, the Global Assessment Scale, the Life Skills Profile ; – Stein and Test’s 18-item assessment of activity and social relationships; the Rosenberg Self-Esteem scale; Stein and Test’s Satisfaction with Life Scale; and a semistructured questionnaire based on Hoult & Reynolds	No	Moderate

Article Name	Intervention	Study Design	N=	Outcome Measures	Successful?	Strength of Evidence
<p>“At the extremities of life” – Service user experiences of helpful help in mental health crises. K,m</p>	<p>Crisis resolution teams</p>	<p>Semi-structured in depth interviews</p>	<p>14</p>	<p>Interviews were conducted to “elucidate how mental health crises are experienced as devastating and multilayered events. “</p>	<p>Somewhat</p>	<p>Weak</p>

Interventions and Outcomes

This systematic review identified five types of interventions that aim to improve police response to persons with SMI. The following section examines these studies by program type, presenting interventions with the strongest evidence first: CIT, Co-Response Teams, R model, crisis resolution teams, and Extended Hours. Next, it highlights the different outcomes studied for each intervention. Finally, it summarizes the program findings.

CIT: Arrests & Officer Safety? A Systematic Review and Meta-Analysis

A systematic review and meta-analysis were performed to evaluate CIT's effectiveness in reducing arrests of the mentally ill, reduce officer use of force, and reduce officer injury. An analysis of five included studies found that CIT trained officers generally made fewer arrests of mentally ill persons. However, one study included in this analysis performed significantly well in reducing arrests, while the others had non-significant results. In the five studies analyzed to determine effects on officer use of force, the author found no significant positive effects on this outcome. One study actually reported that CIT training had "significant detrimental effects" on officer's use of force. This study was unable to analyze CIT's effects on officer injury because there is limited knowledge on this topic.

This found that even though CIT trained officers were more likely than non-CIT trained officers to transport subjects to community-based services rather than arresting them, this still had insignificant effects on the rate of CIT arrests overall. The author of this meta-analysis concluded that the current evidence shows that CIT model carries neither significant benefits nor harms (Taheri).

CIT and Crisis Center Utilization

One study aimed to find out how CIT training impacted use of local crisis centers. Findings revealed a significant impact of CIT training on crisis center utilization. Referrals to crisis centers increased by 21.9% in the post period following CIT implementation. Additionally, CIT officers were 2.8 times more likely to transport to a crisis center than their non-CIT counterparts. Overall, CIT was successful in increasing utilization of local crisis centers by police (Comartin et al.).

Co-response – Indianapolis.

This study examined the effects of a co response team on criminal justice and emergency service outcomes among individuals experiencing a behavioral health crisis. A behavioral health unit (BHU) was also assigned to follow up with individuals after contact. The study found that individuals assigned to the co response team group were slightly less likely to be arrested immediately following the 911 incident. There was no significant relationship in jail bookings at the 6 and 12 month follow up between the two models (co responder or non co responder). Although follow ups from the Behavioral health unit did not reduce bookings or EMS encounters, those with this follow up were more likely to have EMS encounter following the contact. In conclusion, this co response team was successful in reducing incarceration in the short term but did not reduce risk for justice involvement or emergency service demand (Bailey et al.).

Boston Co-Response

The Boston Police Department implemented a co-response program in order to improve services to those with behavioral health challenges (Morabito et. Al.). They partnered with BEST, which is a local community resource provider. A master's level clinician rides along with

the police officer on all calls relative to mental illness. Short-term outcomes were evaluated using quantitative co-responder data. Qualitative data from officer interviews were used to discuss police officer perspectives on the effectiveness of the co-responder approach at their agency. Before the implementation of the co response program in 2010, police referred 25 subjects directly to BEST for mental health services. In the year of 2017, 509 subjects were referred for services. This is a 1,936% increase in referrals to BEST services”. Additionally, only .8% of co-responder service calls ended in arrest, which was cited in the study as a similar arrest rate to other co responder programs (Morabito et. al). Subjects were directly transported to a behavioral health urgent care center in 14% of calls and brought to the hospital for emergency psychiatric hospitalization in 8.4% of the calls. Those transported to the hospital were done so under section 12 of Massachusetts law, which states a person can be involuntarily hospitalized if the officer believes the individual to be a danger to oneself or others. Twenty-two officers who participated in the program were interviewed about the role of co-responders, mental illness related call dispositions, and decision-making protocol during these calls. Questions were also asked regarding the officer’s general perceptions towards the efficacy of the program. Although officers expressed concerns about putting the clinician’s safety at risk, one officer also noted that “clinicians are helpful in responding to low-level crimes and figuring out what to do”. Another officer stated that “clinicians have de-escalation skills that can put people at ease.” However, officers also expressed concern about funding challenges, poor personnel turnover rates, and access to resources to keep the co-response model running effectively. This raised concerns about the future of the program. Overall, the general perception of officers towards this program was that it was valuable in a multitude of ways (Morabito et al.).

Chicago Police Department's Crisis Intervention Team

In a quasi-experimental study using two CIT pilot districts and two comparison districts, officers were sampled using an interview tool with questions about recently received mental disturbance calls. This included calls they responded to in the past month. The results found that CIT officers directed 18% more subjects to services than their non-CIT counterparts. This effect was most pronounced for officers who reported someone close to them had a mental illness, and when the subject's resistance level was low. CIT reduced the instance of "Contact only" encounters among officers who viewed mental health resources positively, and for officers with prior knowledge of mental illness. "Contact only" encounters were operationalized in this study by encounters where the officer's presence was enough to resolve the situation, and no formal action was taken. Similar to other studies of CIT, this research found that CIT did not impact arrest decisions, or use of force among officers (Watson).

Urbantown Police Department (UPD) CIT

The Urbantown Police Department's (UPD) has crisis intervention training that was inspired by Memphis Model CIT program, but strongly emphasizes emergency detention protocol. Much like the Memphis model of CIT, this is a collaborative model taught by mental health professionals, police, and other paraprofessionals. The training is 8 hours a day 5 days, with a totaling in 40 hours in training. UPD's training academy hosted the training. Tests were administered before and after completion of the training. In the post test, 87% reported that the CIT training was "useful". On a scale ranging from 1-10, the mean score for how much the officer learned during the training was 6.48. There was no reported difference in "the officer's perceptions of emotionally disturbed persons". In the interviews Officers also emphasized the importance of talking instead of acting in situations of mental health crises.

Some even noted that they have changed the way that they approach mental health calls in the field. More research needs to be done to determine the effects of CIT on arrest decisions, level of force, and disposition in this district.

CIT plus 8: Number of encounters, treatment engagement

The influence of CIT on individuals with multiple law enforcement (LE) encounters is examined in this study, as well as differences in results between individuals with SMI only, and those with Co-occurring disorders (COD). In addition to the standard CIT training, an additional 8 hours of training that included the history of CIT, intro to the mental health system and community resources, suicide awareness/prevention, and a four-hour section of advanced verbal de-escalation skills catered towards individuals experiencing a mental health crisis. This study found that in the post-implementation period, the number of law enforcement encounters increased by 26.4%. However, mental health treatment engagement increased by 17%. Although researchers found no significant outcome difference, they found a difference between those with SMI only and COD. The evidence did display that people with SMI had slightly less frequent encounters with law enforcement than COD (89 days between contacts for SMI, 60 days for COD). Findings revealed that individuals spent more time in jail in the post CIT period, however, this is not up to the decision of the police officer (Willis et al.). The author hypothesized that this could be because judges get tired of repeatedly seeing the same people. Since there is no evidence-based mental health training for judges, they may not be as compassionate towards the situation as one might hope.

CIT Level of force and resolution, referral, and arrest.

This study evaluated the effects of CIT on level of force, and disposition. Similar to other CIT studies, the effect on level of force was limited. However, CIT trained police officers

reported verbal engagement as the highest level of force more frequently than non CIT officers. Compared to non CIT, officers, the CIT trained officers were more likely to refer or transport than to arrest (Compton et al.).

R Model

This study utilizes self-reported officer data to evaluate the effectiveness of training on the officer's knowledge on mental illness, crisis intervention skills, and mental health stigma. 60.78% of officers demonstrated reduced stigma following the training. There was no change in self-efficacy (remaining calm in a recognized crisis) or empathy scores between the pre and post-training tests. However, there was a significant increase in knowledge of resources among officers who completed the training. This increase in local resource knowledge and knowledge of mental illness was upheld at the four-month follow-up mark. Interestingly, officers who had prior CIT training had similar baseline scores in each category to those without prior CIT training experience. In the post-test, priorly trained CIT officers scored lower than their non-CIT counterparts. According to agency crisis call data, the number of service calls dropped from 59% to 53% in one year. There was a notable decrease in "repeat calls" from people who frequently encountered law enforcement (Peterson et al.).

Extended-Hours Community Health Team.

One quasi-experimental study examined an extended-hours community health team (CHT). The team's services included emergency assessments/crisis management, as well as ongoing case management. Its aim was to reduce inpatient utilization, rehabilitate users, reduce symptomatology, and improve social skills. The author noted that budgetary restrictions caused the CHT to be open from 0800- 2300 rather than 24, and caseloads averaged 20 instead of the desired 10. At the end of the study period, there was no evidence that inpatient utilization, social

skills or symptoms had improved. The author concluded that the effects of this intervention were limited. This could be explained by the service environment where the study took place. Even with the addition of a CHT, it is possible that the lack of services in the area did not allow for a measurable difference in inpatient utilization (Habibis et al.).

Crisis Resolution Team (CRT).

A descriptive exploratory study that utilized semi-structured in-depth interviews to collect data on service users' feelings about the helpfulness of CRTs was conducted in Norway. The study sample included 14 CRT users ranging from 25-70 years old. Suicidal crisis was identified as a main cause of contact for a majority of the participants in the study. Open-ending questions were used in every interview, and participants were allowed to elaborate on subjects they felt were significant. In reviewing this study, it is important to acknowledge the human aspect of mental health crisis response. Many studies focus strictly on outcomes, which are valuable in letting us know how effective the program is for reducing arrests, improving access to care, and encouraging safety, but an individual's trust in CRT, and personal feelings about whether the contact was helpful should also be taken into consideration when evaluating the effectiveness of a response model.

One service user described feeling a heightened sense of security just knowing that the crisis resolution team was available if needed. However, for another user, CRT was not identified to be helpful with practical issues like housing or connection to other resources. Overall, Crisis resolution teams gave the users a feeling of security, and were helpful in de-escalating crisis, but were not as helpful with the root causes of the individuals stress, like housing, food, etc. This study emphasized and highlighted the importance of the feelings of the individual at the time of crisis. The study was successful in its goal of examining what service

user’s found helpful in a time of crisis, but the program itself isn’t entirely successful in meeting these needs. Many times, providing an individual with basic needs is what stands between them and a crisis. CRTs are effective in coaxing the individual “off the ledge” of the crisis, but not in providing practical solutions to the root problem (Klevan et al.).

Interventions and Outcomes

Table 3 illustrates the outcomes included across studies and indicates which were achieved for each model. Both CIT Training and the R model reduced mental health stigma, increase knowledge of local resources among responders, increased officer knowledge about mental health, and were viewed as useful by responders. CIT Training and the Co-Response model increased responder referral to mental health services. Crisis resolution teams were perceived as helpful by service users. The Co-Response Model reduced arrests but CIT Training did not reduce arrests. CIT training did not reduce officer use of force and CIT Training, Crisis Resolution Teams, and Extended-Hours Community Mental Health Teams failed to decrease hospitalizations. Finally, Extended-Hours Community Mental Health Teams did not improve service user symptoms.

Table 3. Interventions and Outcome Measures

Outcome Measure	CIT Training	Co-Response Model	Crisis Resolution Team	R-Model	Extended-Hours Community Mental Health Team
Reduces Mental Health Stigma among Responders	Yes	N/A	N/A	Yes	N/A

Outcome Measure	CIT Training	Co-Response Model	Crisis Resolution Team	R-Model	Extended-Hours Community Mental Health Team
Increased knowledge of local resources among responders	Yes	N/A	N/A	Yes	N/A
Increases officer knowledge about mental health	Yes	N/A	N/A	Yes	N/A
Increases referral to mental health services by responders	Yes	Yes	N/A	N/A	N/A
Program Perceived as useful by responders	Yes	N/A	N/A	Yes	N/A
Perceived as helpful by service users	N/A	N/A	Yes	N/A	N/A
Reduce Arrests	No	Yes	N/A	N/A	N/A
Reduce Officer Use of Force	No	N/A	n/a	N/A	N/A
Decrease Hospitalizations	No	N/A	No	N/A	No

Outcome Measure	CIT Training	Co-Response Model	Crisis Resolution Team	R-Model	Extended-Hours Community Mental Health Team
Service User Symptom improvement	N/A	N/A	N/A	N/A	No

Summary of Findings

This review identified studies of the effectiveness of each of these models using a variety of methods and measures. It discovered six articles assessing the effectiveness of CIT. This included four quasi-experimental studies, one meta-analysis, and one exploratory study. Overall, CIT training was found to be effective in increasing officer’s knowledge about mental health and increasing subject’s referral to mental health services by responding officers. However, there was no significant evidence that CIT training has any positive effects on arrest rates or use of force.

This review also identified two quasi-experimental articles assessing the effectiveness of the Co-Response model. Overall, co-response teams were less likely to arrest individuals with mental illness immediately following the 911 call. The Boston model for co-response showed great evidence of increased referral to services. One study identified in this research examined service users’ experiences with a Crisis Resolution Team (CRT). Overall, this study found that service users felt an increased sense of security knowing that the CRT was there if needed. However, there was no evidence that CRTs decreased instances of hospitalization among users.

One study included in this review examined the Extended Hours Community Mental Health Team model. It found that these did not decrease hospitalizations or improve service user symptoms. The R model reduced mental health stigma among responders, increased responder knowledge of local resources, and increased officer knowledge about mental health

Chapter 5. Discussion

This study reviewed current research on models of public safety response for persons with serious mental illness. I conducted a systematic review of the literature using the key words “serious mental illness” AND police, or “law enforcement” or 911 or cop or “crisis”, and intervention or training or policy” in the PsychInfo, Academic Search Complete, SoicIndex, and Google Scholar databases. I reviewed 713 articles and applied inclusion criteria to narrow this list down to 11 articles that were included in the study.

Many of the studies reviewed focused on CIT training. This model was created in response to the shooting of a mentally ill man by police in Memphis in 1988. The main goals of CIT are to improve transport decisions, decrease arrest, improve officer/subject safety, and decrease the level of force used by responding officers. Overall, CIT programs were effective in influencing officer’s transport decisions (i.e, bringing the individual to a crisis center or mental health facility), but there was no overall impact on arrest decisions across the board. The level of force used by the officer was also not affected by CIT. The CIT model for responding to mental health-related calls was the first intervention studied and, therefore has the most published research available. However, this does not necessarily mean that it is the best model.

Because CIT shows mixed effectiveness on arrest decisions and use of force, I recommend that we invest in studies of emerging models of response for persons with mental illness. Other promising response models have emerged, displayed in the co-Response models and the R-Model study. Co-response models, which utilize a team consisting of police, a mental health professional, and sometimes EMS staff, was effective in reducing number of short-term arrests. However, it did not have impact on frequency that the individual encountered public response agencies. This could be explained by lack of mental health services catered towards

people with SMI, especially those with medication and treatment nonadherence. No matter how effective a response model is at reaching its goals, the outcomes are only going to be as good as the services available in the area allow them to be. While the co-responder model showed promising results, it needs to be further researched to consider this an evidence-based practice. The R model should also be further studied to evaluate effectiveness in the field. This model was developed in 2017-2018 and is comprised of an 8 hour training that covers the following topics: the criminalization of mental illness, recognizing mental health crisis, de-escalating mental health crisis, mental health symptom identification, trauma, lived experience with serious mental illness, local treatment resources, and agency resources. However, the research included in this study only measured officer's perception of the training's effectiveness. A theme that emerged among articles was that regardless of what happens at the point of contact between public safety response (PSR) agencies and SMI, the individual is likely to continue encountering these systems until there are adequate long term treatment options available in the community.

Policy and Practice Implications

It is evident that some amount of reform needs to be established to assure the safety of public safety responders and persons with mental illness at point of contact during a crisis. Based on the findings of this study, it is recommended that states dedicate funding to pilot and study alternate methods of public safety response, rather than only CIT training. In addition, focus needs to be shifted to creating adequate community-based resources so that trained response personnel can feel confident that the decision to refer an individual to mental health services will make a difference. As previously stated, no matter how effective the model of response is for point of contact between public safety response entities and persons with SMI, the outcomes are only going to be as good as the infrastructure for continued care is in the area.

Conclusion

This study reviewed current research on public safety response models for people with mental illness. Findings of this study revealed that the popularly utilized Crisis intervention team model is effective in increasing referral to services but has null effects on arrest rates and use of force. There are emerging alternatives to this model, such as the co-response model, crisis resolution teams, and the R model for crisis intervention. The co-response model showed promising results in reduction of arrest and an increase of access to services. Officers who participated in the R model study suggested great promise in that program as well, although more research would need to be done for both models to consider them evidence-based practices. Overall, I recommend that more time and resources be put into researching alternative models to policing than the popularly utilized CIT model.

References

- Al-Rousan, T., Rubenstein, L., Sieleni, B., Deol, H., & Wallace, R. B. (2017). Inside the nation's largest mental health institution: a prevalence study in a state prison system. *BMC Public Health*, 17(1). <https://doi.org/10.1186/s12889-017-4257-0>
- Bailey, Katie, et al. "Evaluation of a Police–Mental Health Co-Response Team Relative to Traditional Police Response in Indianapolis." *Psychiatric Services*, 26 Aug. 2021, p. appi.ps.2020008, 10.1176/appi.ps.202000864.
- Ben Kessler Ben Kessler is a reporter for NBC. (n.d.). *Calls to reform, defund, dismantle and abolish the police, explained*. NBC News. Retrieved October 26, 2021, from <https://www.nbcnews.com/news/us-news/calls-reform-defund-dismantle-abolish-police-explained-n1227676>
- Bovin, M. J., Meyer, E. C., Kimbrel, N. A., Kleiman, S. E., Green, J. D., Morissette, S. B., & Marx, B. P. (2019). Using the World Health Organization Disability Assessment Schedule 2.0 to assess disability in veterans with posttraumatic stress disorder. *PloS One*, 14(8), e0220806. <https://doi.org/10.1371/journal.pone.0220806>
- Buehler, E. (2021). *Bureau of Justice Statistics · Statistical Tables State and Local Law Enforcement Training Academies, 2018 -Statistical Tables*. <https://bjs.ojp.gov/sites/g/files/xyckuh236/files/media/document/slleta18st.pdf>
- Criminalization of Mental Illness*. Treatment Advocacy Center. Retrieved December 7, 2021, from <https://www.treatmentadvocacycenter.org/key-issues/criminalization-of-mental-illness>
- Comartin, Erin B., et al. "Mental Health Crisis Location and Police Transportation Decisions: The Impact of Crisis Intervention Team Training on Crisis Center Utilization." *Journal of Contemporary Criminal Justice*, vol. 35, no. 2, 17 Mar. 2019, pp. 241–260, 10.1177/1043986219836595. Accessed 22 Aug. 2019.
- Compton, Michael T., et al. "The Police-Based Crisis Intervention Team (CIT) Model: II. Effects on Level of Force and Resolution, Referral, and Arrest." *Psychiatric Services*, vol. 65, no. 4, Apr. 2014, pp. 523–529, 10.1176/appi.ps.201300108.
- English Poor Laws*. (2011, January 19). Social Welfare History Project. <https://socialwelfare.library.vcu.edu/programs/poor-laws/#:~:text=The%20poor%20laws%20gave%20the>
- Frank, R. G. (2000). The Creation of Medicare and Medicaid: The Emergence of Insurance and Markets for Mental Health Services. *Psychiatric Services*, 51(4), 465–468. <https://doi.org/10.1176/appi.ps.51.4.465>

Habibis, Daphne, et al. "A Comparison of Patient Clinical and Social Outcomes before and after the Introduction of an Extended-Hours Community Mental Health Team." *Australian and New Zealand Journal of Psychiatry*, vol. 36, no. 3, Jan. 2002, pp. 392–398, 10.1046/j.1440-1614.2002.01033.x. Accessed 4 June 2021.

Hassell, Kimberly D. "The Impact of Crisis Intervention Team Training for Police." *International Journal of Police Science & Management*, vol. 22, no. 2, 26 May 2020, pp. 159–170, 10.1177/1461355720909404.

Incarceration Nation. (2021). Apa.org.
<https://www.apa.org/monitor/2014/10/incarceration#:~:text=While%20at%20least%20half%20of>

Kesslen, B. (2020, June 8). *Calls to reform, defund, dismantle and abolish the police, explained*. NBC News. <https://www.nbcnews.com/news/us-news/calls-reform-defund-dismantle-abolish-police-explained-n1227676>

Lamb, Richard H, M.D, & Weinberger, Linda E., Ph.D (1998). *Persons With Severe Mental Illness in Jails and Prisons: A Review*

Livingston, J. D. (2016). Contact Between Police and People With Mental Disorders: A Review of Rates. *Psychiatric Services*, 67(8), 850–857.
<https://doi.org/10.1176/appi.ps.201500312>

Manning, M., Smith, C., & Homel, R. (2013). Valuing Developmental Crime Prevention: Developmental Crime Prevention. *Criminology & Public Policy*, 12(2), 305–332.
<https://doi.org/10.1111/1745-9133.12024->

Morabito, Melissa S., et al. "Police Response to People with Mental Illnesses in a Major U.S. City: The Boston Experience with the Co-Responder Model." *Victims & Offenders*, vol. 13, no. 8, 17 Nov. 2018, pp. 1093–1105, 10.1080/15564886.2018.1514340. Accessed 31 Jan. 2021.

NIMH » Mental Illness. (n.d.). Retrieved November 1, 2021, from
<https://www.nimh.nih.gov/health/statistics/mental-illness>

National Alliance on Mental Illness. (2020). *Anosognosia | NAMI: National Alliance on Mental Illness*. Nami.org. <https://www.nami.org/About-Mental-Illness/Common-with-Mental-Illness/Anosognosia>

National Survey: Police, Sheriffs Overwhelmed by Mentally Ill. (n.d.). Mental Illness Policy Org.
<https://mentalillnesspolicy.org/crimjust/homelandsecuritymentalillness.html>

NIMH » Mental Illness. (n.d.). Retrieved November 1, 2021, from
<https://www.nimh.nih.gov/health/statistics/mental-illness>

- Org, M. I. P. (n.d.). Homeless Mentally Ill Facts and Figures. *Mental Illness Policy Org*. Retrieved December 7, 2021, from <https://mentalillnesspolicy.org/consequences/homeless-mentally-ill.html>
- Peterson, Jillian, et al. "Evaluation of "the R-Model" Crisis Intervention De-Escalation Training for Law Enforcement": *The Police Journal*, 30 July 2019, journals.sagepub.com/eprint/KZENB6S5PKQPRTA443KS/full, 10.1177/0032258X19864997.
- Pope, L. G., & Pottinger, S. (n.d.). *First-Episode Psychosis: Considerations for the Criminal Justice System*. 21.
- Raphael, S., & Stoll, M. A. (2013). Assessing the Contribution of the Deinstitutionalization of the Mentally Ill to Growth in the U.S. Incarceration Rate. *The Journal of Legal Studies*, 42(1), 187–222. <https://doi.org/10.1086/667773>
- Ridenour, Nina, Ph.D. (1961). *Mental Health In the United States A Fifty-Year History*. Harvard University Press.
- Rocheftort, David A. (1989). *Handbook on Mental Health Policy in the United States*. Greenwood Press, Inc
- Steadman, H. J., Osher, F. C., Robbins, P. C., Case, B., & Samuels, S. (2009). Prevalence of Serious Mental Illness Among Jail Inmates. *Psychiatric Services*, 60(6), 761–765. <https://doi.org/10.1176/ps.2009.60.6.761>
- Substance Abuse and Mental Health Services Administration, U.S Department of Health and Human Services. (n.d.). *2018 National Survey on Drug Use and Health: African Americans*. 58.
- Teplin, L. A. (2000). Police Discretion and Mentally Ill Persons. *Keeping the Peace*, 8.
- Taheri, Sema A. "Do Crisis Intervention Teams Reduce Arrests and Improve Officer Safety? A Systematic Review and Meta-Analysis." *Criminal Justice Policy Review*, vol. 27, no. 1, 5 Nov. 2014, pp. 76–96, 10.1177/0887403414556289.
- Watson, Amy C. "Research in the Real World: Studying Chicago Police Department's Crisis Intervention Team Program." *Research on Social Work Practice*, vol. 20, no. 5, 11 June 2010, pp. 536–543, 10.1177/1049731510374201.
- Willis, Tamarie, et al. "Individuals with Mental Illness Who Have Multiple Encounters with Law Enforcement." *Journal of Offender Rehabilitation*, vol. 60, no. 2, 11 Jan. 2021, pp. 117–137, 10.1080/10509674.2020.1863298.
- Wood, J. D., & Watson, A. C. (2016a). Improving police interventions during mental health-related encounters: past, present and future. *Policing and Society*, 27(3), 289–299. <https://doi.org/10.1080/10439463.2016.1219734>

2020 *Adult Data*. (n.d.). Mental Health America. Retrieved December 6, 2021, from <https://mhanational.org/issues/2020/mental-health-america-adult-data>

Vita

Ashley Bailey, born and raised in Louisiana, is a twenty-two-year-old Master's student whose professional interest lies in the complex relationship between the criminal justice system and mental health system in the United States. She received her bachelor's degree in Social Work from Louisiana State University and anticipates graduating with her Master's in Social Work in May of 2022. Upon completion of her master's degree, she plans on getting a job that serves persons with chronic mental illness who are at risk for criminal involvement and repeated hospitalization.