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Mobile Response Teams and the Youth Emergency Behavioral Health System

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by

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ABSTRACT

Introduction: This dissertation includes three separate manuscripts that coalesce under the shared topic of mobile crisis response and the emergency behavioral health system. Method: The first manuscript includes a synthesis of the research on mobile crisis response from the 1960s to present day to assess whether mobile crisis services can improve mental health care access in the U.S. for youth and adults. The second manuscript includes bivariate and multivariate analyses of MRT participant data to characterize participants who receive an involuntary psychiatric evaluation versus those who do not, and to assess factors associated with involuntary psychiatric evaluation or referral to outpatient treatment in Sarasota County. The third manuscript includes a qualitative analysis of 16 participant interviews to identify the EBH agencies in Sarasota County, assess strengths and challenges of the partnerships between these agencies, and to examine whether the MRT could reduce unnecessary Baker Act initiations. Results: Minimal outcomes-based research exists on U.S. based mobile crisis response. The Sarasota County MRT had 21 Baker Act initiations during the study period, with older age youth, emergent call type, suicidal ideation, and being referred to the MRT by school personnel all significantly associated with higher odds of receiving an initiation. Interview participants who had experience with Sarasota County's MRT thought to reduce unnecessary Baker Act initiations, mental health services must shift toward preventative care rather than relying on acute care measures including the MRT. Conclusions: Mobile crisis response is a cost-effective way to reduce hospitalization among people experiencing crises compared to police response or receiving behavioral health treatment in the emergency room. However, by the time an MRT is needed, a crisis has already occurred.

and more focus needs to be on funding preventative mental health services to mitigate crises from happening to begin with.

CHAPTER ONE:
INTRODUCTION

Opening Remarks

This dissertation includes three different manuscripts that examine the history of mobile crisis response for youth and young adults in the United States (U.S.), how mobile crisis response fits into the broader youth emergency behavioral health response system, and the outcomes of one specific mobile response team (MRT) in a southwestern Florida county. Mobile crisis response goes by a couple of different names including mobile crisis response and MRT, and both refer to teams of behavioral health professionals and paraprofessionals who provide on-site behavioral crisis management within 60-minutes of receiving the call for youth under 25 years (Substance Use and Mental Health Services Administration [SAMHSA], 2020). Crises may include threats of harm to self or others, drug or alcohol overdose, mood or anxiety disorders, or aggressive behaviors that without immediate intervention may escalate to needing a higher level of care. Upon arrival, the youth in crisis is assessed by the mobile crisis response or MRT staff, and depending on their unique situation may require intervention, referral to care, or creation of a safety plan, and follow-up within a set number of hours (e.g.,72 hours) by the mobile crisis staff. In Florida specifically, one primary purpose of MRTs is to divert youth and young adults from the Baker Act to lower-level mental health services in the community.

The first manuscript is a review of the literature in which we scoured three different databases including PubMed, PsychINFO, and Medline for any empirical studies on U.S.-based, non-law enforcement mobile crisis response. A true systematic literature review would have two

researchers searching the literature, comparing their findings, and completing the review in tandem as a team. Given a dissertation is to be completed by one student, with guidance from their dissertation chair and committee members, this manuscript followed the general steps one would take in completing a proper systematic literature review minus the comparative and teamwork components. These steps included creating a priori research questions, selecting databases in which to find literature, the Boolean search terms used to find literature in the selected databases, and inclusion and exclusion criteria for the literature found. When it appeared an article meets inclusion criteria based on the abstract, we read the full-text article to determine inclusion or exclusion from the study. Only seven studies met inclusion criteria, which uncovered a gap in the literature on mobile crisis response outcomes to address in the second dissertation manuscript.

The second manuscript is a cross-sectional analysis of Sarasota County's MRT outcomes from the inception of the MRT program on 2/1/2019 through 5/28/2021. When the current study was in its planning phase, Sarasota County's MRT was operating through one agency called Jewish Family and Children's Services or JFCS of the Suncoast. This agency is a comprehensive care provider to individuals, families, and groups seeking mental health or human services like counseling, assistance with food, housing, or finances, and wrap around case management. However, on January 1st, 2021, the MRT agency changed to First Step of Sarasota (FSOS). This agency is the mental health and substance use receiving facility in the county and offers 32 other services that now include mobile crisis response to all ages instead of the 0–25-year-old age range that JFCS of the Suncoast was providing mobile crisis response to. The change in MRT agencies means this dissertation includes combined outcome data from when JFCS of the

Suncoast was the MRT provider from 2/1/2019-10/14/2020 as well as the data from the current MRT provider FSOS from 2/1/2021-5/29/2021.

The third manuscript includes a qualitative analysis of 16 interviews we conducted with staff, administrators, and executives from different agencies that make up the emergency behavioral health system in Sarasota County. All participants were asked which other agencies they work with on a regular basis to provide a foundation for which agencies comprise the county's emergency behavioral health system. Then, strengths and challenges of partnerships between the participant and these other agencies were gauged using the Collective Impact Model as a framework. Finally, participants were asked whether they had experience with the county's MRT and whether they believed the MRT could be used to reduce unnecessary Baker Act initiations. Altogether, these interviews provided a complete picture of the agencies in the emergency behavioral health system in Sarasota County, the condition of their partnerships with one another, and how participants perceived the MRT as fitting within this system and whether it could be used in this system to reduce Baker Act initiations.

CHAPTER TWO:
HOW MOBILE RESPONSE TEAMS FIT WITHIN THE YOUTH EMERGENCY BEHAVIORAL HEALTH SYSTEM IN THE UNITED STATES: A SYSTEMATIC REVIEW

Abstract

Introduction: In the United States (U.S.), each year approximately one out of five adults over the age of 18 and one out of six school-aged youth aged between 6-17 years old experience a diagnosed mental health condition. Despite this level of diagnosed mental health conditions, barriers to accessing mental health treatment persist meaning people often reach the point of crisis before they access any type of mental health care. Mobile response teams (MRTs) were created as a way to respond 24/7 to people experiencing crises and divert them from hospitalization to lower levels of mental health care in the community. Although literature cites MRTs back to the 1960s, minimal empirical evidence exists on the effectiveness of MRTs or outcomes associated with being responded to by an MRT in crisis as opposed to regular police or medical response. Methods: This study synthesizes non-law enforcement, U.S. based MRT outcomes-based research from the 1960s to present day to better understand how these services operate within the larger behavioral health system. Additionally, this study assessed whether MRTs may increase access to mental health care for people experiencing crisis. Results: A total of 1,238 article titles were screened for inclusion. Of the total article titles screened, 1,196 were omitted. The remaining 42 article abstracts were screened, with seven meeting inclusion criteria. Study results indicated that mobile crisis response was found to reduce hospital admissions

compared to receiving behavioral health care in the emergency department or regular police intervention. Mobile crisis response was also significantly more cost-effective than police intervention. Conclusions: This review suggests mobile crisis services are a cost-effective way to reduce hospital admissions. However, substantial more research is needed to understand whether mobile crisis services are reducing hospital admissions by increasing referrals to more community-based mental health care services and whether these services are actually being received after referrals are made.

Introduction

In the United States (U.S.), one out of five adults over the age of 18 and one out of six school-aged youth aged between 6-17 years old experience a diagnosed mental health condition each year (Devitt, 2019; National Alliance on Mental Illness [NAMI], 2019). Despite the substantial prevalence of diagnosed mental health conditions among youth and young adults, barriers to mental health treatment persist as indicated by the low percent of individuals accessing care among these younger populations (Mental Health America [MHA], 2021). These barriers may result in youth and young adults foregoing needed mental health treatment until they reach the point of crisis. In fact, the first time a youth or young adult come into contact with the mental health system is often in the context of a crisis at home, in school, or in their community (Colizzi, Lasalvia, & Ruggeri, 2020). Factors identified in the literature contributing to the low initiation rate of mental health services among youth prior to crisis include being male, an ethnic minority, and socioeconomically disadvantaged, with the social stigma of receiving mental health care serving as a primary barrier among treatment seeking among these groups (Colizzi, Lasalvia, & Rugerri, 2020).

To address this gap between the need for mental health care and lack of access among youth and young adults, many U.S. communities are incorporating services like mobile crisis teams or mobile response teams (MRTs) into their behavioral health system (Vanderploeg et al., 2016). These teams typically consist of behavioral health professionals and paraprofessionals who provide 24/7 on-site behavioral crisis management within 60-minutes of receiving the call for youth and young adults under 25 years (Substance Use and Mental Health Services Administration [SAMHSA], 2020). Upon arrival, the MRT staff assess the youth in crisis in their natural environment. Depending on the acuity, the staff then provide referral to care at a public or private behavioral health provider or create a safety plan with the youth or young adult and their family. After the referral or safety plan is made, MRT staff are supposed to follow-up with the youth or young adult within 72-hours to ensure the appropriate services were reached or safety plan was followed (SAMHSA, 2020).

Mobile crisis response dates back to the 1960s in the U.S. following the movement toward de-institutionalization and treating people with behavioral health disorders in the community rather than in acute care settings like hospitals (Watson, Compton, & Pope, 2019). The heterogeneous nature of mobile crisis teams or MRTs often means there are no uniform set of standards, mission, or practice across and within the U.S. states. The general premise of mobile crisis response is to triage, assess, treat, and refer people in the community experiencing mental health crises (Glick, Berlin, & Fishkind, 2008). However, each U.S. state and community with established MRTs have different models by which their teams operate depending on the unique needs of their youth and families, as well as the capabilities, size, and nature of the community's overall behavioral health system (Vanderploeg et al., 2016) with the resulting implementation of each MRT often appearing different for each community. While this tailoring

is positive in terms of addressing the unique needs of each community, it makes it difficult to compare each mobile crisis response system in terms of shared data collection, performance metrics, and outcomes (Garland, Bickman, & Chorpita, 2010).

Literature on mobile crisis response program effectiveness is limited and often community-specific given the lack of common measures across all mobile crisis response programs in the U.S. This review will synthesize the research from the 1960s to present day on mobile crisis services in the U.S. to better understand how these services operate within the larger behavioral health systems in each community. In addition, this review will examine whether mobile crisis services can improve mental health care access in the U.S. for youth and adults.

Methods

A systematic search of bibliographic databases including PsychINFO, PubMed, and Medline (Gusenbauer & Haddaway, 2019) was conducted for relevant articles published between January 1, 1960 and April 26, 2021. Boolean search terms included “Mobile Response Team”, “Mobile Crisis Team” and “Mobile Crisis Response Team”. For specification of results, the remainder of the Boolean search terms included “Mobile Response Team”, “Mobile Crisis Team”, or “Mobile Crisis Response Team”, AND, followed by “youth” or “behavioral health”. Relevant articles were identified through first screening titles, and then screening abstracts of relevant titles to determine eligibility for inclusion in the study. In the case of insufficient information in the abstract, the full-text article was read to determine eligibility. References within relevant articles were also screened for eligibility. Once deemed eligible for inclusion in the study, data from the resulting articles were extracted for analysis.

Search Strategy and Selection of Studies

Selection criteria.

Participant characteristics. Although the current study is focused on mobile crisis services accessed by youth and young adults aged 0-25 years, the literature on mobile crisis services for younger populations is minimal. Therefore, this review includes youth and adults responded to by a mobile crisis team, MRT, or any other type of non-police mobile crisis service in the U.S. between January 1, 1960-April 26, 2021.

Types of studies. The types of studies included in this review are retrospective administrative data reviews, cross-sectional studies, retrospective cohort studies, and quasi-experimental studies. Solely descriptive studies that characterized mobile crisis services without including analyses of outcome or performance measures are excluded.

Types of interventions. The types of interventions are mobile crisis services. These services may go by different names including mobile crisis teams, mobile crisis units, mobile crisis services, mobile psychiatric crisis intervention, or others, so long as the services meet hallmark mobile crisis characteristics. These characteristics include a team of behavioral health professionals and paraprofessionals who respond to crisis calls 24/7, within 60-minutes of receiving the call, then assess the person in crisis in their natural environment or community, and refer them to the appropriate behavioral health care setting.

Comparison groups. Comparison groups include study participants who access behavioral health services through hospitalization (state, private, or public), the emergency department (ED), or participants who are responded to in crisis by police or other law enforcement professionals.

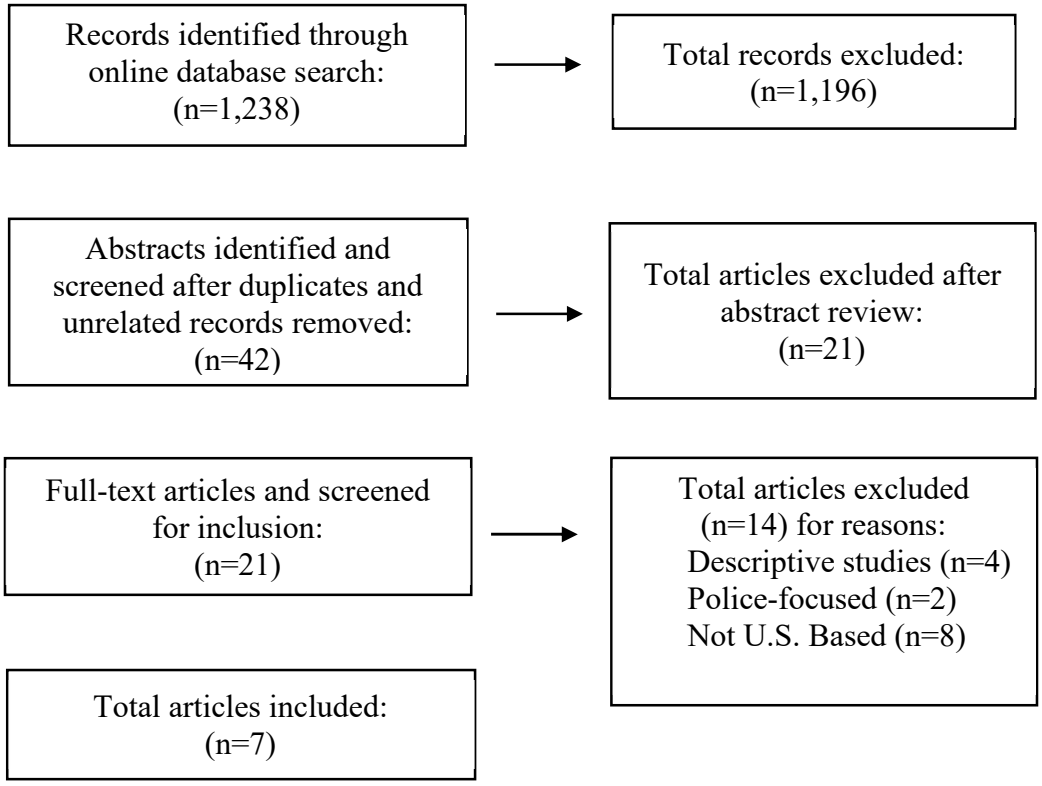
Types of outcome measures. The primary outcome measure is private, state, or ED hospital admission among study participants responded to by a mobile crisis service compared to other crisis response mechanisms. Other outcome measures include participant characteristics associated with mobile crisis service referral or hospitalization, arrests of participants in crisis being responded to by a mobile crisis service versus police, and cost-benefit analysis of mobile crisis response versus hospitalization.

Results

We screened a total of 1,238 article titles including those found in PsycINFO (n=80) PubMed (n=488), and Medline (n=670) for inclusion. Of the total article titles screened, 1,196 were omitted based on duplication and not meeting inclusion criteria. The remaining 42 titles' abstracts were screened for eligibility. A total of 21 abstracts were selected and their respective full-text articles as well as relevant references listed in each bibliography were read in full for consideration of inclusion in the study. Reading full-text articles and relevant references resulted in the exclusion of 14 articles due to being based outside of the U.S., having police-focused crisis interventions, or studies that were only descriptive. This left seven studies for inclusion in this review. Figure 1 serves as visual representation of the screening process.

Figure 1

Flow chart of screening process



Characteristics of Included Studies

Study description. In all seven studies included in this review, the intervention was a mobile crisis service comprised of behavioral health professionals and paraprofessionals who responded to crises 24/7, assessed the person in crisis in their natural environment or community, then made appropriate behavioral health care referrals. Two articles included the comparison group of behavioral health services received in the ED (Fendrich et al., 2019; Vanderploeg, Lu, Marshall, & Stevens, 2016); three articles included the comparison groups of hospitalization in a private, state, or public facility (Fisher, Geller, & Wirth-Cauchon, 1990; Guo, Biegel, Johnson, & Dyches, 2001; Reding & Raphelson, 1995); one article included the comparison group of

home-based care with behavioral health supports (Muehsam, 2019); and one article included the comparison group of law enforcement response (Scott, 2000).

The most common outcome variable included hospital admission rates between the mobile crisis service versus a comparison group (Fisher, Geller, & Wirth-Cauchon, 1990; Guo, Biegel, Johnson, & Dyches, 2001; Reding & Raphelson, 1995; Scott, 2000). One study specified their hospital admission rate outcome as subsequent ED visits at the 18-month post-study follow-up time point (Fendich et al., 2019). Guo and colleagues also compared participant characteristics between the mobile crisis service versus a hospital-based service to determine whether there were predictive factors of the participants' using the hospital-based mental health services (2001).

Outcomes other than number or rate of hospital admissions included the per-capita expenditures of non-emergency behavioral health resources in catchment areas with mobile crisis availability compared to catchment areas without mobile crisis availability (Fisher, Geller, & Wirth-Cauchon, 1990) and number of arrests made among psychiatric crises responded to by a mobile crisis unit compared to those responded to by police (Scott, 2000).

Study design. Three out of the seven included studies (Muehsam, 2019; Scott, 2000; Vanderploeg, Lu, Marshall, & Stevens, 2016) performed retrospective analysis of administrative data obtained from the mobile crisis service. Two of the three studies using retrospective administrative data analysis methods used the administrative data of the mobile crisis service alone to analyze the services' level of care recommendation, response time, and the characteristics of people who used the mobile crisis service associated with hospitalization (Muehsam, 2019; Vanderploeg, Lu, Marshall, & Stevens, 2016). Scott's study (2000) study compared mobile crisis service administrative data to local law enforcement data to examine

differences in hospitalization, arrest, and the comparative costs of psychiatric emergencies responded to by mobile crisis versus police.

One of the seven studies, conducted by Fendrich et al. in 2019, was a retrospective cohort design comparing youth who used mobile crisis services (n=2,532) to youth who used behavioral health services in the ED (n=3,961) and their respective subsequent ED use in the 18 months post-study period. Another study by Guo and colleagues included a quasi-experimental design in which they compared the likelihood of hospitalization among a matched control group of 1,696 people who accessed hospital-based behavioral health services to 4,106 people who accessed behavioral health services from a community-based mobile crisis service (2001). Fisher and colleagues employed a cross-sectional comparison of state, public, and private hospitalization rates across 40 catchment areas in Massachusetts, including 20 catchment areas with mobile crisis service availability versus 20 catchment areas without mobile crisis service availability (1990). Finally, the study led by Reding and Raphelson (1995) employed a time series analysis of state and private hospital admissions prior, during, and after the implementation of a pilot Mobile Psychiatric Crisis Intervention program. Table 1 provides more in-depth information on each study description and design.

Effect of Mobile Crisis Services

Outcome variables. Hospital admissions was the most common outcome variable. Guo and colleagues found that people who received hospital-based crisis services in the ED were 51% more likely to be hospitalized within 30 days of a mental health event (2001) compared to people who received a community-based mobile crisis service. The study authored by Scott found significantly greater hospital diversion among the mobile crisis service (55%) compared to the hospitalization diversion among police officers (28%) responding to psychiatric crises (2000).

The 1995 study by Reding and Raphelson found a statistically significant reduction in state hospital admissions during a six-month pilot period of a mobile crisis service compared to the two years prior and one year proceeding the pilot period.

As for ED visits specifically, Fendrich and colleagues (2019) compared youth under 18 years of age who received crisis care from mobile crisis services versus youth who received crisis care in the local ED. The youth who received crisis care from a mobile crisis service had 25% reduced risk of a subsequent ED visit versus the comparison youth who received crisis care in the ED. While the previous studies all demonstrated significant reductions in hospital admissions and subsequent ED visits, not every study found statistically significant reductions. In the study performed by Fisher and colleagues, (1990) there was no demonstrated reduction in hospital admissions in Massachusetts catchment areas that had mobile crisis service availability versus catchment areas without mobile crisis service availability.

Arrests. Only one of the seven studies (Scott, 2000) considered arrest as an outcome when comparing crisis response by a mobile crisis service to regular police intervention. There were five total arrests among the 73 participants responded to by a mobile crisis service, and eight arrests among the 58 participants responded to by regular police intervention. Analysis revealed no significant difference in arrests between the comparison groups.

Other outcomes. While not initially considered in the planning phase of this review, outcomes other than hospital admission, arrest, patient characteristics associated with hospitalization, and cost-benefit analysis were found in one of the seven articles by Vanderploeg and colleagues (2016). The comparison of outcomes in this article included those achieved prior to versus after the implementation of a performance improvement center (PIC). The PIC was established in 2009 to standardize care, collect and analyze data, and report outcomes of the local

mobile crisis service. One outcome included "face-to-face crisis response" following a crisis call. Prior to PIC implementation, face-to-face response was 49% compared to 93% after PIC implementation (Vanderploeg, Lu, Marshall, & Stevens, 2016).

Predictor variables. Two of the seven studies included predictive analyses on participant characteristics associated with hospitalization. Guo and colleagues (2001) found participants who were younger in age, homeless, and presented with suicidal gestures, anxiety, or agitation, were significantly more likely to be hospitalized than their older counterparts with living arrangements and less acute psychiatric symptoms. The same authors found participants who were referred by the legal system (i.e., a police officer) to be twice as likely to be hospitalized as self-referred participants, and those who were diagnosed with schizophrenia or various forms of psychosis were also twice as likely to be hospitalized than those who were diagnosed with a substance use disorder (Guo, Biegel, Johnson, & Dyches, 2001).

The second study examining predictive patient characteristics used multinomial logistic regression to determine which, if any, clinical observations made by mobile crisis service staff predicted the patient level of care recommendation (Muehsam, 2019). Results showed participants who were older in age, who had recent drug and alcohol use, and participants who had an intellectual disability, were more likely to be referred to the level of care of a subacute facility than home with supports. Participants were also more likely to be referred to involuntary hospitalization if they were older, seen by the mobile crisis service more than once, and had homicidal ideation (Muehsam, 2019).

Cost-benefit analysis. Two studies included cost-benefit analysis between mobile crisis services and psychiatric hospitalization. Scott (2000) compared the cost of mobile crisis services versus police response, noting a 23% lower average cost for mobile crisis services ($1,520)

compared to regular police intervention ($1,963). As for program costs, Scott found $455 for mobile crisis program costs versus $1,065 for psychiatric hospitalization (Scott, 2000). Fisher and colleagues (1990) examined the per capita expenditures of non-emergency and emergency services in Massachusetts catchment areas with mobile crisis service availability versus catchment areas without mobile crisis service availability. While significant differences in per capita expenditures for both non-emergency and emergency services existed, the results are in 1986 U.S. dollars (Fisher, Geller, & Wirth-Cauchon, 1990).

Discussion

Literature examining the evaluation of U.S.-based mobile crisis services is minimal. Additionally, only three of the seven articles in this review included outcomes of U.S. mobile crisis services specific to youth and young adults, therefore requiring the inclusion of articles with outcomes that responded to adults in order to have a more robust discussion. According to the results, mobile crisis services appear to reduce hospital admissions and offer a more cost-effective way to respond to behavioral health crises compared to hospitalization or police. However, the two articles assessing cost effectiveness are over 20 years old and the relevance of these findings in present day may be debatable. Results also suggest there may be characteristics of people in crisis that render them more likely to be hospitalized, particularly if they are homeless and experience acute psychiatric symptoms and suicidality. Finally, there is no evidence to-date that mobile crisis services significantly reduce arrests of people experiencing behavioral health crisis compared to police response.

The majority of the seven articles compared hospital admission rates among people responded to in crisis by a mobile crisis service versus standard care within the community. This finding is encouraging given that SAMHSA outlines reduced psychiatric hospitalization as the

main outcome objective of mobile crisis teams (2020). Participant characteristics found to be predictive of hospitalization or more acute level of care recommendations in this review align with the literature on risk factors associated with psychiatric hospitalization. Particularly, the article authored by Guo and colleagues (2001) found hospitalizations to be associated with participants who were homeless and experienced more acute psychiatric symptoms. These findings are supported by a recent study that found hospitalization among people who were homeless between 2007-2013 was more frequently due to mental illness or substance use disorders compared to their non-homeless counterparts (Wadhera et al., 2019).

Another SAMHSA best practice recommendations regarding the use of mobile crisis services is for these services to respond to crises without the presence of law enforcement (2020). This is due to the increased risk of harm or use of force by police officers when responding to behavioral health crises, given they are not licensed behavioral health professionals (Watson et al., 2009). It was therefore surprising that only one article included in this review examined the outcome of arrest during crises responded to by the mobile crisis service compared to the local status quo of police intervention (Scott, 2000). The author did not find a significant difference in arrests made after mobile crisis versus regular police intervention, pointing to a need for more studies focused on how mobile crisis services might compare to police response in behavioral health crises in terms of arrest, jail diversion, and increased referrals to non-criminalized mental health care services. One study is not sufficient to make any substantive conclusions regarding these outcomes.

Limitations

One of the limitations of this review is that only seven empirical studies on MRT exists in the literature, which means this review merely scratches the surface of the potential outcomes of

all mobile crisis response services in the U.S. Further, four of the seven reviewed studies are over 20 years old, the results of which may not be reflective of the current state of mobile crisis services in the U.S. today. The literature is also lacking outcomes-based mobile crisis response research focused on youth and young adults, as we only found two articles focused on this younger (e.g., 0-17 years) population. In addition, the examined outcomes of mobile crisis response are focused on hospital admission rates while neglecting other imperative outcomes like arrest, participants actually accessing the treatment referrals provided by the mobile crisis staff, and whether mobile crisis response might impact recidivism rates among participants in terms of experiencing subsequent crises or cycling through the acute care system multiple times. Finally, the literature is generally lacking U.S.-based and non-law enforcement based mobile crisis response outcomes, therefore this review may not be generalizable to the outcomes of mobile crisis response teams that operate in tandem with law enforcement or exist in countries outside of the U.S.

Implications for Future Research

For a service touted as a best practice by national organizations like SAMHSA and being included in the organization's Best Practice Toolkit published within the past year, there is minimal empirical research on mobile crisis services in the U.S. This aligns with what Garland and colleagues called the lack of outcome accountability in mental health and social services in their 2013 report on improving community-based mental health care for children (Garland et al., 2013). There may be several reasons including: (1) challenges in methodology (2) capacity of mental health providers to collaborate with community-based researchers to conduct sound research that informs a research-to-practice continuum, or (3) issues of transparency regarding data reporting within the mental health care community, the lack of outcome-driven evidence on

mobile crisis services seems to be a microcosm of a larger problem in youth mental health service research (Garland et al., 2013).

While the current review showed positive outcomes regarding mobile crisis and diversion from hospitalization, the literature on mobile crisis response is hyper-focused on reducing hospitalization. Especially in areas where community-based mental health services are minimal or nonexistent and police officers serve as first responders to mental health crises, not only is there increased risk for hospitalization but also an increased risk of arrest of the person experiencing crisis. This is because someone in crisis may be experiencing psychosis or hallucinations that may be perceived as acting erratically, the police officer(s) responding to the crisis may not have adequate de-escalation techniques to reduce their use of force during the response, and a concurrent crime may be occurring during the mental health crisis that leads to the person being arrested. More research is vital to understanding whether mobile crisis response might reduce arrest, and further to reduce the amount of time, cost, and resources spent by law enforcement agencies responding to crises that could instead be responded to by trained mental health professionals on a mobile crisis team.

Additionally important for further research on mobile crisis outcomes is to include those focused on youth and young adults. Mobile crisis teams are often used in the U.S., especially in states like Florida, to respond to youth in K-12 school systems as a way for school staff to de-escalate mental health crises experienced by students without the use of law enforcement. More needs to be understood regarding whether this approach is effective in diverting school-aged youth from not only hospitalization after their initial crisis but preventing future crisis episodes due to being referred more appropriately by the mobile crisis staff to lower-levels of mental health care services in the community. Future research might also examine whether the use of

referrals made by mobile crisis staff improves access to psychiatrists or other mental health professionals among youth as younger populations have persistently low access to mental health care rates in the U.S.

Conclusions

Despite substantial prevalence of mental health conditions among youth and young adults in the U.S., access to mental health care services is low among these populations. Mobile crisis services may be a way to increase access to needed mental health care services by bringing behavioral health professionals and paraprofessionals to the person in need rather than placing the burden on them to travel to receive necessary services. The current review suggests mobile crisis services might be cost-effective way to reduce hospital admissions. However, more research is needed to understand whether mobile crisis services are reducing hospital admissions by increasing referrals to more community-based mental health care services and whether these services are actually being reached by youth and young adults in need after being referred. More research is also needed to understand whether mobile crisis services may reduce the likelihood of arrest compared to police intervention. The lack of empirical evidence on mobile crisis service effectiveness in general may point to a larger issue of transparency among U.S. mental health service research and the guardedness of evaluating mobile crisis services in the country.

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Table 1

Characteristics of included studies

Author(s)/ Year	Methodology	Outcome measure(s)	Study sample	Intervention vs Comparison	Comparison Group	Main Outcomes
Youth						
Fendrich et al. (2019)	Retrospective cohort analysis	Subsequent ED use in an 18-month follow-up period	Youth who used mobile crisis services (n=2,532) versus youth who used behavioral health services in the ED (n=3,961)	Mobile crisis services	Behavioral health services in the ED	Youth who used mobile crisis services had 25% reduced odds of subsequent ED use compared to youth who used behavioral health services in the ED.
Vanderploeg, Lu, Marshall, & Stevens (2016)	Retrospective administrative data review	Youth characteristics Number of referrals Service volume Response time	Number of youth responded to by the Emergency Mobile Psychiatric Services (EMPS) prior to performance improvement center (PIC) implementation versus after PIC implementation in fiscal year 2015 (n=12,472)	The EMPS	Emergency room Juvenile justice system	Youth responded to in crisis by the EMPS are majority adolescents who present with risk of harm to self, disruptive behavior, or depression, with 78% meeting criteria for Serious Emotional Disturbance.

Table 1 (Continued)

Youth and Adults						
Muehsam (2019)	Retrospective administrative data review	Level of care recommendation	People responded to by a mobile crisis program (n=793)	Home with supports, crisis residential program, substance rehabilitation, or hospitalization	Behavioral health services in the ED	Older participants, those seen by the mobile crisis service more than once, or had homicidal ideation were more likely to receive a referral for involuntary hospitalization.
Adult						
Fisher, Geller, & Wirth-Cauchon (1990)	Cross-sectional	State hospital admission rates; Per-capita expenditures on non-emergency resources; Level of demand for inpatient services; Number of private and general hospital beds	Catchment areas with mobile crisis service capacity (n=20) versus catchment areas without mobile crisis service capacity (n=20)	Mobile crisis services	State, private, and public hospitalization	No difference in hospital admission rate in catchment areas with versus without mobile crisis service capacity.
Guo, Biegel, Johnson, & Dyches (2001)	Quasi-experimental	Rate of hospitalization Timing of hospitalization Consumer characteristics	Community-based mobile crisis intervention cohort (n=1,696) versus a hospital-based intervention cohort (n=4,106)	Community-based mobile crisis services	Hospital-based services	Community-based mobile crisis intervention reduced the rate hospitalization by 8% Use of hospital-based intervention

Table 1 (Continued)

Reding & Raphelson (1995)	Time series analysis	State and private hospital admissions	Hospital admissions two years prior to Mobile Psychiatric Crisis Intervention pilot (n=448); one year prior to pilot (n=674); during pilot (n=499); and, one year after pilot (n=243)	Mobile Psychiatric Crisis Intervention program	Private and state hospital admissions	Decreased state hospital admissions occurred during pilot period, compared to the two years prior to the pilot and subsequent year after pilot period ended.
Scott (2000)	Retrospective administrative data review	Hospitalization Arrest Cost of police versus mobile crisis intervention	Psychiatric emergencies responded to by a mobile crisis team (n=73) versus psychiatric emergencies responded to by police (n=58)	Mobile crisis team	Regular police procedures	55% of emergencies responded to by mobile crisis team were diverted from hospitalization compared to 28% of emergencies diverted from hospitalization after regular police intervention. Average cost per case was 23% less for crises handled by mobile crisis team compared to regular police intervention

CHAPTER THREE:

OUTCOMES OF YOUTH AND YOUNG ADULTS RESPONDED TO BY A MOBILE RESPONSE TEAM IN SARASOTA COUNTY, FLORIDA

Abstract

Introduction: To address the gap between the need for mental health care and lack of access to it among youth and young adults, many U.S. communities are incorporating services such as mobile response teams (MRTs) into their behavioral health system. In Florida, there are 40 MRTs across all 67 counties, with this study focused on one MRT in Sarasota County. Methods: Data from the Sarasota County MRT between 2/1/2019-5/28/2021 were used to assess characteristics of youth and young adults who received an involuntary psychiatric evaluation versus those who did not, and whether participant demographics or MRT-specific factors were associated with receiving an involuntary psychiatric evaluation after being assessed by MRT staff. Results: Out of 389 total youth and young adults between 0-17 years responded to by MRT during the study period, there were 21 involuntary psychiatric assessments initiated by the MRT staff. The majority of these 21 participants were female, White, and between 11-17 years old with the most common reason precipitating the crisis suicidal ideation. Bivariate logistic regression analyses indicated that older youth, emergent call types, suicidal ideation, and referral from school personnel to MRT staff had significantly increased odds of receiving involuntary psychiatric evaluations. The results of multivariate analysis suggested that suicidal ideation is the strongest predictor of involuntary psychiatric examination. Additionally, results demonstrated

that White participants were more likely to receive referrals to outpatient treatment by the MRT staff versus non-White participants. Conclusions: Disparities in mental health treatment referrals exist and should be investigated further by MRT staff. Acuity of crises was associated with receiving involuntary psychiatric evaluations, whereas other participants were diverted to lower-level services, consistent with recommendations outlined in the Florida DCF Framework for MRTs.

Introduction

In the United States (U.S.), one out of six school-aged youth between 6-17 years old (17%) and one out of five adults over the age of 18 (20%) experience a diagnosed mental health condition each year (Devitt, 2019; National Alliance on Mental Illness [NAMI], 2019). Despite the substantial prevalence of mental health conditions among youth and young adults (18 to 25 years old), barriers to receiving mental health treatment persist (Mental Health America [MHA], 2021). Youth and young adults often forego mental health treatment until they reach the point of crisis. In fact, the first time a youth or young adult comes into contact with the mental health system is often in the context of a crisis at home, in school, or in their community (Edelsohn, Braitman, Rabinovich, Sheves, & Melendez, 2003). This is especially true for African American youth, who are almost half as likely as White youth to receive mental health care even though they experience similar rates of mental health conditions (American Psychological Association, 2017).

To address this gap between the need for mental health care and lack of access to it among youth and young adults, many U.S. communities are incorporating services like mobile crisis teams into their behavioral health system (Vanderploeg et al., 2016). Mobile crisis response goes by several different names including mobile crisis teams or mobile response teams

(MRTs), but generally refer to teams of behavioral health professionals and paraprofessionals who provide 24/7 on-site behavioral crisis management within 60-minutes of receiving the call for youth and young adults under 25 years (Substance Use and Mental Health Services Administration [SAMHSA], 2020). Upon arrival, the mobile crisis response or MRT staff assesses the individual in crisis in their natural environment. Depending on the unique situation, the mobile crisis staff then provide referral to care at a public or private behavioral health provider or create a safety plan with the individual and their family. After the referral or safety plan is made, mobile crisis team staff are to follow-up with the youth or young adult within 72 hours to ensure the appropriate services were reached or the safety plan was followed (SAMHSA, 2020).

While mobile crisis response literature dates back to the 1960s, the heterogenous nature of mobile crisis teams or MRTs means there are no uniform set of standards, missions, or practices, across and within the U.S. states with mobile services. The general premise of mobile crisis response is to triage, assess, treat, and refer people in the community experiencing mental health crises (Glick, Berlin, & Fishkind, 2008). However, each U.S. state and community with established mobile crisis teams or MRTs have different models by which their teams operate depending on the unique needs of their youth and families, as well as the capabilities, size, and nature of their overall behavioral health system (Vanderploeg et al., 2016). As a result, each mobile crisis team or MRT can look drastically different from community to community. While this is positive in terms of addressing the unique needs of each community, it is difficult to compare across MRT systems in terms of shared data collection, performance metrics, and outcomes (Garland, Bickman, & Chorpita, 2010).

This study focuses on MRTs that operate independently, without law enforcement co-responding with the mobile crisis staff. After conducting an extensive literature review, only seven empirical studies were published from the 1960s to present day that examine outcomes of mobile crisis teams that operate independently from law enforcement. The research on MRTs suggests that mobile crisis response is a cost-effective alternative to police response or hospitalization (Fisher, Geller, & Wirth-Cauchon, 1990; Scott, 2000). Mobile crisis response is also associated with lower hospital admission rates compared to police response or hospital-based crisis response in the emergency department (ED) among youth and adults in crisis (Guo, Biegel, Johnson, & Dyches, 20001; Reding & Raphelson, 1995; Scott, 2000). One study found mobile crisis response had lower subsequent ED admission rates in the 18-month period following the study timeframe, during which the researchers compared the outcomes of youth under 18 years who had initially received crisis care by a MRT versus behavioral health care in the ED (Fendrich et al., 2019).

Due to the limited number of empirical studies on mobile crisis, a gap exists in the literature on response outcomes. Specifically, no research to-date has examined whether mobile crisis response was associated with diversion from initiation of the state's involuntary commitment law. The involuntary commitment law in Florida is the Florida Mental Health Act of 1971, more popularly known as the Baker Act, named after Maxine Baker, who sponsored the Act as a State Representative from Miami (Department of Children and Families [DCF], 2002). The Baker Act states a person may be taken to the closest crisis stabilization unit (CSU) and held up to 72 hours for evaluation and crisis stabilization if they have evidence of a mental illness, and because of their mental illness: a) refuse or are incapable of making the decision for voluntary commitment, and without treatment or care, will neglect to take care of themselves, or

b) there is extraordinary likelihood that without treatment there is imminent risk of serious bodily harm to themselves or others (Florida Mental Health Act, 1971). After the 72-hour period, the individual may either be admitted to inpatient treatment or discharged with referrals to outpatient mental health services. Because the Baker Act is Florida-specific language, this study refers to a Baker Act initiation as an involuntary psychiatric evaluation initiation.

Program Description

In Florida, the focus on increased funding for and the expansion of MRTs across the state came well after most other U.S. states' widespread implementation of mobile crisis services. In 2017, a Task Force created by Florida House Bill 1121 found a dramatic increase in involuntary mental health examinations in the previous 15 years among youth aged under 18 years, relative to the small percentage change in this subpopulation in the same time frame (DCF, 2018). One of the recommendations made by the 2017 Task Force in response to the increase in youth involuntary mental health examinations was to create a statewide network of MRTs. Research suggests MRTs, compared to law enforcement or Emergency Medical Services (EMS), increase diversion of youth experiencing a behavioral health crisis from acute mental health settings to more appropriate, lower-level services (DCF, 2018). After the school shooting that took place at Marjory Stoneman Douglas High School in Parkland, Florida on February 14, 2018, there was a call for increased funding for more MRTs across the state (DCF, 2018). As such, the number of MRTs increased from 12 teams across 10 counties in 2018, to 40 teams across all 67 Florida counties (increase of 233%), with the current study focused on one MRT located in Sarasota County.

Sarasota County, on the southwest coast of Florida, includes the cities of Sarasota, Venice, Long Boat Key, and North Port. According to the U.S. Census Bureau (2019), the

county has a population of 433,742, with 87,004 (20%) being youth and young adults aged 0-25 years. Without a precise estimate of the mental illness prevalence in Florida among children under the age of 12 years, applying the 2019 MHA estimate of the percent of Florida's youth aged 12-17 who a major depressive episode in the past year to Sarasota County's population aged 6-17 years suggests over one in eight of the county's youth, or 5,961 in total, experienced a MDE in the past year (2020).

Until January 1st, 2021, the MRT in Sarasota County was operated by Jewish Family and Children's Services (JFCS), a mental health and human services agency that offers non-denominational services including counseling, mental health programs, food and financial assistance, homeless prevention services, and at-risk youth and family services (Jewish Family and Children's Services [JFCS], 2020). The JFCS MRT provided crisis stabilization and case management services 24/7 to individuals aged 0-17 years who: were experiencing a mental health crisis, had DCF involvement; posed imminent risk of harming themselves or others; had no immediate access to other mental health services; and/or were at risk for school expulsion or a more restrictive home placement (JFCS, 2020). In 2018, with additional funding from the Marjory Stoneman Douglas High School Public Safety Act, the JFCS MRT expanded their response to such calls for those aged 0-25 years. JFCS MRT staff included one coordinator, a licensed therapist, and two MRT specialists who answered a dedicated referral line and provided verbal de-escalation along with other evidence-based techniques to make every attempt to divert the individual in crisis from a Baker Act initiation to a community-based mental health and/or substance use treatment provider (JFCS, 2020).

Despite the additional legislative funds to serve a broader age group, the JFCS MRT had limited reach because its funding stream was still inadequate. Because of this, the contracted

MRT provider changed on January 1st, 2021, to the non-profit mental health and substance use treatment agency in Sarasota County named First Step of Sarasota (FSOS). This new agency also operates the county's Baker Act central receiving facility for adults and provides 32 different services in addition to the MRT, including: outpatient treatment and counseling for all ages; prevention services and groups for pregnant women, youth, young adults, and adults; and, detox and inpatient residential treatment for adults. FSOS not only has a greater capacity to maximize the MRT service to respond 24/7 to youth and young adults in crisis given the agency receives both state and county funding, FSOS expanded the MRT service to respond 24/7 to crises experienced by all ages including geriatric populations.

Current Study

To fill a gap in the empirical literature related to MRTs, this study describes participants responded to by the MRT in Sarasota County, Florida, and factors associated with initiation of involuntary psychiatric evaluation by the MRT staff. The first research aim characterized youth who received an involuntary psychiatric evaluation and those who did not after being responded by the Sarasota County MRT. The second research aim was to determine whether participant demographics or MRT-specific factors were associated with receiving an involuntary psychiatric evaluation after being assessed by the MRT staff. his study was submitted to the University of South Florida's Institutional Review Board (IRB) and was determined to be exempt from IRB review.

Method

Participants

A total of 389 youth and young adults between 0-25 years (M=11.7 years; SD= 3.8) responded to by the Sarasota County MRT between 2/1/2019-05/28/2021 were included in the

analyses. As can be seen by Table 2, slightly more than half of the participants (51.7%) were male. Majority of the participants were White (64.0%), almost 14% were African-American, 13% were Hispanic, and the remaining 8% were from other racial or ethnic groups. Ofthe 389 crisis calls, only 21 (5.4%) were involuntary psychiatric evaluations initiated by the MRT staff.

Data Source

De-identified data for youth and young adults responded to by the JFCS Sarasota County MRT between 2/1/2019-10/14/2020 and the First Step of Sarasota (FSOS) Sarasota County MRT from 2/1/2021-5/28/2021, were retrieved by Central Florida Behavioral Health Network (CFBHN). As stated in the Florida statute, the Department of Children and Families (DCF) works in partnership with local communities to protect the vulnerable, promote strong and economically self-sufficient families, and advance personal and family recovery and resiliency. To do this effectively, DCF contracts with regional managing entities to tailor DCF's funding to the specific behavioral health needs in the seven Florida regions. Sarasota County is included in the region overseen by the managing entity named CFBHN. One duty of CFBHN is to collect outcome metrics from each MRT including the name, location, and demographics of each youth and young adult responded to by the MRT, as well as the response time in minutes or hours, call type whether urgent or emergent, whether an involuntary psychiatric evaluation initiation took place, where the individual was referred to if an involuntary psychiatric evaluation initiation did not take place, and other metrics per the contractual agreements between the specific MRT and CFBHN. Combined dataset including both JFCS and FSOS MRT was utilized.

Measures

Independent variables.

Age. The age of every individual responded to by the MRT was determined by the difference between the date the call was responded to by the MRT and the individual's date of birth. Only participants who were 25 years of age or younger were included in the analyses.

*Gender***.** Gender refers to the self-identification of being male, female, or transgender by each person responded to by the MRT. Transgender was omitted from the analyses to protect the identity of the participant due to a small number of cases (n=1).

*Race/ethnicity***.** Race/ethnicity refers to the self-identification of being White, African American, Asian, Native American, Hispanic, or Other by each person responded to by the MRT. Four dichotomous variables were created to identify the following race/ethnicity categories: White, African American, Hispanic, or Other racial/ethnic category.

Type of call. The MRT categorized their response to each call in three ways: urgent, emergent, or routine. Calls categorized as urgent were responded to by the MRT staff within 48 hours whereas calls categorized as emergent were responded to within 60 minutes. Routine calls were those made within 72 hours of the crisis event for follow-up.

Referral source. The referral source indicates who referred the participant in crisis to the MRT. Referral sources categorized by the MRT staff include referrals made by people in the community, self-referral by the person in crisis, a member of law enforcement, a physician or doctor, school personnel, or other types of social service professionals who interacted with the person in crisis. A dichotomous (yes/no) variable was created indicating whether the participant in crisis was referred to the MRT by the specific referral source (yes) versus any of the other referral sources (no).

Call explanation. Only the FSOS MRT documented circumstances that precipitated the crisis response. While each case is unique, primary call explanations included suicidal ideation, depression symptoms, threats of harm to self or others, actualized self-harm, and psychosis or other changes in mental state. A number of dichotomized variables were created to indicate the reasons that precipitated the crisis call, including suicide (yes/no), depression (yes/no), aggression and harm to others (yes/no), or other reasons (yes/no).

Outcome measures.

Involuntary psychiatric evaluation. This outcome refers to whether an involuntary Baker Act initiation occurred as a result of the evaluation made by the MRT licensed staff member who responded to the individual in crisis. This variable was dichotomized into a yes/no outcome.

Diverted home with referrals to outpatient treatment. This outcome indicates whether the MRT staff provided outpatient mental health treatment referrals to participants, in lieu of or "diverting" participants from an involuntary psychiatric evaluation. The variable was dichotomized into a yes/no outcome.

Data Analysis

Descriptive statistics were used to detect data input errors, outliers, missing data patterns, and to describe the distributions for each included in the analysis variable. Descriptive statistics were also used to examine participant's characteristics and compare them to those who received an involuntary psychiatric evaluation versus those who did not receive an involuntary psychiatric evaluation after MRT assessment. Bivariate and multiple logistic regression analyses were conducted to examine factors associated with involuntary psychiatric evaluation initiated by the MRT staff. A separate bivariate regression analysis was conducted to examine whether race/ethnicity was associated with receiving referrals to outpatient treatment after MRT

assessment. Odds ratios were used to assess the strength of the associations. All analyses were performed with IBM SPSS Statistics for Windows, Version 27.0.

Results

Study Question One: Descriptive MRT Participant Comparison

Among the 21 participants who received involuntary psychiatric evaluation initiations after MRT assessment during the 2019-2021 study period, the majority were female (62.0%), White (57.1%), and between 11-17 years old (M=14.2 years; SD= 2.3). For these 21 participants, the most frequent call explanation was suicidal ideation (61.9%) and most call types were classified by the MRT agency as emergent or responded to within 60 minutes (81%). Among the 368 participants who did not receive an involuntary psychiatric evaluation initiation, the majority were male (52.4%), White (64.4%), and aged between 5-14 years old (M=10.4 years; SD= 2.5). The results of a Chi-square analysis indicated no significant differences by gender or race/ethnicity among participants who received involuntary psychiatric evaluation initiations versus those who did not. However, the results of ANOVA showed a significant difference by age between participants who received an involuntary psychiatric evaluation versus those who did not ($p<.05$). The most common call explanation was suicidal ideation (49%), and the majority of call types were classified by the MRT agency as urgent or responded to within 48 hours (72.8%). Further race/ethnicity comparison between participants who received an involuntary psychiatric evaluation initiation versus those who did not revealed a higher percent of African-Americans (19.1% versus 13.4%), Native Americans (4.7% versus 1.6%), and Hispanic or Latino (19.1% vs 13%).

Study Question Two: Factors Associated with Involuntary Evaluation

Bivariate logistic regression. Bivariate logistic regression analyses were performed to examine whether a relationship exists between involuntary psychiatric evaluation and variables including age, race, gender, call type, or referral source of the individual responded to by the Sarasota County MRT. Results showed a statistically significant association between age and involuntary psychiatric evaluation, such that one additional year of age was associated with 13% increased odds of receiving an involuntary psychiatric evaluation (OR=1.13, $p<.05$). Participants with emergent call types (i.e., crises responded to within 60 minutes) had 14 times greater odds to receive an involuntary psychiatric evaluation initiation after being assessed by the MRT staff compared to participants with non-emergent call types (OR = 14.37, $p<.05$). This meant MRT staff were more likely to initiate involuntary psychiatric evaluations among participants who were experiencing more imminent levels of crisis, which coincided with the finding that urgent call types (i.e., crises responded to within 48 hours), had 91% lower odds of receiving an involuntary psychiatric evaluation compared to participants with emergent or routine call types (OR=.09, $p<.001$). A final bivariate regression analysis indicated that there is a significant association between schools as the referral source and receiving an involuntary psychiatric evaluation. Specifically, when youth were referred by the schools, they had almost four times greater odds of receiving an involuntary psychiatric evaluation compared to youth who were referred by other sources (OR = 3.90, $p<.05$).

Additional bivariate logistic regression analyses examined associations between involuntary psychiatric evaluation and the different call explanation types. Suicidal ideation as a reason for a call was significantly associated with receiving an involuntary psychiatric evaluation. In particular, participants with suicidal ideation had 4.19 greater odds of receiving an

involuntary psychiatric evaluation compared to the other call explanation types of depression, aggression or harm to others, and other reasons. This coincided with the previous finding that MRT participants with emergent call types had higher odds of receiving an involuntary psychiatric examination initiation by the MRT staff, being that suicidal ideation was considered emergent. No other significant associations were found. See Table 3 for more information on all bivariate analysis results.

Multivariate analysis. Multivariate logistic regression analysis was performed to further examine whether age, referral source, call explanation, and call types were significantly associated with involuntary psychiatric evaluation initiation. Suicidal ideation was the only factor to remain statistically significant (OR=3.7, $p<.05$) holding all other factors constant (see Table 4).

Diversion Location

Diverted home with referrals to outpatient treatment. A separate binary regression analysis was performed to assess whether race/ethnicity was associated with provision of outpatient treatment after MRT assessment. Results showed that MRT participants who identified as White had 2.22 greater odds of being referred home with an outpatient referral to counseling compared to non-White participants (95% CI 1.03-4.80).

Discussion

This first study aim characterized a sample of 21 youth and young adults who received an involuntary psychiatric evaluation versus 368 who did not by the Sarasota County MRT between 2/1/2019-5/28/2021. Comparison showed a higher percent of females, older youth, and White participants were more likely to receive an involuntary psychiatric evaluation after a MRT assessment. Furthermore, emergent calls, and calls related to suicidal ideation were more likely

to lead to involuntary hospitalization. Based on the literature showing racial disparities in mental health care access (American Psychological Association, 2017), an additional binary regression analysis was conducted to examine whether race/ethnicity was associated with diversion location after MRT assessment. Results showed MRT participants who identified as White were more likely to be referred home with outpatient mental health treatment referrals compared to non-White participants after MRT assessment.

One of the primary goals of MRT services as outlined in the Florida DCF Framework (2018) for mobile crisis response is to divert individuals in crisis from a Baker Act initiation (i.e., involuntary psychiatric evaluation) to more appropriate, lower levels of care. There were 21 involuntary psychiatric evaluations in the current study, resulting in a diversion rate of 94.6%, with diversions by the MRT most often being a referral to outpatient mental health counseling at JFCS or FSOS. Research on diversion rates of MRTs is limited but compared to a 2011 study that found an 85% diversion rate of a child and adolescent mobile response team, the diversion rate of 94.6% in Sarasota County is exceptionally high (Warner & Chen, 2011). Diversion from involuntary psychiatric assessment among individuals who do not meet statutory criteria for such an assessment is preferable because the process of psychiatric hospitalization can be traumatic and may prevent people from seeking care in the future (Snowden, Hastings, & Alvidrez, 2009). Perhaps counterintuitive, but the trauma associated with psychiatric hospitalization has been shown to compound rather than to help crises and can lead to mistrust of mental health providers and the mental health system as a whole (Snowden, Hastings, & Alvidrez, 2009).

Particularly among minority populations including those who identify as African American or Hispanic, diversion from psychiatric evaluation when the individual does not meet the clinical threshold to be hospitalized and lower-level treatment measures are available, is

imperative. This is because racial disparities exist in mental health care access, the quality of treatment provided when care is accessed, and disproportionate diagnoses of severe mental illness (McGuire & Miranda, 2008; Physicians for a National Health Program, 2016). African American and ethnic minorities are also less likely to be prescribed best available treatments for mood disorders and less likely to receive referrals (Wang, Bergland, & Kessler, 2000). This study did not include quality of treatment or diagnosis measures but did assess referrals and the findings support the literature as White MRT participants had higher odds of being diverted home with outpatient mental health referrals compared to their non-White counterparts.

MRT participants who expressed suicidal ideation had higher odds of receiving an involuntary psychiatric evaluation compared to those with depressive symptoms, aggression or harm to others, or other crisis types. This finding aligns with the statutory criteria that must be met to initiate an involuntary psychiatric evaluation in Florida outlined in a previous section. It further aligns with the Baker Act Reporting Center's finding that the majority of involuntary psychiatric evaluations are due to threats of harm to self (57.83%) compared to the other reasons for initiation including harm to others and self-neglect (Baker Act Reporting Center, 2020). As previously discussed, one reason why the 2017 Task Force recommended a network of MRTs be established in Florida was to curb the significant rise in Baker Act initiations among youth. It appears the MRT in Sarasota County is doing their diligence in initiating the Baker Act in appropriate, imminent circumstances while appropriately referring participants who do not meet statutory threshold for the Baker Act to outpatient treatment.

Limitations

Limitations of the current study must be acknowledged. The use of administrative data had the disadvantage of incomplete or inaccurate data elements. For example, several

participants' age was assigned incorrectly in the original data set, which the study investigator identified and resolved with the correct age after discussing with the ME. Furthermore, the generalizability of the results are limited, given the study was based on one MRT located in Florida that may not be demographically representative of youth and young adults or otherwise representative of the outcomes of MRTs in other areas within or outside of the U.S. Specifically, the current study's sample of youth and young adults were disproportionately White and the outcomes may not be indicative of the those of an MRT operating in a more racially or ethnically diverse geographic area. Finally, FSOS had only been the MRT agency for five months at the time the data was requested for this study. Therefore, the results may not be indicative of a long-term or sustainable MRT program, but rather the initial results of a relatively new MRT program that may change as the program matures.

Implications and Future Directions

A main implication from this study is that mobile crisis response is effective in diverting youth from involuntary psychiatric evaluation to lower levels of mental health care. This study also shed light on the need for more equitable provision of referrals to outpatient care, based on race and ethnicity of the person in crisis. Finally, given the outpatient referrals made by the MRT staff were only to internal services provided by the MRT agency, Sarasota County needs a wider variety of options for outpatient mental health treatment for youth.

In terms of the MRT data itself, this study sheds light on the need to realign the data kept and reported to the managing entity by the Sarasota County MRT agency. Race and ethnicity are currently a combined variable, and this variable should be separated to more accurately reflect participant demographics. Specifically, when it comes to examining whether racial and/or ethnic disparities exist in the way the MRT assesses participants, whether an involuntary psychiatric

evaluation is initiated, and whether participants are receiving referrals after MRT assessment, separating race and ethnicity will allow for a clearer picture of whether any specific racial or ethnic groups are being treated differently. Aside from the race/ethnicity variable, it would be helpful for the call type variable (e.g., urgent versus emergent) to be better explained as MRTs are supposed to respond to all crisis calls within 60 minutes per the DCF Framework (2018). An additional variable that categorizes call explanations should also be created as the primary investigator in the current study had to create the categories of suicidal ideation, depression, harm to others and aggressive behavior, and others, by reading the narrative for every crisis call responded to by the MRT. Finally, it would be beneficial to know, after an involuntary psychiatric evaluation initiation is made, whether the participant is admitted into longer term treatment or discharged after the 72-hour evaluation period, or whether participants referred to outpatient counseling actually attended counseling sessions.

Conclusions

Untreated mental illness contributes significant costs to the U.S. each year in the form of disability, loss of productivity, hospitalization, and premature death. Consistent funding and innovative solutions are critical to preventing and mitigating crises precipitated by mental illness or behavioral health conditions in general. Mobile crisis response teams or MRTs are one innovative way to respond to people in crisis, diverting them to more appropriate, lower-level mental health care in the community rather than psychiatric hospital settings. This study examined the outcomes of one of the 40 MRTs currently operating in Florida. Results showed the MRT in Sarasota County indeed diverted the majority of youth experiencing crisis from involuntary psychiatric evaluations into lower levels of care in the community when appropriate. This study supported previous research that African American youth are less likely to receive

mental health treatment referrals compared to their non-African American counterparts. Given this study adds to seven total empirical studies on MRTs in the U.S. since the 1960s, there is clearly a need for more outcomes-based research on this type of mobile crisis response.

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Table 2

Involuntary Psychiatric Evaluation Participant (Yes/No) Characteristics

Yes Characteristics (%) N=21		No Characteristics (%) N=368		Total (%) N=389	
Gender		Gender		Gender	
Male	(38.0)	Male	(52.4)	Male	(51.7)
Female	(62.0)	Female	(47.6)	Female	(48.3)
Race/Ethnicity		Race/Ethnicity		Race/Ethnicity	
White	(57.1)	White	(64.4)	White	(64.0)
African	(19.1)	African	(13.4)	African	(13.6)
American	(4.7)	American	(1.6)	American	(1.8)
Native American	-	Native	(.8)	Native	(.8)
Asian	-	American	(6.8)	American	(6.4)
Other	(19.1)	Asian	(13.0)	Asian	(13.4)
Hispanic or		Other		Other	
Latino		Hispanic or		Hispanic or	
		Latino		Latino	
Age		Age		Age	
0-4 Years	-	0-4 Years	(3.3)	0-4 Years	(3.1)
5-10 years	(19.0)	5-10 years	(32.1)	5-10 years	(31.4)
11-14 years	(38.1)	11-14 years	(41.0)	11-14 years	(40.9)
15-17 years	(38.1)	15-17 years	(19.3)	15-17 years	(20.3)
18-25 years	(4.8)	18-25 years	(4.3)	18-25 years	(4.4)
Call Type		Call Type		Call Type	
Urgent	(19.0)	Urgent	(72.8)	Urgent	(69.9)
Emergent	(81.0)	Emergent	(22.8)	Emergent	(26.0)
Routine	-	Routine	(4.3)	Routine	(4.1)
Yes Characteristics (%) N=17		No Characteristics (%) N=87		Total (%) N=104	
Call Explanation[a]		Call Explanation[a]		Call Explanation[a]	
Suicidal Ideation	13(76.5)	Suicidal	38(43.7)	Suicidal	51(49.0)
Aggression/HTO	2(11.8)	Ideation	17(19.5)	Ideation	19(18.3)
Depression	2(11.8)		12(13.8)		14(13.5)
Other	2(11.8)	Aggression/HTO	26(29.9)	Aggression/HTO	28(26.9)
		Depression		Depression	
		Other		Other	

[a]Call explanation only includes FSOS MRT participants and column percent totals do not add to 100% due to six participants presenting with depression and suicidal ideation.

Table 3

Bivariate Analysis of Factors Associated with Involuntary Psychiatric Evaluation

Factors	β	Wald	OR	95% C.I.
Gender	-.58	1.60	.206	[.23-1.38]
Age	.12	4.25*	1.13	[1.01 – 1.27]
Race/Ethnicity				
African American	.43	.55	1.53	[.50-4.74]
White	-.31	.45	.74	[.30-1.80]
Hispanic	.45	.61	1.57	[.51-4.86]
Call Explanation				
Suicidal Ideation	1.43	5.50*	4.19	[1.27-13.89]
Depression	.145	.030	1.16	[.23-5.89]
Aggression	-.60	.56	.55	[.11-2.6]
Other	-1.16	2.17	.31	[.07-1.47]
Referral Source				
School Personnel	1.22	6.12*	3.40	[1.29-8.95]
Type of Call				
Emergent	2.67	21.91**	14.37	[4.71-43.87]
Urgent	-2.43	18.35**	.09	[.03-.27]

*Note. *p<.05. **p<.001.*

Table 4

Multivariate Analysis of Factors Associated with Involuntary Psychiatric Evaluation

Factors	β	Wald	OR	95% C.I.
Suicidal Ideation	1.30	4.33*	3.68	[1.08-12.53]
School Referral	.14	.04	1.15	[.28-4.81]
Emergent	.48	.55	1.61	[.46-5.65]
Age	.09	1.04	1.09	[.92-1.30]
Constant	-4.11	6.08	.02	

*Note. *p<.05*

CHAPTER FOUR:

MOBILE CRISIS RESPONSE AND THE EMERGENCY BEHAVIORAL HEALTH SYSTEM: A QUALITATIVE INQUIRY OF THE MOBILE RESPONSE TEAM IN SARASOTA COUNTY, FLORIDA

Abstract

Introduction: In Sarasota County the lack of preventative services for youth is evident as most people experiencing mental health conditions in this population will reach the point of crisis before they receive care, placing them at higher risk of psychiatric hospitalization. Methods: This study includes the analysis of 16 interviews with Sarasota County administrators, executives, and staff representing 12 different agencies in the county's emergency behavioral health system. Questions assessed what agencies make up the emergency behavioral health system, the strengths and weaknesses of the partnerships among these agencies based on the five elements of the Collective Impact Model, and how the mobile response team (MRT) fits within these agencies in terms of whether it could be leveraged to reduce unnecessary involuntary Baker Act initiations in the county. Results: All participants worked with law enforcement, medical hospitals, mental health and substance use treatment facilities, and social/victims service agencies on a regular basis. The primary issues facing youth named by participants included depression, anxiety, and isolation. Executive and administrative level participants experienced high levels of collaboration with other agencies, whereas staff level participants did not. Whether the MRT could be leveraged to reduce involuntary Baker Act initiations, participants felt there should be more of a shift from reliance on the acute mental health care system to preventative

services available to youth in the county. Conclusions: The MRT is one part of the emergency behavioral health system, but by the time youth need MRT response, they are already in crisis. More preventative services must be available to youth to mitigate crises from happening from the beginning, which may in turn reduce involuntary Baker Act initiations instead of relying on the MRT to do so.

Introduction

The current need for increased access to mental health treatment options in the U.S. is evident, as one out of five adults over the age of 18 and one out of six school-aged youth ages 6-17 experience a diagnosed mental health condition each year (Devitt, 2019; National Alliance on Mental Illness [NAMI], 2019). In Florida, Mental Health America (MHA) projects that among youth aged 12-17 years, approximately 9.3% will experience a major depressive episode (MDE) in 2021 and those adults aged 18 years and over approximately 17% will experience any mental illness in 2021 (MHA, 2021). Florida ranks above the national average (49.5%) in the unmet need of mental health care, with approximately 55% of youth and 22% of adults who need mental health services never receiving care (MHA, 2021; Sexton, 2019).

One of the reasons for this unmet need of mental health care is Florida consistently ranks last or next-to-last nationwide in mental health spending per capita (Swerlick, 2020). This lack of funding for mental health services was highlighted in a recent youth mental health environmental scan of Sarasota County conducted by University of South Florida (USF) researchers (Abella et al., 2019). In this environmental scan, researchers spoke with county stakeholders who voiced concerns about the lack of preventative services available to youth, teens, and young adults in the county, with more of a focus on acute care like psychiatric hospitalization (Abella et al., 2019). Furthermore, police officers are often the first responders to mental health crises in Florida,

meaning by the time youth enter the mental health system, they are already in a state of crisis and being responded to by law enforcement rather than a mental health professional (Lamb, Weinberger, & Walter, 2014).

Younger populations are at higher risk of receiving an involuntary psychiatric examination hold when police officers respond to their mental health crisis, because officers consistently initiate the majority of involuntary psychiatric examinations in the state every year (Baker Act Receiving Facility [BARC], 2020). The involuntary examination law in Florida is the Florida Mental Health Act of 1971, more popularly known as the Baker Act, named after Maxine Baker, a then-State Representative who sponsored the Act into legislation (DCF, 2002). The Baker Act states a person may be taken to the closest crisis stabilization unit (CSU) and held up to 72 hours for evaluation and crisis stabilization if they have evidence of a mental illness, and because of their mental illness: a) refuse or are incapable of making the decision for voluntary commitment, and without treatment or care, will neglect to take care of themselves, or b) there is extraordinary likelihood that without treatment there is imminent risk of serious bodily harm to themselves or others (DCF, 2002). After the 72-hour period, the individual may either be admitted for inpatient mental health services or referred to outpatient mental health services.

In 2017, a Task Force in Florida created by House Bill 1121 found a significant increase in Baker Act initiations in the previous 15 years among youth under 18 years of age, relative to the small percent change in this subpopulation in the same time frame (DCF, 2018). Two primary reasons cited for this dramatic increase in Baker Act initiations among youth included lack of access to early intervention and prevention services, and an absence of behavioral health treatment options other than the Baker Act in many Florida communities (DCF, 2018). Consequently, one of the recommendations made by the 2017 Task Force was to create a

statewide network of mobile response Teams (MRTs) because Baker Act rates among youth were found to be lower in areas with MRTs compared to areas without MRTs (DCF, 2018). Research furthermore suggests MRTs, compared to law enforcement or Emergency Medical Services (EMS), increase diversion of youth experiencing a behavioral health crisis from acute mental health settings to more appropriate, lower-level services (SAMHSA, 2020).

The Florida DCF framework for MRTs states that they are to provide 24/7, on-demand crisis intervention service by trained behavioral health professionals and paraprofessionals who arrive on-scene within 60 minutes of a mental health crisis call for individuals aged 25 years and younger (DCF, 2018). The purpose is to shift reliance on mental health crisis response from local law enforcement agencies and emergency departments to trained mental health professionals and paraprofessionals (DCF, 2018). Furthermore, MRTs are intended to stabilize youth experiencing mental health crises in a community-based setting that provides opportunity for individualized, needs-based assessments and referral to lower-level, less restrictive mental health care in lieu of the local jail, emergency department, and/or the Baker Act (DCF, 2018). They are also intended to reduce trauma associated with mental health crises, and to prevent unnecessary psychiatric hospitalization or criminal justice system involvement.

The DCF Framework suggests the success of MRTs is heavily reliant on community collaboration (2018). This collaboration should consist both of written formal agreements including response protocols of the MRTs with local law enforcement and school districts like a Memorandum of Agreement (MOA) or Memorandum of Understanding (MOU) as well as informal partnerships with community stakeholders (DCF, 2018).

There are currently 40 total MRTs across Florida's 67 counties, with this study focusing on one of the 40 MRTs located in Sarasota County, Florida. This study has three aims: (1)

identify agencies comprised in the Sarasota County's emergency behavioral health (EBH) system and the role of the county's MRT within this system, (2) understand strengths and challenges of partnerships among the identified agencies within the EBH system and the MRT in Sarasota County, and (3) assess whether the MRT in Sarasota County can be leveraged to reduce unnecessary Baker Acts, which is one of the goals identified by both the 2017 Task Force and the Florida DCF Framework for MRTs (DCF, 2018).

Method

This qualitative exploratory study took place in Spring 2021, using individual semi-structured interviews and network mapping with staff and administrators who work in 12 different emergency behavioral health agencies in Sarasota County, Florida. The 45-minute interviews were led by the primary investigator of this study. Topics were separated into three categories including: 1) interviewees' employer, length of experience in current role, and any prior experience they had in other roles and/or agencies related to the behavioral health system; 2) the other agencies in the county's EBH system that the interviewee interacts with on a daily, weekly, or monthly basis, and their perceptions and ratings (i.e. 1 lowest to 10 highest) of the level of collaboration and trust between their agency and each of the other agencies; and 3) the interviewee's interactions with the county's MRT, if any, and their perspective on whether the MRT reduces unnecessary Baker Acts.

Interview questions addressing research aim two, gauging the strengths and challenges of agency partnerships, were guided by the Collective Impact Model (Collective Impact Forum, 2014). This Model is defined by the Collective Impact Forum as an approach that (1) defines problems and shared visions, (2) establishes shared measurement among agencies, (3) coordinates collective efforts toward the shared visions for solving problems, (4) builds trust and

relationships between community agencies, and (5) identifies a leadership team (Collective Impact Forum, 2014). The Collective Impact Model was developed because community organizations often work in silos, or in isolation, rather than integrating and collaborating their efforts with other community organizations focused on similar issues. This Model therefore provides a blueprint for community organizations on how to come together in a structured way to achieve social change surrounding a shared problem (Collective Impact Forum, 2014). The condensed version of Collective Impact includes five conditions: (1) common agenda, (2) shared measurement system to track progress in the same way for continuous improvement, (3) mutually reinforcing activities, (4) continuous communication, and (5) backbone support organization.

Specific questions grounded in the Collective Impact Model that were asked of each interview participant included: (1) What do you perceive as the main issues facing youth in Sarasota County? (2) What are the other agencies that you collaborate with on a regular (i.e., daily, weekly, or monthly) basis? (3) On a scale from 1 (not at all collaborative) to 10 (the most collaborative), how would you rate the level of collaboration between your agency and the agencies you listed? (4) Are there collective efforts or common goals among your agency and the other agencies you listed in Sarasota County toward improving any of the main issues facing youth? Interview questions then turned to focus more specifically on the MRT in Sarasota County, how it fits within the overall EBH system, and whether it could be leveraged to reduce unnecessary Baker Act initiations. Questions or prompts included: (1) Tell me what you know about the MRT in Sarasota County. (2) Does your agency interact with the MRT in Sarasota County, and if so, how would you describe this interaction? (3) What strategies, including the

MRT, do you think could help reduce the persistently rising rate of Baker Act initiations among youth in Sarasota County?

All interviews were conducted via the online meeting platforms Microsoft Teams or Zoom, digitally recorded, and transcribed by an audio-to-text automated transcription service. The principal investigator reviewed all transcripts to ensure accuracy. Preliminary inductive analysis identified emergent themes from the transcripts, then coding was performed using MAXQDA Version 2020 (VERBI GmbH, 1989-2020) following a codebook developed based on the research questions, Collective Impact Model, focus group guide, and emergent themes (see Table 5). A second analyst independently coded five of the 16 transcripts. The kappa statistic between coders was .71 (95% confidence interval: .67-.78) indicating substantial inter-coder agreement. The agency types and total length of experience were recorded by the primary investigator based on self-report by the interviewees. This study was submitted to the University of South Florida's Institutional Review Board (IRB) and determined to be exempt from IRB review.

Results

Interviews were conducted with 16 participants who each work in a different professional role in 12 EBH system agencies in Sarasota County, including staff, administrative, and executive levels of law enforcement, juvenile justice, behavioral and medical health, non-profit and grassroots organizations, policy, and child welfare. Participant characteristics are described in Table 6. Most participants were female (68.8%), and among participants with college degrees, more participants held graduate-level degrees (43.7%) compared to associate or bachelor's degrees (18.8%). While the largest proportion of participants had over 20 years of experience in

the field (43.7%), when specifically accounting for how long each participant was in their current role within their agency, most participants had one to five years of experience (68.8%).

Aim 1: Agency Representation

Agencies that participants identified as being in Sarasota County's EBH system are highlighted in Figure 1. When asked which agencies are representative of the EBH system in Sarasota County, all interview participants regardless of their current professional background noted FSOS, the county's largest mental health and substance use treatment facility, as the primary agency they interact with. This agency is the Licensed Baker Act and Marchman Act (involuntary commitment related to substance use) support groups for mental illness and substance use, and several inpatient housing options) for children, youth, and adults, in addition to being the current MRT agency. The only mental health treatment facility in the county that offers residential services to youth as well as the other Licensed Baker Act receiving facility in the county was mentioned second-most by participants as the EBH System agency with whom they collaborate frequently.

Aim 2: Strengths and Challenges of Agency Partnerships

Strengths noted by participants regarding their EBH agency partnerships included a high level of mutually reinforcing activities among EBH agencies, with all participants describing activities they partake in complement with other EBH agencies on a regular basis. Another strength was that participants shared a common agenda in terms of social or behavioral health issues faced by youth in the county, albeit each participant's EBH agency activities toward addressing issues facing youth were from a different angle depending on their agency type as well as the participant's professional role at the agency. A challenge noted by all participants regarding their EBH agency partnerships included a lack of preventative mental health services

available to youth in the county, with more of a reliance on acute care services when youth have already reached the point of crisis. There is also no presence of a backbone organization in the county.

Differential experiences in strengths and challenges of collaboration and communication were observed among participants depending on their professional level at their EBH agency as well as how long their professional tenure has been in Sarasota County. On one hand, all participants who held administrative or executive roles in their current EBH agency cited high levels of collaboration and communication between themselves and other EBH agencies. These participants had also worked in Sarasota County for over 20 years and cited their long tenure in the county as one of the reasons why their collaboration and communication with other EBH agencies was high. On the contrary, participants who either had not worked in Sarasota County for many years or participants who held ground-level, direct patient service type of positions, indicated a low level of collaboration and communication between themselves and other EBH agencies.

Common agenda. Common agenda based on Collective Impact includes a shared understanding of the problem. For the purpose of this study, participants were asked what they perceived as the primary social or behavioral health issues facing youth in Sarasota County as a way to gauge whether they have a shared understanding of the 'problem', e.g. what, if any, common social or behavioral health issues are precipitating crises among youth. Further assessed was whether participants held shared visions for addressing these issues. The majority of participants identified among youth they work with and anecdotally from their own child(ren) that youths' attachment to their electronic devices is a major issue. Particularly worrisome for these participants was that youth never turn their social media notifications off, even during the

evening and overnight hours, meaning youth have no separation from their digital life. As one behavioral health professional participant described:

> *"Social media has become a huge concern with people, especially kids and even some young adults now… If you post something on Facebook, you know, my daughters are going through this…they post something on Instagram or Facebook or wherever. And then they go back like 20 times in like an hour to see how many people liked it. Kids having phones at nighttime is always a bad idea."*

Given the interviews were conducted one year into an unprecedented COVID-19 pandemic, participants were asked whether they thought the societal changes (i.e., quarantine, mask mandates, and/or social isolation) caused by COVID-19 affected youth being on their phone more often to maintain the connections they were missing in person. Two participants did indicate they noticed more acute levels of depression and anxiety among youth, specifically due to the pandemic. As one policy consultant participant stated: "Just anecdotally, what I have heard from the providers and the school is just the level of anxiety and depression. And that 12 to 17 [year old] range is through the roof. The acuity is just higher than they've ever seen." This participant went on to describe how youth who might already be facing stressors of beginning middle school or high school, in addition to the heavy cloud of the pandemic and isolation, have exacerbated issues surrounding mental health.

The question of whether interview participants had a shared vision for addressing the common issues facing youth proved difficult to answer for the first two participants. Beginning at the third interview and beyond, the interviewer changed this question to instead ask: "In a perfect world, what would the EBH system look like to you in order to address the issues faced by youth in Sarasota County?" All participants' answers reflected a common theme of

prevention - surrounding youth with more support before they reach the point of crisis. While each interview participant had their own vision of what preventive services should look like, the common thread among participant responses was to reduce the social isolation and negative mental health consequences precipitated by dependency on the digital world by increasing parent and peer involvement in youths' lives.

Shared measurement. Shared measurement in the Collective Impact Model includes collecting data for performance management and shared accountability among agencies. Eight participants held professional positions that included data collection and sharing within their day-to-day activities. Data included police reports and Baker Act initiations from law enforcement and juvenile justice, monthly data reports for stroke, cardiac arrest, and traumas responded to by the fire department, child welfare, and patient-level data from outpatient behavioral health treatment and the MRT. Four of these eight participants discussed the difficulties they faced in sharing data with or requesting data from other agencies because each agency has their own unique data system. This was especially true for participants working directly with patients who needed to request records or share records with other agencies due to medical or Family Educational Rights and Privacy Act (FERPA) restrictions.

Participants explained that, to address concerns regarding shared measurement, aggregate data on law enforcement, child welfare, and Baker Act initiations are now disseminated at the county's Acute Care Task Force meetings. This reporting is intended to increase accountability and transparency of data among agencies in the EBH system, as anyone from the public can attend these meetings and provide input. One participant expressed how the Acute Care Task Force has improved data accountability in terms of bringing law enforcement to the table, because this professional group was historically disconnected from the Baker Act receiving

facilities. Being that law enforcement initiates the majority of Baker Acts in the county, it was imperative to have representatives from law enforcement and the receiving facilities at the same table to discuss challenges and opportunities based on the data they shared at the Acute Care Task Force meetings. Still, all eight interview participants with data-related tasks noted how a shared data system was needed in Sarasota County for better transparency, ability to treat patients effectively, and to "be on the same page" when it came to integrating or complementing their services with other agencies.

Mutually reinforcing activities. Mutually reinforcing activities in the Collective Impact Model refers to agencies taking differentiated approaches to address a shared problem while still being synchronized through a shared plan of action. All participants detailed a high level of mutually reinforcing activities between their own agency and other agencies in the EBH system. As one participant who works as a mental health/substance use provider stated: "We are only as good as our community partners. Because it takes all of us, it takes a village." This participant went on to describe several activities including partnering with schools across Sarasota County by integrating therapists in the school systems available to help students who need outpatient services. Yet another activity included contracting with peer support specialists who work in the emergency department at the local hospital to guide interested patients experiencing substance use disorders into treatment or recovery services offered at the participant's agency directly from the emergency department.

The law enforcement and juvenile justice participants provided several more examples of mutually reinforcing activities they perform on a regular basis. These activities primarily included the referrals to other EBH agencies that they provide to people who experience substance use disorders, including detoxification, family safety planning, and wraparound

services. As one participant aptly summarized, their job description as a policy coordinator is to identify people and agencies in the county who are working on similar issues, bring them to the same table, and facilitate their reinforcing activities toward a shared goal by looking at the data and coming up with mutually agreed upon solutions.

Continuous communication, trust, and collaboration. In the Collective Impact Model, continuous communication refers to the frequency and transparency of communication among agencies that may in turn build their level of trust with one another. All participants were asked to rank their communication and trust with other EBH agencies, but the conversation quickly turned to discussions about collaboration among the participant's agency and other EBH agencies. Therefore, an additional question to the interview guide was added by the study investigator, asking participants to rank their level of collaboration with other EBH agencies on a scale from 1 (not at all collaborative) to 10 (the most collaborative). Several participants provided different ranking of collaboration with other agencies depending on the agency, therefore the responses were coded and placed into Table 7.

Differential reporting on collaboration ratings based on whether the participant was in an administrative or executive role, versus a direct service provider, as well as professional tenure in Sarasota County was noticed by the study investigator over the course of interviews. One participant identified this differential collaboration experience as well, stating that law enforcement and administrative level staff tend to have an easier time with collaboration than case workers and staff who perform the ground-work or day-to-day operations. Cited as the reason was issue of understaffed and overworked ground-work staff, which led to burnout among the staff still left in the agency and high turnover rates. Of the seven responses of high levels of collaboration (i.e., rated a 9-10), all but one participant held an administrative or executive

position and had been working in the Sarasota County EBH system in various roles for more than fifteen years.

All participants who ranked collaboration as high also cited continuous, open communication as one of the reasons for such a high collaboration rating. One participant specifically cited the creation of the Acute Care Task Force as a precipitator for improved communication and collaboration among EBH agencies in the past 10 years, as the Task Force brings everyone together including direct service level staff, executives, and administrators from law enforcement, hospitals, treatment facilities, and the transportation system. Another law enforcement participant who worked in Sarasota County for 30 years relayed how they ranked collaboration with other EBH agencies high because they have the personal cell phone numbers of anyone they would need to contact on a regular basis, making communication instantaneous when a need to collaborate arises.

Two policy consultant participants who reported low collaboration among agencies in the system had long careers in the behavioral health field in other states but had only held positions in Sarasota County for less than three years. They both made note of the drastic differences between the collaboration and communication among EBH system agencies in other states compared to those in Sarasota County and in Florida in general. Specifically mentioned by both participants was the idea that simply showing up to Task Force meetings is considered collaboration among EBH system agencies, whereas collaboration in its true form is cross-systems provision of care with different agencies that has checks and balances in place to keep each other accountable.

"There seems to be a nuance in that at least in Florida, where agencies feel that continuum of care must exist within their agency, where I feel differently. I feel like the continuum of

care happens across the provider network. In fact, I believe that having different agencies that provide different services across and get genuine, help provide stock gaps that help monitor quality and improve performance because other agencies are then aware of the issues. But that requires a lot of oversight. And because Florida is funded at such a low per capita, I think it's like 49 to 51st, depending on who you're asking, agencies are not wanting to give up those dollars. So, there's not an incentive to work together. So, the collaboration is low. They'll show up to the meeting, but to collaborate with care, I think is actually very low."

Among the participants who ranked their trust with other EBH agencies in Sarasota County, their answers tended to coincide with their ranking of collaboration with other EBH agencies. Generally, the participants who rated collaboration among agencies as high also cited a high level of trust either between themselves personally or their agency and the other agencies they collaborate with. One policy consultant/child welfare participant who rated the level of collaboration as a 10 among agencies had worked in Sarasota County for over 20 years. This participant was asked if they felt their longevity in the County working with the agencies they identified as frequent collaborators influenced the level of trust between them and they agencies they collaborate with. The participant validated that, yes, the time spent in establishing the trust they had with other agencies played a large part in their high level of collaboration. Another law enforcement/juvenile justice participant who was with their current agency for 30 years shared this sentiment, stating that they are "well established" in the Sarasota County EBH system, having spent those years cultivating the high level of trust with other agencies that they have today.

Backbone organization. The Collective Impact Model refers to a backbone organization as separate organizations with staff and specific skills that serve as a backbone for the entire initiative. Sarasota County does not have a single backbone organization, as one policy consultant/child welfare professional participant who rated EBH agency collaboration as low stated: "One reason why there is no systemic collaboration is there is no central agency to figure out how to get all agencies into one room. There is a single point of responsibility, in a true system of care." Speaking to this point, participants mentioned the Acute Care Task Force and the Behavioral Health Consortium as being initiatives that bring the Sarasota County EBH system agencies together in a way that might be considered a pseudo-type of backbone organization in the absence of one central authority. The Acute Care Task Force was created as a way for first responders (i.e., law enforcement and EMS), the contracted transportation agency for involuntary initiations, licensed receiving facilities, and the Managing Entity to meet regularly to communicate about what is happening with the Baker Act and Marchman Act (substance use) initiation processes in the county. The Behavioral Health Consortium has broader participation of behavioral health stakeholders in Sarasota County, including non-profit organizations, grassroots initiatives, consultants, county commissioners, Department of Health, and other entities, that also meet on a regular basis to talk about a range of behavioral health topics affecting the county. While both the Task Force and Consortium have successfully brought behavioral health, law enforcement, medical, and other professionals to one table, there is no backbone organization that specifically focuses on supporting issues faced by youth in the county.

Aim 3: Mobile Crisis Response

All participants were asked whether they perceived the MRT as a resource that could be used to reduce unnecessary Baker Act initiations in Sarasota County. The general theme of answers to this question was there needs to be increased resources allocated to preventative behavioral health services rather than relying solely on the acute care system including the MRT. As one policy consultant participant stated: "In an ideal world, instead of relying on the Baker Act or Marchman Act, we would have a continuum of services that started with making sure that every child grew up in a loving and supportive and stable home situation. Prevention would be the top investment, in families and decent and affordable housing, healthcare and a minimum wage, because kids who grow up in those environments are way less likely to develop mental health and substance use problems later."

Another participant who works with a grassroots organization with youth in schools discussed how their work was to provide simple, preventative approaches to improving students' well-being by working in schools with high levels of Baker Act initiations during the school year. This participant stated they thought by the time the MRT needs to be called, "it's too late" and the focus should be on low cost, effective solutions to mitigating stressors faced by youth before they reach the point of crisis and receive a preventable Baker Act initiation. In the same vein of shifting financial incentives from acute care to preventative measures, a different policy participant stated they felt reducing unnecessary Baker Acts comes down to eliminating financial incentives for receiving facilities. This participant provided a specific example of their perception of there being a conflict of interest in having the central receiving facility also operating the MRT. In essence, this participant felt the MRT has no incentive to refer youth anywhere else other than internal acute care treatment within the receiving facility because it

generates revenue for the facility to receive a Baker Act initiation or be referred to various services offered in-house.

> *"And the other thing about mobile crisis response teams, or these MRTS. I perceive this as big misstep on the state's end, mostly on the managing entity is they put these teams as extensions of the receiving facility. My question has always been, if I can get paid to go visit [the receiving facility] on my MRT service, what's my incentive to not also have them visit my Baker Act center? Oh. And by the way, also run them through my inpatient unit. Oh. And then I'll run her through my outpatient services. I [receiving facility] have multiple service levels. I generate revenue. But, if I were actually not part of the Baker Act center, there would be an incentive for the mobile crisis response teams to actually stabilize in the community and avoid someone walking through that acute care continuum altogether. I think those are part of the reasons where I think there is an over utilization and overdependence based on financing based on incentivizing, based on programmatic integrations of things like MRTS with Baker Acts.*

Discussion

This study used semi-structured interviews with 16 different professionals in Sarasota County's EBH system to identify the agencies in Sarasota County's EBH system, gauge strengths and challenges of partnerships among this system's agencies by using the Collective Impact Model as a framework, and to assess whether the county's MRT might be leveraged to reduce unnecessary Baker Act initiations. The primary agencies in Sarasota County's EBH system are law enforcement, EMS, and the county's two publicly funded receiving facilities for involuntary mental health examinations. Strengths of EBH agency partnerships cited by participants included a high level of shared perceptions of the issues facing youth and mutually

reinforcing activities among EBH agencies. Challenges of partnerships included a lack of a backbone organization and the absence of a shared data management system. Differentiated responses were observed among participants' rank of collaboration with other EBH agencies, with administrative and executive participants generally rating collaboration as high whereas ground-level, direct service provider participants generally rating collaboration as low. Greater diversity of preventative and routine mental health care services was cited by all participants as a better pathway to reducing unnecessary Baker Acts in the county rather than relying solely on the MRT for this purpose.

The strengths and challenges of inter-agency partnerships and the influence these partnerships or lack thereof have on youth receiving adequate behavioral health care are cited elsewhere in the literature (Chuang & Wells, 2010; Franke, Terry, Collier, & Greenlaw, 2020) Particularly noteworthy is the current study's finding of challenges in sharing data among agencies, because this challenge has been found in other research to reduce the likelihood of youth accessing the care they need, especially when involved in the child welfare or juvenile justice systems (Chuang & Wells, 2010). One interview participant representing child welfare discussed at length how challenging it was in Sarasota County to share data with other agencies in child welfare cases due to staff at the other agencies being unaware of what information they can or cannot share due to HIPAA and FERPA laws. By the time case managers receive the information, they are already behind and missed windows of opportunity to get the parent(s) and/or youth into appropriate services. Research supports this participant's concern that lack of data transparency impedes access to care, as the open sharing of administrative data has been shown to significantly improve the odds that youth involved in the child welfare and/or juvenile justice systems receive necessary behavioral health treatment (Chuang & Wells, 2010).

In addition to the challenge of data sharing was the low level of collaboration perceived by some participants. Specifically, two participants emphasized how the EBH system in Sarasota County needs to shift from focusing on the deeper end, acute level of care (i.e., central receiving facilities) to more preventative care strategies to reduce the likelihood of youth reaching the point of crisis. This notion is aligned with current literature examining how to apply the Public Health Model in implementing programs and policies focused on improving youth behavioral health (Herrenkohl, 2019). This Model when applied to behavioral health leverages cross-systems partnerships and collaboration to reduce environmental risks for poor mental health among youth like childhood trauma and to increase protective factors like resiliency at the individual, family, educational, and societal levels (Herrenkohl, Higgins, Merrick, & Lamb, 2015). Cited challenges with applying the Public Health Model to behavioral health are precisely what was discussed during the interviews, including a shortage of staffing and resources for more diversified behavioral health services due to the inadequate amount of funding devoted to these services.

In addition to the challenges surrounding collaboration and funding for more diversified, prevention-focused behavioral health services in Sarasota County was the perception of interview participants that the MRT has no incentive to reduce unnecessary Baker Act initiations. The county's central receiving facility for Baker Act initiations is the same agency that operates the MRT, making it financially beneficial for the MRT to continue referring youth to services offered in-house at the central receiving facility rather than diverting youth elsewhere. When considering the Public Health Model, inadequate funding and the concentration of this minimal funding to acute care services are cited in the literature as barriers to using this Model for implementing preventative programs and policies on improving youth behavioral health

(Herrenkohl, 2019). As one participant discussed, mental illness and substance use are symptoms of the same thing: trauma. Applying the Public Health Model to this participant's ideas for ensuring children grow up in a safe environment free of substance use, domestic violence, and other causes of Adverse Childhood Experiences (ACEs), to reduce unnecessary Baker Act initiations would require a shift of prioritizing acute care measures like the MRT to more environmental supports like affordable housing, higher wages, and expansion of social services (Herrenkohl, 2019).

Implications

One of the implications of this study is that staff at the administrative levels versus staff at the direct service to patient-level are experiencing different realities in terms of interagency collaboration and communication. Identifying this gap in experiences may be the first step to alleviating the barriers to collaboration and communication faced by staff at the service level, which may lead to greater trust between service providers and other agencies leading to better service provision to patients who are often youth in the EBH system. In addition to greater collaboration at the service provision staff level, information sharing with child welfare, especially from school systems and medical providers, must be more transparent to ensure child welfare professionals are equipped with adequate information to help their families and youth especially when behavioral health services are needed. Furthermore, by the time youth appear to reach needed behavioral health services in Sarasota County or are responded to by the MRT for assessment, they are already in a state of crisis. There is a reliance on one central receiving facility in the county to perform acute care, outpatient care, and MRT services. To reduce unnecessary Baker Act initiations among youth it will be imperative for Sarasota County to

diversify not only the acute treatment options and agencies that offer these options, but to shift the focus from acute care treatment to prevention of crises experienced by youth.

Limitations

Limitations of this study should be recognized. The participants who consented to interviews for this study heavily represented administrative level positions within their current agency. As identified in the results, administrative staff had different experiences and inter-agency relationships compared to the direct service level staff included in this study, limiting the generalizability of the findings depending on what type of behavioral health professional is being referred to. This study did not include a representative from every agency within Sarasota County's EBH system for various reasons including unwillingness to participate, non-response to the recruitment announcement, and scheduling conflicts with otherwise interested participants. The results, therefore, are not representative of the experience of every agency nor every professional who works in Sarasota County's EBH system. Among those who did participate, response bias may have occurred to protect their professional reputation or position in fear of being identified, although anonymity was promised by the study investigator. Finally, participation bias may have occurred, meaning participants willing to take part in this study may systematically differ from participants who were unwilling to participate in this study.

Conclusions

While MRTs pose an opportunity to divert youth already in crisis from involuntary psychiatric examinations like the Baker Act to lower levels of care, it may be crucial for MRT host agencies to be separated from the area's acute care treatment facility or receive greater incentives for referring youth to a diverse array of mental health services in the community. The Public Health Model may be an option for not only Sarasota County, but for other U.S.

communities, to consider by implementing programs and policies for youth to promote their foundational well-being. And in turn, reduce the rate of youth reaching the point of crisis from the beginning. This is especially true for communities like Sarasota County with leaders who have strong partnerships with other EBH system agencies, as implementing a Public Health Model focus on preventative youth behavioral health programs may not prove as daunting as in communities without such partnerships.

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Table 5

Analytic Framework for Study Aims

Construct
Aim 1: Identify EBH Agencies
Aim 2: Strengths and Challenges of Partnerships
Collective Impact Model
Common Agenda (Youth Issues)
Backbone Organization
Shared Measurement System
Continuous Communication
Mutually Reinforcing Activities
Aim 3: MRT Leveraged to Reduce Baker Act Initiations

Table 6

Frequency of Participant Demographics

Demographics	N=16 (%)
Sex	
Male	5 (31.2)
Female	11 (68.8)
Education	
College degree (associates/bachelors)	3 (18.8)
Graduate degree (masters/doctoral)	7 (43.7)
Unknown	6 (37.5)
Number of years in current position	
1-5 years	11 (68.8)
6-10 years	3 (18.8)
11-15 years	1 (6.2)
16-20 years	0 (0.0)
>20 years	1 (6.2)
Number of years in emergency behavioral health	
1-5 years	1 (6.2)
5-10 years	2 (12.5)
10-15 years	3 (18.8)
15-20 years	3 (18.8)
>20 years	7 (43.7)
Professional background	
Behavioral or medical health	6 (37.5)
Law enforcement/juvenile justice	4 (25)
Policy/ child welfare	4 (25)
Nonprofit/grassroots organizations	2 (12.5)

Figure 2

List of EBH System Agencies Identified by Participants, Categorized by Agency Type

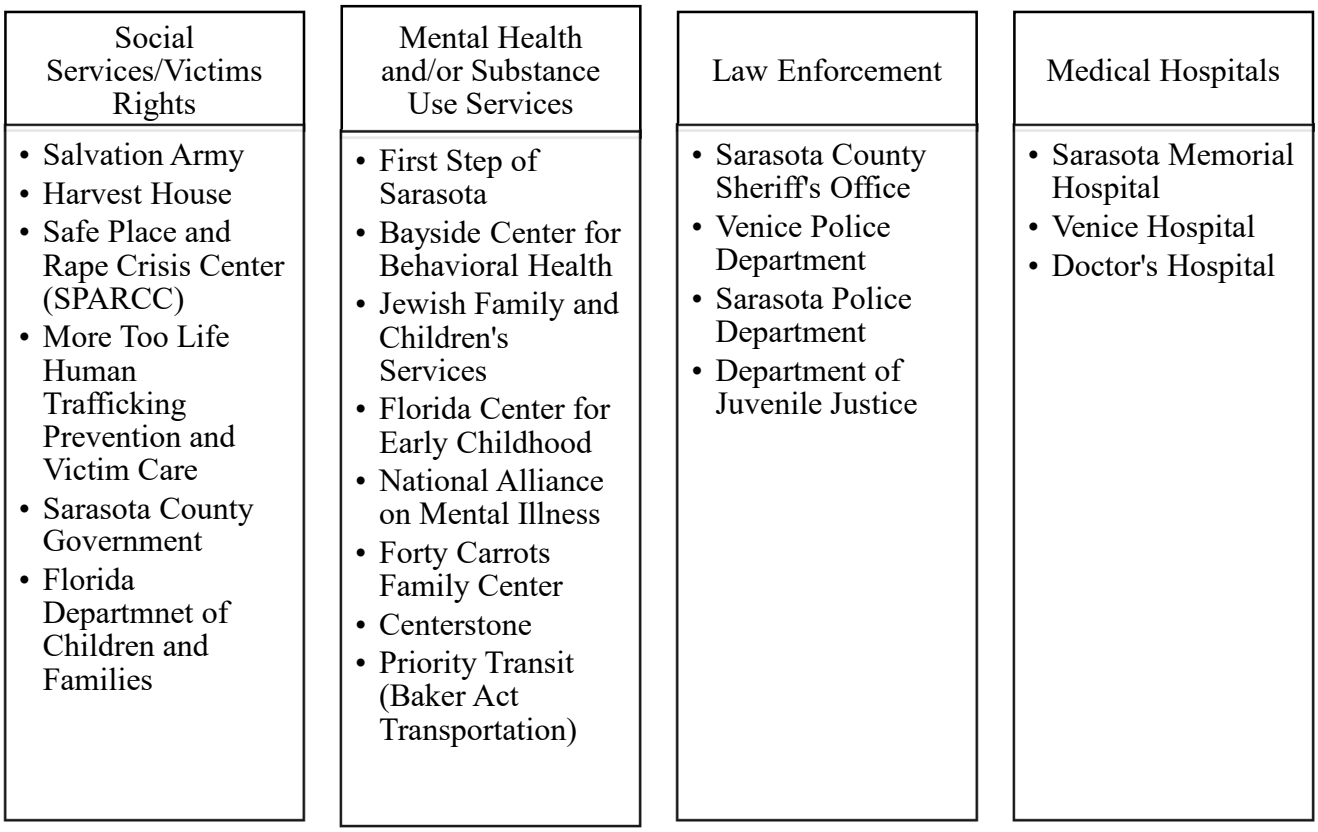
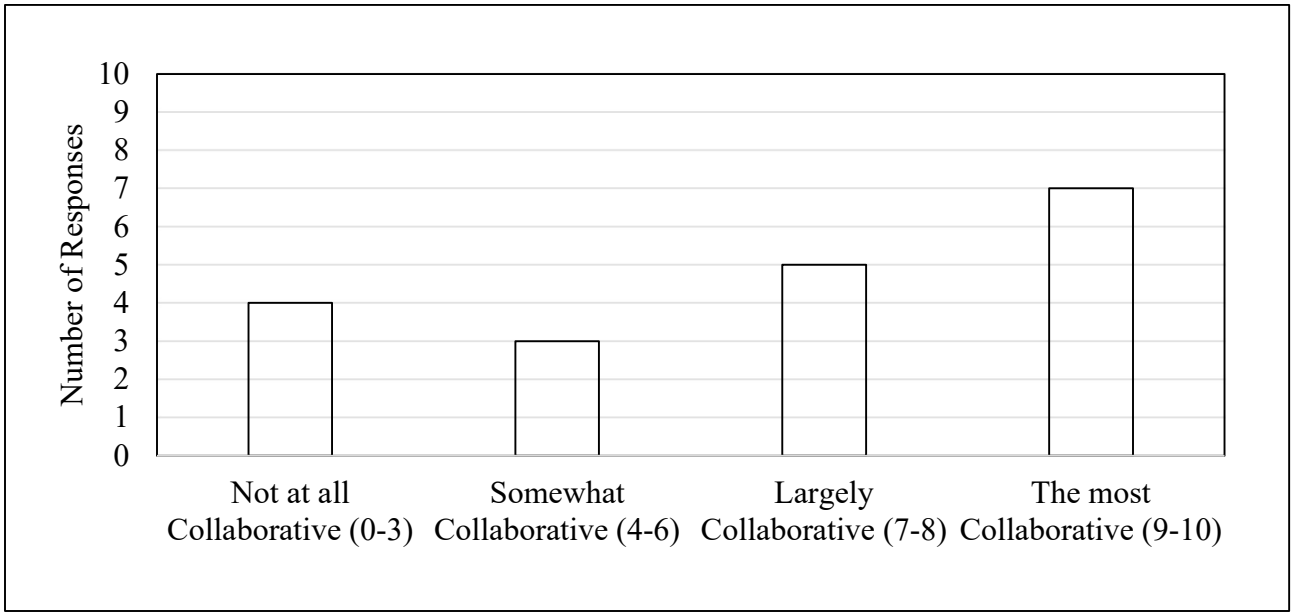


Table 7

Participant Rank of Collaboration per Number of Responses



CHAPTER FIVE:

DISCUSSION

Conclusions And Implications

In the U.S. and in Florida specifically, there is an unmet need for mental health care treatment among younger populations on top of a lack of preventative services available to mitigate behavioral crises from happening to begin with. In Florida, this reality has led to such a rise in Baker Act initiations over the past 15 years among youth that a legislative Task Force was created in 2017 to examine why the Baker Act initiation rate was so high among this population and what could be done about it (DCF, 2018). One of the recommendations made by the 2017 Task Force was to create a statewide network of Mobile Response Teams (MRTs) as they found Baker Act initiations to be lower in areas with MRTs compared to areas without MRTs (Department of Children and Families [DCF], 2018). Despite the additional funding provided to counties to either create new MRTs or use the funds towards MRTs already in operation, a lack of strategic planning has led to each county having a different target population, size and capacity, operating hours, and funding sources for their mobile crisis services (DCF, 2018).

As the research in this dissertation found, having heterogenous MRT programs can pose difficulty in comparing one program to another to effectively evaluate outcomes. Chapter one covered a review of the literature that systematically coalesced what research currently says about outcomes of U.S.-based MRTs that do not operate in tandem with law enforcement. Starting with the fact that only seven empirical studies on MRT outcomes exist in the literature from the inception of documented mobile crisis response in the U.S. in the 1960s, the sheer lack

information on mobile crisis response makes it difficult to pose implications for future directions of MRT research or practice. when the primary implication is that more research is critical to begin to understand what would be needed to improve MRT practice. Most frustrating for the researcher was that certain websites and even the 2018 Florida DCF Framework for MRTs cited extensively throughout this dissertation includes "model practice" examples of other MRTs across the country. However, no references are provided on where to locate the original studies on these model practice MRTs to better understand what program outcomes are being celebrated.

Not only does the lack of referencing other MRT program outcomes and the minimal literature available diminish the ability to make research implications, but it also creates difficulty for comparing one mobile crisis program to another. Chapter two of this dissertation included an analysis of de-identified data from the Sarasota County MRT to assess participant characteristics among those who received involuntary psychiatric evaluations and whether certain MRT program factors were associated with the outcomes of involuntary psychiatric evaluation or referral to outpatient treatment. Sarasota County has never performed such an analysis on the outcomes of their MRT program, making this information valuable to their community and MRT host agency. However, given the absence of comparable outcome literature or references to model practice mobile crisis programs in other areas of the U.S., this outcome analysis of Sarasota County's MRT is just that. It is an analysis of one MRT program without much context as to whether it performs better or worse than other MRTs in comparable U.S. communities.

In addition to the minimal outcomes-based literature on MRT programs is the lack of qualitative evidence surrounding the actual experiences that people have with MRTs. This limited understanding is important because the DCF Framework might outline the ideal manner

in which MRTs are supposed to operate (e.g., 24/7, respond face-to-face within 60 minutes). However, due to the differences in funding, capacity of the MRT host agency, target populations, and size of each MRT, the reality of how the program is operating on the ground level may be different than the utopian idea of how each MRT program should be. It was for this reason that dissertation chapter three was written.

In chapter three, a qualitative analysis of 16 participant interviews consisting of administrators, executives, and staff from 12 different Sarasota County agencies in the emergency behavioral health system took place. The interview questions were divided into three sections, starting with information about the participant's professional role in the county's emergency behavioral health system and which other agencies they worked with on a regular basis within this system. This was done to assess which other agencies are involved in the emergency behavioral health system even if tangentially, including social services and other wraparound agencies. The importance of garnering an idea of the agencies most involved in the emergency behavioral health system was to understand the network of which agencies interacted the most with others, the direction of these relationships, as well as the strength of the relationships.

The second section of participant interviews assessed the strengths and partnerships among agencies in the emergency behavioral health system. Questions for this section were grounded in the Collective Impact Model which includes the five components of a common agenda, shared measurement, backbone organization, continuous communication, and mutually reinforcing activities (Collective Impact Forum, 2014). The idea is when agencies are working collectively toward a shared goal rather than working in separate silos toward the same goal, much greater impact can be made. This is where some of the differences in experiences with

partnerships came to surface, depending on whether the participant held an administrative or executive role in the emergency behavioral health system or a direct patient service type of staff role in the system.

While positive that administrators and executives seem to have open communication and warm relationships with one another, the same respect must be extended to the staff providing direct patient care. This is because, we already know that youth are more often than not accessing mental health care services for the first time when they are already in a state of crisis. If youth arrive to the treatment facility and their first experience with a mental health provider is one of a direct patient care staff member who is experiencing burnout due to a lack of collaborative support to fulfill their job duties, this could in turn give youth a negative perception of mental health care treatment. This negative perception could lead the youth to not follow-up with the referrals provided to them upon discharge, or even worse, lose trust in seeking care from another mental health care provider again (Knaak, Mantler, & Szeto, 2017). While more information is needed on the particular barriers to collaboration and communication among staff level professionals in Sarasota County's emergency behavioral health system, an implication here is that administrators and executives must do more to support their direct service level staff.

Finally, the third section of chapter three was to garner an idea of how the Sarasota County MRT fits within this overall emergency behavioral health system and partnerships to assess whether the program could be leveraged to reduce unnecessary Baker Act initiations. Sarasota County is no different than the rest of Florida in that Baker Act initiations among youth under the age of 18 experience increased Baker Act initiations every year. To begin with, each participant was asked about their involvement with the county's MRT. Some participants had minimal to no contact with the MRT although they were aware of its existence, whereas other

participants interacted with the MRT on a daily basis. Even still, participants who used the MRT on a regular basis tended not to think it would be a viable resource to reduce unnecessary Baker Acts due to challenges they experienced with reaching the MRT program staff in a timely manner, not receiving responses from the MRT program staff after leaving a voicemail, and not wanting to halt an active crisis to call the MRT hotline and wait for their arrival.

The discussion surrounding the challenges with relying on the MRT to reduce unnecessary Baker Acts quickly turned to the need for more preventative services offered to youth in Sarasota County. As Florida tends to rank last or next-to-last in mental health spending per capita every year, this sentiment from interview participants in the unavailability of prevention-focused programs came as no surprise. There is simply no funding for these types of services in a state system that disproportionately funnels the minimal mental health care funding available to acute care services. A possibility to address this issue came to light recently as the Sarasota County Commission recently approved a proposal to use money from the county's budget toward a mental health special district (Snabes, 2021). This special district would allow for increased funding toward mental health services, including preventative and youth-focused services, as a previously described 2019 mental health scan by University of South Florida researchers revealed an absence of these services in Sarasota County.

In conclusion, although the MRT might not be *the answer* to reducing unnecessary Baker Act initiations in Sarasota County, there are opportunities for the MRT to play a role in this endeavor. Based on participant answers, it appears the largest barrier to using the MRT to its full capacity is that the use of it requires stopping in the middle of an ongoing crisis to call a designated hotline and wait for its arrival. Especially in Florida where law enforcement are often the first responders to mental health crises and are the highest percent of Baker Act initiators

every year, it makes sense for the MRT to work in tandem with law enforcement rather than being a separate entity. The MRT staff might consider having an office space within the law enforcement headquarters so that when a crisis call is made and law enforcement are dispatched, the MRT staff can go along to focus on de-escalating the mental health crisis while law enforcement focus on potential criminal conduct. In this way, both sets of professionals are operating within their bounds of expertise and perhaps unnecessary Baker Act initiations would decrease given mental health professionals are already at the scene assessing the crisis in real time.

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APPENDICES

Appendix A: Supplemental Tables

Table A1

List and Frequencies of Boolean Search Terms

Boolean Search Term	Boolean Search Term Alone	Boolean Search Term AND Youth	Boolean Search Term AND Mental Health	Total
Mobile Response Team				
PsycINFO	7	2	2	11
PubMed	283	0	1	284
Medline	381	3	32	416
Mobile Crisis Team				
PsycINFO	33	3	29	65
PubMed	104	21	56	181
Medline	134	3	67	204
Mobile Crisis Response Team				
PsycINFO	2	0	2	4
PubMed	22	0	1	23
Medline	33	1	16	50
Total	999	33	206	1,238