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International Journal of Law and Psychiatry



A descriptive evaluation of the Seattle Police Department's crisis response team officer/mental health professional partnership pilot program **,*****



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ARTICLE INFO

Available online 24 August 2015

Keywords:
Crisis intervention
Law enforcement
Behavioral crisis
Mentally ill
Evaluation
Seattle Police Department

ABSTRACT

The Seattle Police Department (SPD) recently enhanced their response to individuals in behavioral crisis through a pilot Crisis Response Team (CRT) consisting of dedicated Crisis Intervention Team (CIT) officers (OFC) paired with a Mental Health Professional (MHP). This study presents results of an incident-based descriptive evaluation of the SPD's CRT pilot program, implemented from 2010 to 2012. The purpose of the evaluation was to determine the value-added by the MHP in cases involving individuals in behavioral crisis as well as the effectiveness of the CRT program with regard to resolution time, repeat contacts, and referral to services. Data were collected from SPD general offense and supplemental reports for a 12-month segment of the program. Key variables included incident location, case clearance, repeat contacts, linkages to services, and case disposition. Results of analyses of general offense and supplemental reports are presented and implications for future development of the OFC/MHP partnership are discussed.

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1. Introduction

The Seattle Police Department's (SPD) Crisis Response Unit (CRU)¹ was implemented in 1998 to implement the Crisis Intervention Team (CIT) model to improve the police response to individuals in behavioral crisis. The Seattle Police Department's Crisis Intervention Policy² defines individuals in behavioral crisis as people exhibiting signs of mental illness, as well as people suffering from substance abuse and personal crises. The CRU is comprised of CIT trained officers responsible for follow-up involving individuals in behavioral crisis. The CRU officers are part of a larger cadre of CIT-trained officers within the Seattle Police force who

[★] An earlier version of this paper was presented at the *International Academy of Law and Mental Health Congress*, Amsterdam, Netherlands, July 18, 2013.

^{☆☆} This research was supported by a 2009 Bureau of Justice Assistance Grant. We would like to thank the City of Seattle, Seattle Police Foundation, and Seattle Police Department for support for this study and Seattle Police personnel who were involved in different stages of the research process. Thank you to Sergeant Lisbeth Eddy (retired) for her appreciation for academic-practitioner research and for her tireless efforts in implementing the CIT model in the Seattle Police Department, training countless law enforcement officers, and developing and transforming the CRU into what it is today, to CRU Sergeant Joe Fountain for assistance with the details of the evaluation process, to CRT officer (now Sergeant and CIT Coordinator) Dan Nelson and MHP Justin Dawson for allowing us the window into the critical front-line work they do and for co-presenting findings and assisting with details of this article, to Officer Scott Enright for assistance in learning about the CRU, to SPD Lieutenant Martin Rivera and SPD researcher Jennifer Albright for assistance with final details for the article, to former SPD Chiefs Gil Kerlikowske, John Diaz (retired), and Assistant Chief Dick Reed, former SPD strategic advisor Mimi Walsh, President and CEO of the Seattle Police Foundation Renee Hopkins, and SPD Chief Kathleen O'Toole for support for CIT and SPD-academic collaboration, Diane Pilon and Sandy Kraus for assistance with administrative details of the project, and special thanks to Elizabeth Neidhart for her earlier research on the SPD CRU and her assistance with background research for the project.

^{*} Results from this paper were presented at the *International Academy of Law and Mental Health Congress*, Amsterdam, Netherlands, July 18, 2013.

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¹ During the study period, the CRU was referred to as the "Crisis Intervention Team" (CIT) Unit. The SPD CIT Unit was renamed the "Crisis Response Unit" (CRU) and the OFC/MHP Team is referred to as the "Crisis Response Team" (CRT) in the new SPD CIT Policy developed in 2015. To avoid confusion and for continuity in future research, the terms used in the current SPD CIT policy will be used in this paper.

² The Seattle Police established a Crisis Intervention Committee in 2013 to make improvements to the implementation of the CIT model in Seattle Police Department. A new CIT Policy was developed and is expected to be approved and effective in 2015. For an earlier draft of the policy, see: http://static1.squarespace.com/static/5425b9f0e4b0d66352331e0e/t/542ae365e4b0957885ec68f5/1412096869192/Crisis_Intervention_Policy_Final_Draft_12-16-13.pdf.

have advanced training in dealing with individuals in behavioral crisis. At the time of this study, 365 (28%) of the department's 1296 officers were CIT-trained officers. The CRU is operated by a sergeant and two officers assigned full-time to crisis intervention who follow up on cases, working with individuals in behavioral crisis to help them stay connected with social service agencies, and serving as a liaison between family members and the Seattle Mental Health Court.

In 2010 the SPD launched a 24-month Crisis Response Team (CRT) pilot program comprised of members of the CRU and a licensed mental health professionals (MHP) trained in crisis assessment, intervention, and resource referral for individuals in behavioral crisis. The CRT pilot program was a long awaited enhancement to the SPD implementation of CIT model that brought the MHP staff-member to the CRU to partner with CIT-trained law enforcement officers. The purpose of the CRT pilot was to assist field officers when they encounter an individual experiencing behavioral crisis. The goal of the pilot program was to improve police response in situations involving mentally ill and chemically dependent individuals through specialized mental health provider response in the field. The MHP takes direction from the CRU sergeant and works in collaboration with a sworn officer/partner (OFC) to exercise their professional discretion in day-to-day contacts with streetlevel mental health and chemical dependency problems. The MHP role includes assessment and referral of individuals to community based resources with the idea that a mental health professional will be able to better meet the housing, mental health, substance abuse and other needs of individuals in behavioral crisis. Ultimately, the objective of the addition of the MHP to the CRU is to help avoid the use of jail or hospital emergency rooms when appropriate.

While there are many law enforcement units based on the CIT model across the country, few jurisdictions have implemented programs partnering law enforcement with mental health providers where the MHP holds a full-time position and is assigned cases. The current state of knowledge about implementation of the CIT model in law enforcement and partnerships with mental health professionals is primarily anecdotal. Evaluations of CIT programs to date have not included control groups with rigorous experimental methods because CIT and other such criminal justice interventions are implemented in real-world settings and as such have been very difficult to study (Neidhart, 2013).

This study presents evaluation results from a 12-month implementation period of the CRT pilot program (January 2011–December 2011) describing the pilot and contributions of this enhancement to implementation of the CIT model in law enforcement interactions with individuals in behavioral crisis. While this evaluation is incident-based and descriptive in nature, the results provide valuable information to assist agencies in determining the benefits of a CRT program, and in making resource decisions about law enforcement/mental health partnerships.

In the next section, we provide a brief review of literature focused on the implementation of the CIT model in law enforcement. We then provide a detailed background on the implementation of the CIT model in Seattle, the development of the CRU, and the transition to the CRT pilot program. Following this, we describe our methods and results, and then discuss the findings and their implications for future programs.

2. Literature review

A variety of innovative models have arisen as communities search for more effective ways to respond to police calls involving people with severe mental health and/or chronic substance abuse issues (Compton, Bahora, Watson, & Oliva, 2008; Deane, Steadman, Borum, Veysey, & Morrissey, 1999; Reuland, Draper, & Norton, 2010). Some have focused primarily on the law enforcement side with formal mental-health training for police officers such as the use of CIT programs. Others have relied on those in the mental health community to be available to respond and assist in these police calls in the form of Mobile Mental Health Crisis Teams. Another model that has evolved is the pairing of a law enforcement officer with a MHP to respond to these crisis situations and/or provide preventative intervention and follow-up, utilizing the professional skills from both sides to best resolve the incident. Sometimes a combination of these models is used within one community, such as those communities having CIT trained police officers as well as a dedicated team of an officer paired with a mental health worker to respond to certain high-crisis situations. All have at their core a common goal of obtaining the needed treatment for these individuals, reducing the frequency of their arrests and incarcerations, and ultimately reducing the frequency of their contacts with law enforcement over the long term.4

Many jurisdictions describe their programs as pairing law enforcement officers with mental health workers (Criminal Justice/Mental Health Consensus Project, 2011). However, how these collaborative teams are used and their actual functions may vary, with different communities using these pairings in different capacities. Some of these law enforcement/mental health teams (LE/MH) are deployed to active incident scenes involving individuals identified as having mental health issues, such as the programs in Los Angeles County, California and Vancouver B.C.'s "Car-87" (Adelman, 2003; Lamb, Shaner, Elliott, DeCuir, & Foltz, 1995). Here the MHP attempts to resolve the situation on the scene, and if resolution is not possible, the officer has the authority to transport and admit the individual for hospitalization. Vancouver's "Car-87" model is widely seen as a success and has been replicated in many communities throughout Canada (Adelman, 2003).

Other communities take a different approach with their teams focusing more on follow-up and preventive intervention. Many of the individuals in behavioral crisis who come into contact with police are "frequent-fliers" - people who are well-known to both the law enforcement and the mental health communities. These individuals exhibit persistent, though mostly misdemeanor offense behaviors that consume a disproportionate amount of police response time over the long term (Reuland, Schwarzfeld, & Draper, 2009). These individuals have been referred to in the literature as "mental health frequent presenters" (MHFP) who are mentally ill or disordered, have multiple needs, and are frequent presenters in emergency services (Andrews & Baldry, 2013). There is increasing and widespread evidence nationally and internationally attesting to the overrepresentation of individuals with complex needs and cognitive disability and disadvantage in the criminal justice system (Baldry & Douse, 2013). Some groups such as Akron, OH's CIT Outreach team and Pasadena, CA's Homeless Outreach Psychiatric Evaluation (H.O.P.E.) team have found that focusing their efforts on these "high-utilizers" before another incident occurs, by periodically checking in on them and their case-workers, doing "knock and talks" and making sure they are getting the services they need, can result in a reduction in law enforcement incident calls regarding these individuals (Criminal Justice/Mental Health Consensus Project, 2011; Reuland et al., 2010).

Abbotsford, BC, a community where 1 in 10 police calls involve individuals with mental health issues, considered their LE/MH program a success after one year and was considering program expansion. Case examples from the Abbotsford LE/MH program show that intervention and follow-up on an individual in behavioral crisis who had in the past generated an average of 100 calls to police, not only had substantially reduced the calls to the police about this individual but also had

³ Currently 411 of 1130 officers (36%) have completed the 40-hour CIT training. This is expected to increase as the Seattle Police have increased the number of CIT-trained officers as an outcome of the new Crisis Intervention Policy developed.

⁴ See Compton et al. (2008) for a comprehensive review of CIT Programs.

enabled the individual to better recognize when his behavior was sliding and empowered him to reach out and seek help (Hopes, 2011).

In Pawtucket, Rhode Island, the police department teamed with Gateway Healthcare Inc., the largest non-profit behavioral healthcare organization in Rhode Island, to more effectively respond to incidents involving mentally ill individuals after criticism and negative press about the Pawtucket Police Department's handling of some incidents involving emotionally disturbed individuals. The Pawtucket CIT program now stands as a successful model for other police departments. The Pawtucket model pairs a clinician from Gateway with a Pawtucket officer to respond to incidents involving emotionally disturbed or suicidal individuals with the idea that this team approach (pairing law enforcement and mental health professional) is better suited to respond to incidents that can be made more difficult with a traditional law enforcement response. The Pawtucket CIT has been viewed as a success based on less traditional outcome variables, such as establishment of trust and information sharing between law enforcement and mental health professionals, and recognition that some incidents may be more effectively handled in the long run with a more nuanced response. This response may initially take longer at the time of the incident, but will result in outcomes such as greater trust between the individual in behavioral crisis and law enforcement, reduction of anxiety for the individual in behavioral crisis and more appropriate referral to resources, as well as de-escalation of a potentially volatile event through active listening, understanding, and communication that reduces future law enforcement contacts (Kirwin, 2011).

In terms of success, many of the communities utilizing these LE/MH teams are currently collecting information related to incident outcomes and recidivism details that may ultimately provide the hard data needed to assess how effective these programs are on a larger scale. To date, there are relatively few analytical studies with most evidence of success at this point being primarily anecdotal. However, Lamb et al. (1995) in their study of the Los Angeles teams, found these teams to be effective in resolving crisis situations in the community and successful in diverting individuals with mental illness from incarceration. Evaluations of Houston's Crisis Intervention Response Team (CIRT) pilot program, which serves as an extension of the CIT program and pairs a CIT trained officer with a MHP who do both response and follow-up work, were reported to be 100% favorable, with the program being adopted permanently in 2009 and the number of responding teams available expanded (Houston, n.d.).

One acknowledged limitation of this type of program has been this issue of availability, with teams only having the capability to respond to one situation at a time and only within certain hours, a drawback similar to what was found regarding the use of mobile mental-health based crisis-response teams such as the one in Knoxville, Tennessee (Adelman, 2003; Steadman, Deane, Borum, & Morrissey, 2000). However, a statistical review of the Vancouver Island, B.C., Integrated Mobile Crisis Response Team (IMCRT), which pairs a plain-clothes officer with a MHP, found they were actually able to handle more than double the amount of high crisis calls in a similar time period as compared to situations utilizing standard patrol-officers, due to the integrated nature of services and no need to wait for coordination of services (Baess, 2005). Findings such as this may serve to offset some of the concerns over limited response capabilities.

From a long-term perspective, successful outcomes will be substantially impacted by the availability of resources and social services for these individuals within any given community (Wilson-Bates, 2008). In their two-year study, Vancouver, B.C.'s police department found that despite active intervention and referral many of their chronic offenders were back in circulation (Thompson, 2010). However, even if intervention and/or diversion occurs, without concurrent and adequate support housing programs, short and long-term institutional mental-health bed availability and sufficient mental health and substance abuse treatment programs, these same individuals are likely to resume and continue in their cycle and depletion of police resource time.

3. Background on the Seattle implementation of CIT model, the CRU, and CRT pilot

3.1. Crisis Response Unit (CRU)

The SPD CRU was formed in 1998, 10 years after the first CIT was implemented in Memphis, Tennessee in 1988.⁵ Modeled after the Memphis CIT program, SPD's CRU is a collaborative effort between the Seattle Police Department, Seattle-King County Department of Public Health, King County Department of Community and Human Services Mental Health Division, Washington Alliance for the Mentally Ill (WAMI), and Mothers for Police Accountability (Seattle Police Department, 2002). CRU personnel have completed 40-hour CIT training at the Washington State Criminal Justice Training Commission and advanced CIT training. The CRT provides CIT training and refresher courses for SPD CIT-trained officers to attend on a voluntary basis to supplement the 40-hour CIT training. The 40-hour CIT training includes subjects such as Mental Disorders, Geriatric Mental Disorders, Understanding Mental Illness, The Law and Mental Illness, Communication with Mentally Ill Individuals, and Intervention in High Risk Situations (Suicides), and other topics. Subjects are taught by local professionals who are experts in the specific subject matter (Seattle Police Department, 2000). The CRU is staffed with a Sergeant, and two dedicated CRU officers (OFC) and includes the OFC/MHP team which comprises the Crisis Response Team (CRT) (described in the next section).

In 2008, an exploratory study of the SPD CRU (Neidhart, 2008) was conducted to examine the extent to which incidents were handled by CIT-trained and non-CIT-trained officers, incident characteristics, and case disposition. The study examined all incidents from November 1, 2006, through October 31, 2007 (N = 2624). Results showed that incidents involving mental health issues during that time frame were handled by non-CIT officers more frequently than CIT-trained officers in a 3 to 2 ratio. The study also found that (1) the majority of CRU resource time was spent responding to incidents involving attempted suicides, suicide ideation, threats, and disturbances with most incidents resulting in hospitalization, (2) both CIT-trained and non-CIT-trained SPD officers made arrests in incidents involving individuals in behavioral crisis infrequently (5.8% of all incidents involving individuals in behavioral crisis),⁶ (3) CIT trained officers tended to direct individuals in behavioral crisis to treatment (hospitalization) rather than jail, and (4) that certain SPD precincts (North and West) had a higher CIT officer response rate.

Neidhart's (2008) study was the first attempt to empirically study the SPD CRU and the ways in which CIT model and training was being implemented in Seattle. One of the findings in the Neidhart (2008) study was that officers recurrently encounter some of the same individuals. Thus, a goal of the CRT was to use a mental health professional in cases that do not require traditional law enforcement resources such as these sorts of recurrent contacts.

3.2. Crisis Response Team (CRT)

The CRT was formed in 2010 with the award of a federal grant as an enhanced version of the CRU with the inclusion of a full-time MHP. The

⁵ Like the Memphis CTT which was formed in response to public outcry in the aftermath of the shooting of a young African American male with a history of mental illness (Vickers, 2000), the SPD CRU was motivated at least partially in response to two incidents involving law enforcement's interactions with individuals in behavioral crisis — a 1996 stand-off between an elderly mentally ill man who had shot a utility worker that ended with the man being killed by police gunfire and a 1997 case involving a man with a samurai sword who disrupted city traffic for 11 h before the police were able to bring the incident to a peaceful resolution using non-lethal tactics. The SPD CIT-training program and CRU were launched the following year in response to recognition that officers could benefit from specialized training in dealing with individuals in behavioral crisis (Neidhart, 2008).

⁶ This arrest rate is lower than rates reported in studies of traditional law enforcement officer interactions with mentally ill individuals (Teplin, 2000) and consistent with recommendations in the research community (Laberge & Morin, 1996; Lamb et al., 2004; Lurigio, 2000; Perez et al., 2003; Thompson et al., 2003).

grant was awarded to contract a mental health professional to work directly with a dedicated CIT officer assigned to the CRU. The Downtown Emergency Services Center (DESC) was selected to fulfill the contract for a 1.25 FTE for the 24-month project period. Full- and part-time MHPs were selected based on experience in crisis intervention, outreach, and chemical addiction and dual diagnosis. The dedicated CIT officers were selected from all patrol officers based on their reputation for problem-solving, strong work ethic, teaching skills, and ability to work with diverse populations. The CRT is comprised of one sergeant, two dedicated CIT officers, 1 full-time MHP, and 1 part-time MHP. Together the CRT Staff developed a triage process for cases and a continuum of intervention ranging from a phone call and records check to arrest and booking, and including outreach, assessment, referral to services, engagement with family and case managers, mental health court intake without booking, and other options (Sergeant Joe Fountain, personal communication, October, 2011). The CRT is also tasked with presenting information and training to local community groups and agencies known to house and provide services to individuals in behavioral crisis. The CRT represents a unique partnership between law enforcement and mental health agencies with the mutual benefit of reciprocal training between law enforcement officers and mental health professionals. This reciprocal relationship has the effect of creating a culture of true collaboration between law enforcement and mental health agencies to provide services to individuals in behavioral crisis that take into consideration the complexity of the behavioral events associated with mental illness, substance abuse, and personal crises.

The specific function of the MHP in the CRT has evolved during the course of the pilot program. The role of the MHP is to handle cases involving mentally ill individuals where no probable cause for a crime exists as well as high volume "nuisance" cases. Additionally, the role of the MHP is to work with the CRU officers (OFC) to triage cases to the CRT for effective, appropriate, and meaningful case disposition. Over the course of the CRT pilot, the MHP has been increasingly involved in fieldwork including "knock and talks," where CRT OFC/MHP team check in on individuals in behavioral crisis for inquiry and follow-up, as well as call-out to incidents involving behavioral crisis events.

4. Method

A descriptive process evaluation of the SPD's CRT pilot program was conducted to determine the degree to which the pilot program was successful in addressing its intended goals. The overall objective of the CRT pilot program is to provide a more efficient and effective response to incidents involving individuals in behavioral crisis, with the hope that doing so will:

- Reduce the number of mentally ill and chemically dependent dispositions to jail and hospital emergency rooms.
- Reduce the number of people who recycle through jail, returning repeatedly as a result of mental illness or chemical dependency.
- Divert mentally ill and chemically dependent youth and adults from initial or further justice system involvement.

The specific goals of the CRT pilot program are to:

- Get individuals in behavioral crisis connected more quickly with appropriate services that can help them achieve stability, including housing and social services for those who are homeless, and treatment for those suffering from mental illness and/or drug abuse.
- Provide a linkage to crisis and commitment services for those individuals who may require involuntary hospitalization and achieve other

system cost savings through diversion from jail and costly hospital services and/or admissions.

The CRU officers and the full-time and part-time MHPs assigned to the CRT Pilot are not able to respond to every call involving mentally ill individuals. Calls are filtered through a triage process and the decision to involve the MHP depends on a number of factors, including the way in which the incident is initially reported to 911, the descriptive terms used by the 911 call taker and dispatcher to describe the individuals involved in the scene, and the decision of the precinct officers to call the CRT to the scene. Given these design features, it was determined that an impact evaluation measuring global outcome variables (such as citywide case dispositions or jail admissions) within an experimental or quasi-experimental framework was not feasible.

The evaluation sought to measure, on an incident-specific basis, the degree to which the MHP played a role in improving police-citizen relations, as well as perceived changes in the nature of these incidents as reported by responding officers. This involved understanding and describing what the MHP did and the ways in which the inclusion of the MHP changed the nature of police responses to incidents involving mentally ill individuals. Specifically, it was hypothesized that the assistance of the trained MHP would affect the nature of incidents involving mentally ill individuals in the following ways: (1) reduce the amount of time to case resolution; (2) reduce the number of repeat contacts involving the same individuals; and (3) change the nature of the incident disposition reflecting predominantly referrals to non-law enforcement resources and informal social controls.

Cases coming into the CRU from January 2011 to December 2011 were included in the evaluation. General offense and supplemental reports were provided to researchers in PDF format, and subsequently coded and entered into the Statistical Package for the Social Sciences (SPSS) for processing and analysis. Cases included all SPD general offense reports triaged to the CRU and supplemental reports by CRT staff. Data were collected for 290 cases from incident reports and supplemental reports. Background interviews were conducted with CRT Staff and others involved in the development and implementation of the pilot. The purpose of these interviews was to ensure that research staff had comprehensive knowledge of the CRT program's processes and procedures, as well as to provide important context to empirical observations.

To provide an overall picture of the CRT Pilot and its effectiveness in relation to the hypothesized outcomes, key variables were examined to describe the types of cases triaged to CRU, the nature of the cases, case disposition, and the role of the CRT OFC/MHP team in the case resolution. Key variables included: Nature of Incident, Repeat Calls/Contacts, Incident Location, Case Disposition, Linkages to Services and Case Clearance Time. Data were collected from general offense and CRT Supplemental Reports relevant to these variables including incident characteristics, the number of times an individual was involved in an incident, the address of incident, the address of person reporting incident, related incidents, victim characteristics (where identified), time to clearance, time spent on incident, intervention, CRT OFC/MHP team response, and case disposition.

4.1. Descriptive analysis

Descriptive analyses were conducted on key variables to provide an overall picture of the CRT pilot and its effectiveness in relation to the outcomes, the types of cases triaged to CRT, the nature of incidents, the number of repeat contacts, the nature of incident for lower and higher volume contacts, the CRT OFC/MHP team response on each case, and the final case disposition. Case clearance was calculated based on the time and date the incident was reported to the time and date the case was administratively cleared.

Narrative data from incident reports was recorded for all cases and analyzed to give a more detailed picture of the types of incidents

 $^{^7\,}$ Crisis Response Unit officers who staff the SPD CRU are differentiated from other SPD officers who have completed the 40 hour CIT training and are considered CIT Officers. CRU officers have advanced training beyond the 40-hour CIT training and are specifically assigned to the CRU.

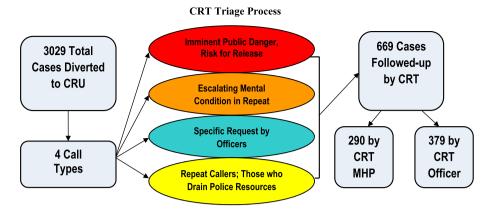


Fig. 1. CRT triage process.

handled by the CRT and the distinguishing characteristics of low and high volume contacts. In addition to descriptive data, 20 cases including 10 low and 10 high contacts with police were identified and qualitative data from incident and supplemental reports were analyzed in order to provide a profile of low and high contact cases handled by CRT.

4.2. Spatial analysis

Following the manual coding of all incident report data, the address fields were cleaned and prepared for geocoding. All incidents were successfully geocoded through either automated or manual processes. We used existing SPD city mapping layers for other features, such as building footprints, highways, and the locations of various waterways. The coordinate system is the State Plane for Washington North (FIPS 4601). All geoprocessing and spatial analyses were performed using ESRI ArcGIS version 10. The analytic plan called for beginning with simple point maps of CRT OFC/MHP team referred incidents in order to visually assess the spatial distribution and calculate basic, global tests for clustering. We also wanted to learn something about the distribution of high volume locations by identifying the number of unique incident addresses and the number of incidents at those locations. We next moved to aggregations at the census-tract level to help visually confirm any observed clustering of point data and to assess the degree of localized clustering. We then conducted local statistical tests for clustering, which provide an empirical basis of confidence for local clustering (i.e., "hotspots") but also provide greater confidence in the validity of our final spatial technique, hot-spot mapping of behavioral crisis incidents using kernel density estimation.

5. Results

5.1. Triage process

From January 2011 through December 2011, a total of 3029 cases were referred to the CRU. Cases were classified into four categories based on the nature of the call: (1) imminent public danger; (2) escalating mental condition involving repeat contacts; (3) specific requests by officers; and (4) REPEAT contacts/nuisance callers. Fig. 1 shows the triage process and the types of calls referred to CRU. As part of the triage process, a determination is made to place the incidents with appropriate CRU staff. The addition of the MHP in the CRU and formation of the CRT allowed for incidents involving individuals in behavioral crisis who engage in repeat nuisance contacts to be diverted to a mental health professional rather than a law enforcement officer. In 2011, 669 (22%) of the total 3029 cases referred to the CRU were followed up by CRU staff. Of these 669 cases, 290 were assigned to the MHP and 379 to

CRU officers. Of the 379 CRU officer cases, those involving violent crimes with clear probable cause were triaged to the CRU officer designated to handle the serious criminal cases and cases involving less serious incidents were handled by the other CRU officer who was part of the CRT OFC/MHP team. Incidents involving nuisance cases with no probable cause that a crime had been committed were assigned to the MHP who was part of the CRT OFC/MHP team.

5.2. Community relations

The CRT OFC/MHP team conducted presentations with local social service and housing agencies to explain the CRT pilot and the services available through CRT to assist local agencies in incidents involving individuals in behavioral crisis. In addition, the CRT has been featured in news reports that describe the CRU, the CRT OFC/MHP team, and specific the role of the MHP.⁸ This public exposure has served the function of educating the public about the possibilities for this sort of law enforcement–mental health agency partnership and the potential for deepening the service and order maintenance components of the police role.

5.3. Nature of incidents referred to CRT

Cases triaged to the CRT were placed into seven categories based on the nature of the incident:

- Mental cases that involved an encounter with a person with mental illness:
- (2) Assault/threat/harassment involving cases with probable cause;
- (3) Suicide:
- (4) Suspicious circumstance;
- (5) Disturbance;
- (6) Robbery/burglary/theft/property; and
- (7) Other.

Results indicate that about 4 in 10 cases triaged to CRT were cases classified as "mental" with no criminal behavior involved (n=124, or 42.8% of cases) followed by assault/threat/harassment (n=41, or 14.1% of cases), and suicide (n=34, or 12.1% of cases). The smallest category of incidents were those involving robbery or burglary/theft/

⁸ See Krishnan (2010) and Lightfoot (2012), a September 15, 2010 Q13 News story on CIT: http://www.q13fox.com/news/kcpq-091510-psychiatrists_in_blue,0,5588084.story and June 13, 2011 Komo News story on CIRT: http://www.youtube.com/watch?v=R-MmPVSGcnM.

Table 1
Nature of incidents.

Incident ($N = 290$)	Frequency	Percent
Mental	124	42.8
Assault/threat/harassment/robbery ^a	42	14.4
Suicide	35	12.1
Suspicious circumstance	31	10.7
Disturbance ^a	27	9.3
Other	22	7.6
Burglary/theft/property	9	3.1
Total	290	100

^a Of these offenses, 17 (6.6%) were identified as "family violence" – 7 were assaults and 10 were disturbances, and 1 was a robbery incident involving an PwMI who reported being robbed at gunpoint.

property crime (n = 10, or 3.4% of cases). Table 1 shows the frequency and percent of incidents by type.

Incidents were triaged to CRT as a result of some reference to mental disorder by individuals reporting the incident, or officers who had previous contact with the individuals involved. Of the 290 cases for which a diagnosis was indicated in the incident report, the majority were identified as "general mental illness" (n=196,67.6%), followed by medication/drugs/alcohol (n=27,9.3%) Table 2 shows the frequency and percent of the diagnostic references in the behavioral crisis incidents.

5.4. Spatial distribution of incidents

The distribution of behavioral crisis incidents is presented as a point map in Fig. 2. At first glance, it is clear that the incidents are spread across the entire Seattle metropolitan area. Visual clustering is apparent in the northeast part of the city, as well as in the downtown core. The Nearest Neighbor Index, a global statistical test for clustering, was significant indicating that behavioral crisis incidents to which the CRT was assigned are not distributed in a spatially random pattern; rather, there is statistically significant clustering of incidents within the study area. The visual distribution indicates the behavioral crisis incidents to which the CRT was assigned are city-wide, and we may presume the OFC/MHP team does so with a particular level of efficiency. However, given evidence of significant global clustering of incidents, there may be a case for greater efficiency with a more regionalized approach.

Some locations (addresses) generated a higher volume of activity than others. These high volume locations are depicted in Fig. 2 as large circles with the number of incidents at the location appearing within the circle. For example, there are two locations on the map in Fig. 2 where 10 incidents occurred during the study period; one location where nine incidents occurred; two locations where eight incidents occurred; and so on. The 12 locations identified on the map (or 6% of all unique addresses) generated 83 incidents (or 27% of all incidents). The finding that 6% of addresses accounted for 27% of incidents suggests

Table 2Diagnostic references to behavioral crisis incidents triaged to CRT.

Incident ($N = 290$)	Frequency	Percent
General mental illness	196	67.6
Redacted	28	9.7
Meds/drugs/alcohol	27	9.3
Bipolar/manic depression	18	6.2
Schizophrenia	8	2.8
Depression	5	1.7
Manic depression	3	1
Paranoia	3	1
PTSD	3	1
Dementia	2	.7
Total	290	100

that the OFC/MHP team is, with these locations alone, alleviating what would otherwise be a significant resource strain on patrol officers.

Behavioral crisis incidents to which the CRT OFC/MHP team was referred were aggregated to census tracts in order to understand potential clustering across the study area. Two census tracts (one in the downtown core and one in the northeast) had the highest counts, with 20 and 18 incidents, respectively, over the study period. Nearby census tracts also had higher frequencies of CRT OFC/MHP referred incidents, tending to confirm the apparent clustering in the point map, and suggesting local clustering in these areas. In order to test for local clustering, the Getis-Ord Gi* statistic (a Local Indicator of Spatial Autocorrelation, or LISA statistic) was calculated and mapped. Statistically significant clustering of the aggregated data was indicated by standardized Gi values exceeding 1.96 (p < .05). The three areas of the city identified earlier (the downtown core, an area in the northeast, and an area in West Seattle) showed statistically significant clustering of high count census tracts.

We then used kernel density estimation (KDE), a smoothing technique typically used in representing crime data, to visualize "hot spots" of CRT OFC/MHP referred incidents. It is particularly important to note that there was visual overlap of the qualitative, smoothed hotspots with the LISA statistics indicating statistically significant clustering of incidents; where there is statistically significant local clustering, we have greater confidence in the validity of the smoothed data. The KDE appears in Fig. 3. The density of incidents is greatest in the downtown core, where it approaches 36 incidents per square mile.

5.5. Repeat contacts

Contacts with police ranged from one to 20 (n=186, M=4.5, Sd=4.72). About 4 in 10 incidents referred to CRT involved isolated incidents where there was no repeat contact with police (n=126, or 43.4% of cases). However, there were a substantial number of incidents that involved two to six repeat contacts (n=97, or 33.4% of cases), approximately 18% (n=52) involving seven to 15 repeat contacts, and a small number of incidents (n=15, or 5.2% of cases) that involved high volume contacts (HVCs) with 15 or more contacts to police. Thus, the majority of incidents (n=164, 56.6%) involved multiple contacts with police (See Table 3).

Incidents involving lower and higher volume contact with police differed with respect to incident nature, χ^2 (6, N=186) = 14.64, p=.02. Higher volume contacts were more likely to involve assault, threats, and harassment, or suicide, while lower volume contacts were more likely to involve incidents coded as "mental" involving a police report or call for service involving a behavioral crisis incident that was not deemed an imminent threat or characterized by probable cause for an offense. Table 4 shows the incident nature by low (zero to six contacts) versus higher (seven or more) contacts with police.

5.6. Case disposition

Table 5 shows the distribution of case dispositions. About a third of cases (34.1%) were referred to non-law enforcement agencies (e.g., inpatient or outpatient chemical dependency treatment, mental health case management). Twelve percent were recommended for administrative clearance, and seven percent had some other type of disposition. Of particular interest, although infrequent, were cases that were handled through some type of individual-local-community resolution (e.g., asking the individual in behavioral crisis's neighbor or landlord to keep an eye on them and call police if there is a problem). These types of resolutions are indicative of informal social control networks that may not have otherwise been activated through traditional police response. It is also important to note that very few cases (about one percent in each category) resulted in arrest or transport to hospital facilities.

Point Map of CRT OFC/MHP Team Referred Incidents, With High Volume Locations Identified

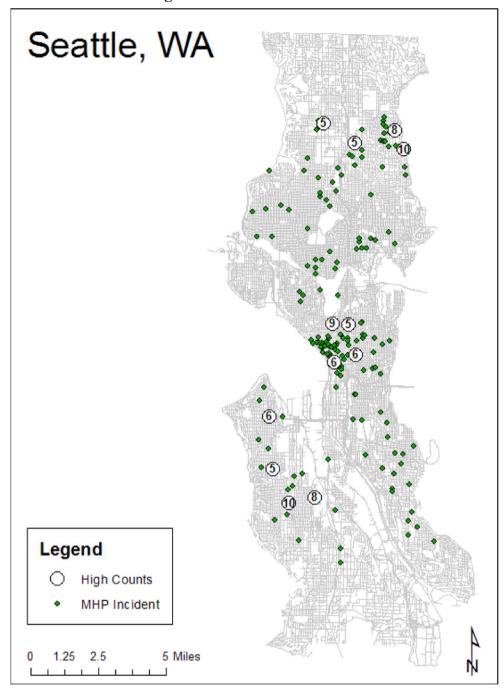


Fig. 2. Point map of CRT OFC/MHP team referred incidents, with high volume locations identified.

5.7. Time spent on intervention

Table 6 shows the results of time analyses based on 186 cases with usable data. There is a fair amount of variability in the number of contacts, time to clearance, and time spent on each case: The number of contacts with subjects ranged from just one to as many as 20; days to clearance ranged from zero to 219 days; and time spent on case ranged from 10 min to more than four hours. Due to skew in these variables, the median is a better indicator

of the "typical" case than the mean: On average, the CRT OFC/MHP team had about 3 contacts with subjects; cases were typically cleared in about 19 days, and the time spent per case was approximately 50 min.

5.8. High and low volume contacts

Given the quantitative results demonstrating a small number of high volume cases (cases that placed burdens on CRU staff prior to the

Kernel Density Estimation

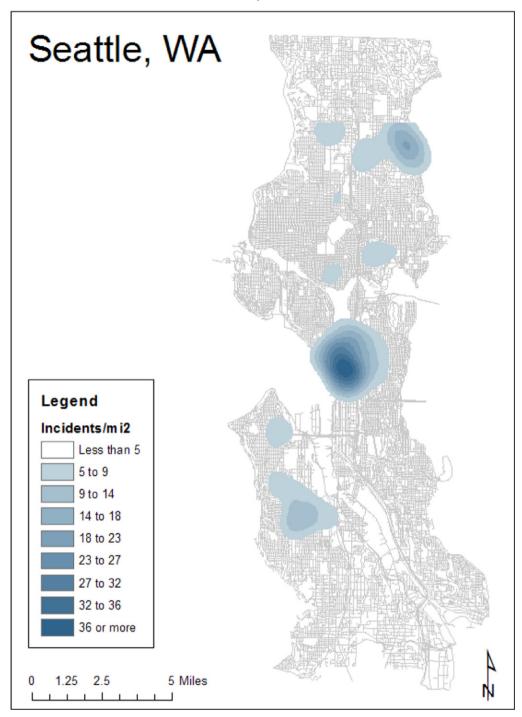


Fig. 3. Kernel density estimation.

Table 3Repeat contacts.

Incident ($N = 290$)	Frequency	Percent	
0-1	126	43.4	
2-6	97	33.4	
7–11	34	11.7	
12-15	18	6.2	
>15	15	5.2	
Total	290	100	

addition of the MHP and the creation of the CRT OFC/MHP team), a qualitative examination of these cases was undertaken in order to understand the true nature of both high volume and low volume contacts. The top 10 high volume cases and 10 lowest volume cases were selected to provide incident details to provide snapshot of the nature of the cases involving high volume contacts (individuals in behavioral crisis who either called police multiple times or were reported to police as a result of a disturbance, community concern, or other witness report) and low volume contacts (individuals in behavioral crisis who

Table 4Repeat contacts by nature of incident.

Incident nature	0–6 contacts with police $(n = 158/84.9\% \text{ of total})$	>7 contacts with police (n = 28/15.1% of total)	Total number of coded incidents $(n = 186/64\% \text{ of total})$
Suicide	13.9% ($n = 22$)	7.1% ($n=2$)	24
Mental	39.9% (n = 63)	21.4% ($n=6$)	69
Assault/threat/harassment	15.8% ($n = 25$)	35.7% ($n = 10$)	35
Suspicious circumstances	8.9% ($n = 14$)	7.1% (n = 2)	16
Disturbance	9.5% ($n = 15$)	3.6% ($n=1$)	16
Burglary/theft/property	5.1% (n = 8)	3.6% ($n=1$)	9
Other	7% (n = 11)	21.4% ($n=6$)	17
Total # contacts with police	158	28	186
	100%	100%	100%

came to the attention of police only once). Four examples are provided in Table 7, including two high volume contacts and two low volume contacts.

The case analyses show that the HVCs, in particular those involving over 15 contacts during the study period, require a high amount of resources in both the initial response and follow-up every time the individual in behavioral crisis is routed to the CRU. Examination of the case study subsample of HVCs and LVCs shows the nature of the case disposition. In most of the cases the CRT OFC/MHP team worked to link the individual in behavioral crisis with resources or to resolve the incident at the informal community level. While approximately 80% of all incidents handled by the CRT OFC/MHP team resulted in a case disposition involving referral to a non-law enforcement agency, administrative clearance, or individual-local-community resolution, within the HVC case category, 100% involved referral to non-law enforcement agency and administrative clearance with no arrests or transport to hospital with these high volume contacts.

6. Discussion

This evaluation of the Seattle Police Department Crisis Response Team (CRT) pilot program sought to measure, on a descriptive incident-specific basis, the degree to which the MHP plays a role in improving police-citizen relations in incidents where the MHP is involved, the nature of the role of CRT OFC/MHP team in responding to behavioral crisis incidents, as well as perceived changes in the nature of these incidents as reported by responding officers. This entailed understanding and describing what the MHP does and the ways in which the inclusion of the MHP as part of the CRT OFC/MHP team changes the nature of police response to incidents involving individuals in behavioral crisis. Specifically, it was hypothesized that the assistance of the trained MHP would affect the nature of incidents involving individuals in behavioral

Table 5Case disposition.

Incident (<i>N</i> = 290)	Frequency	Percent	Valid Percent
Referral to non-law enforcement agency	99	34.1	58.6
Recommend administrative clearance	35	12.1	20.7
Other ^a	21	7.2	12.4
Suggestion for individual-local-community Resolution	4	1.4	2.4
Assistance declined	4	1.4	2.4
Transport to hospital or outpatient	3	1.0	1.8
Arrest	3	1.0	1.8
Total	169	58.3	100

^a The majority of these incidents were situations in which the CRT OFC/MHP team followed up but could not make contact with the individual in behavioral crisis. Other cases involved dropped charges or complaints, involuntary detention of the individual, and completed suicide.

crisis in three ways: (1) Reduce the amount of time to case resolution; (2) Reduce the number of repeat contacts involving the same individuals; and (3) Change the nature of the incident disposition reflecting predominantly referrals to non-law enforcement resources and informal social controls.

The CRT pilot program has clearly changed the nature of police response to behavioral crisis events. The most common case disposition in this study (occurring in about one third of all cases) was a referral to a non-law enforcement agency and over 80% of cases (and 100% of the HVCs) were handled by either referral to a non-law enforcement agency, individual-local-community resolution, or administrative clearance. One example of such a referral would be directing the individual in behavioral crisis to available chemical dependency treatment programs. In contrast, very few cases (about one percent) resulted in an arrest or a transport to hospital facilities for evaluation, the latter being a "default" type of response for patrol officers responding to behavioral crisis events without the benefit of MHP involvement as part of the CRT OFC/MHP team. The outcomes of cases handled by the MHP as part of the CRT OFC/MHP team represent a clear shift from prior practice.

The results support previous research highlighting the importance of alternative approaches to responding to "mental health frequent presenters" who are mentally ill or disordered individuals with multiple needs in mental health crisis who frequently present to emergency services (Andrews & Baldry, 2013) who have complex needs and cognitive disability and disadvantage. These individuals are similar to the HVCs identified in this research as individuals who are regularly admitted to emergency rooms and are high utilizers of police and emergency services (Baldry & Douse, 2013). The ability of law enforcement to meaningfully address the complex needs of these frequent presenters depends on the resources available in law enforcement to be able to identify and address the complex needs of these individuals that can include a range of issues such as substance abuse problems, mental health issues, homelessness, and a range of mental health, physical, and social disadvantages.

The current findings show the ways in which the SPD CRT OFC/MHP team was able to provide nuanced intervention and case disposition that meaningfully addressed issues presented by frequent fliers. These individuals tend to get caught in a never-ending cycle as both victims and offenders. Without necessary resources, law enforcement officers

Table 6Time spent on intervention.

	N	Mean	Median	Sd	Min-max	Range
Number of contacts with subject	186	5	3	4.72	1–20	19
Time to clearance (days)	186	36	19	44.02	0-219	219
Time spent per case (minutes) ^a	186	67	50	59.03	10-250	240

 $^{^{\}rm a}$ Each email/phone call = 10 min. Each face-to-face encounter = 60 min.

Table 7High and low volume contacts.

3 years. Over 29 calls in

first 2 months of year

he made the calls and

was arrested and taken

Type Of Contact	HVC #1	HVC #2	LCV #1	LVC #2	HVC #3	HVC #4	LCV #3	LVC #4	
#Incidents	28	42	1	1	19	11	1	1	
Incident code	"Mental"	"Harassment"	"Mental"	"Assault"	"Other"	"Suicide"	"Suicide"	"Disturbance"	
Incident overview	Occurred at residence/home Woman with 3-year history of calls to 911 to report various threats to her safety. Approximately 20-30 calls per year.	 Occurred at residence/home 3-year history of 911 calls to residence. Officers to house 14 times in two month period. 	Occurred at a liquor store 1911 call in regards to a man banging his head against a store window	Occurred at residence/home 1911 was dispatched to a supportive housing location for a reported threat No related incidents during study period.	Occurred at residence/home Subject has history of calling 911 and running away from home because he does not feel safe around his parents.	Occurred at residence/-home HVC is a chronic 911 caller, who often threatens to commit suicide. HVC is well known by SFD, has made 5 + suicide attempts/threats since 2009.	Occurred at a residence/home 1911 called for reports of an attempted suicide, called in by the subject's in-home attendant. No related incidents during study period.	Occurred at residence/-home 911 was dispatched for a disturbance call	
Incident details	HVC called about vehicles circling her house at night. Later, she reported an unknown male watching her through her house windows and attempting to break in.	Officers respond to 6 hang-up calls to 911.	Officers were dispatched to a local liquor store to respond to a call of a LVC male banging his head against the store window.	Officers arrived at a supportive housing location for reports of a resident threatening a staff member	Police responded to threats of suicide by medication overdose.	Officers responded to a 911 call reporting an attempted suicide by the LVC subject. The call was made by the LVC's in-home attendant.	Officers responded to a disturbance call of a woman trespassing on local business property.	Officers arrived at supportive housing location for reports of a resident there	
 Incident nature and why flagged for CRU and Triaged to CRT 	Officer asked HVC how she saw these prowlers, questioned her about the incident, and asked what types of medications she was using. HVC known to police for	Officer arrived at residence. Male and female HVC informed by officers during previous incident that the next occurrence would result in an arrest for harassment. Man said	The male subject smelled strongly of liquor and seemed to be under the influence of some other intoxicant. The LVC subject was handcuffed for his	The staff member told officers that the fe- male LVC subject threatened her when she came to pick up her medications that night.	Subject told officers that he was being neglected by his parents and did not feel safe staying under the same roof as them. Officers continuously spoke to the parents	 HVC called 911 saying he wanted to kill himself, and he had medications do to it. When police arrived the HVC was being treated for 2 lacerations on his left 	Seattle Fire Department treated the female subject, who had 3–4 cuts on her wrists from what she stated was a piece of glass. LVC's in-home	LVC had previously been removed from the property for making a sleeping area in an alley behind a restaurant, and was found trespassing on the property again Police spoke with LVC	

· Because the LVC sub-

ject was on

who assured them that

wrist.

attendant said that the

• HVC suffers from major subject was allowed to

while workers cleaned

up all the

own safety, and was

transported to a

- and 20 calls just before new year.
- Known to police that over one year ago she was diagnosed and is on medications.
- CRT CRT assigned for response follow-up in an atcase tempt to engage HVC with services in an efdisposition fort to decrease her
 - frequent calls to 911. CRT OFC/MHP team met with HVC at her residence, listened to her concerns and observations.
 - · CRT was able to have HVC acknowledge that others are not seeing what she is doing, but she declined to meet with them further.

- to the precinct.
- · Officers to residence numerous times over the last 3 years regarding 911 hang up calls -14times in two months at year start.
- · MHP assigned to follow up by CRU Sergeant due to continued 911 hang-up
- · Female HVC stated that her insurance will no longer pay for therapy. MHP located several replacement centers, emailed them to female HVC and requested email progress updates.
- Recommended case be cleared administratively as female HVC was offered resources and reported a plan to locate services to help her through her mental health symptoms.

nearby hospital for a mental health evaluation.

- CRT assigned for follow-up to assist with investigation and attempt to engage LVC with services in an effort to assist him with his mental health issues.
- MHP located the LVC subjects NAVOS case manager and coordinated a plan to increase his supports in the community.
- · There was an appointment scheduled with case manager and subject to discuss increasing his support that he receives. Case was referred to a non-law enforcement agency.

anti-psychotic medications she was transported to a local

· CRT assigned for follow-up with LVC due to CRU's familiarity with the subiect.

hospital for a mental

health evaluation.

- CRT OFC/MHP team was in email contact with LVC subject's case manager and offered assistance in helping to decrease LVC's behaviors that might result in further police contacts
- LVC's treatment team meets with her twice daily and she also has the support of her housing staff. Due to her intensive services there is no further role CRT can play in her treatment, and the case was cleared.

they were in no way neglecting their son.

- · MHP assigned to follow up by CRU Sergeant due to continued 911 contacts and the subject's refusal to receive any mental health services
- MHP spoke to HVC who repeatedly refused any mental health service, and only wanted to be placed in a foster home to get away from his parents.
- Recommended case be referred to another agency as the subject was refusing any help from the MHP or any other mental health services.

mental health issues. and is believed to be in need of detox from alcohol/narcotics.

- · CRT was assigned for follow up due to the HVC's increased contacts with SPD due to suicidal ideation after consuming large quantities of alcohol and mixing with pills
- MHP unable to reach the HVC, HVC's sister said he uses alcohol to numb his pain issues, and refuses to take his prescribed meds.
- · CRT recommended the case be referred to another/non-law enforcement agency to help with HVC's substance abuse treatment.

leave her house, and came back later that day with a piece a glass she picked up outside.

- · CRT assigned for follow-up with LVC to check on her safety and well-being.
- CRT found the contact information for the LVC's case manager, who stated that they had no had contact with the LVC for almost 18 months...
- · CRT worked to re-establish contact between LVC and her case . manager, after which there was nothing more CRT could follow-up on.

garbage the LVC had accrued, LVC kept trying to collect her "valuables". all of which the officer confirmed as trash from the nearby dumpster.

- CRT assigned for follow-up with LVC. · MHP checked ECLS and
 - found no case manager information for LVC. Emailed DESC and HOST to check if they were familiar with the LVC. Another email was sent to HOST outreach to obtain information for an outreach plan for
 - the LVC. CRT continued outreach attempts to engage LVC in the community. Requested collaboration with SPD, and continued to alert them of LVC's whereabouts so that they may attempt further outreach assistance.

have difficulty ascertaining the nature of the situation of individuals they come in contact with who are experiencing such severe and complex problems. Individuals with chronic and complex needs, disability, and disadvantage utilize an enormous amount of police and emergency resources. They often become targets of the police because of their unusual behavior and interaction with police tends to make them anxious which can exacerbate their problems, resistance, and contacts with police. Units such as the SPD CRT that pair law enforcement and mental health professionals provide the expertise to reduce future contacts with police and utilization of emergency and police resources by taking steps to break the cycle through appropriate case disposition that addresses the multiple and complex needs of these individuals.

One area of potential improvement in police–citizen relations is in those cases where the MHP facilitated individual-local-community resolution to the problem. Informal social control networks can be more effective and have longer lasting effects in addressing neighborhood issues and problems than formal police responses. It is unlikely that traditional police response to individuals in behavioral crisis would lead to these kinds of collaborative, community-building types of activities. This is not to say that traditional patrol officers are unable or unwilling to facilitate local responses, but that they probably lack the necessary time and other resources to support local efforts. The CRT OFC/MHP team fills this gap.

In addition to improving police–citizen relations and the quality of interactions between the police and individuals in behavioral crisis, the CRT program represents a substantial improvement in the use of police resources. This descriptive evaluation of the CRT program has demonstrated that the CRT OFC/MHP team takes on a substantial burden which existed for traditional patrol resources which were being directed toward essentially non-law enforcement matters and with resulting inefficient and ultimately less effective responses (for example, unnecessary and resource-consuming transports to hospital). The high volume, repeat contacts in the "mental" category in particular represent an unnecessary and inappropriate burden on patrol officers that is alleviated by the CRT OFC/MHP team and leads to a more appropriate response. However, the results suggest that in the case of the high volume contacts, there was not a clear decrease in contacts during the study period as hypothesized.

We are hesitant to make policy recommendations based on this descriptive evaluation of a relatively new program. Although this study provides clear evidence that the MHP as part of the CRT OFC/MHP team is alleviating a sizeable burden that would otherwise be carried by regular patrol officers, and the addition of the MHP and inclusion in the CRT OFC/MHP team arguably represents a more refined and comprehensive response to persons experiencing mental health crises, no conclusions can be drawn from this evaluation regarding the effectiveness of the CRT program in contrast to previous or alternative responses. That being said, the results of this descriptive study suggest that there is true "value-added" by the CRT OFC/MHP team and that continued use of the MHPs in the CRU as part of the CRT program is merited. The study also points to potential program enhancements, such as an expansion of the number of CRT OFC/MHP teams and the addition of MHP FTEs combined with a regionalized approach to resource allocation, which may lead to further efficiencies. The original vision of the addition of the CRT Program and the OFC/MHP teams was the addition of four MHPs who would be paired with four CRU OFCs in teams of two who would work in shifts to cover the entire 24-hour period of the day, modeled after the Los Angeles Police Department (L. Eddy, Personal Communication, July 30, 2012). The addition of one MHP made possible by federal funding brought these enhanced services to interactions involving police and individuals in behavioral crisis for incidents triaged to the lone CRT OFC/MHP team. Additional CRT OFC/MHP teams would allow for more comprehensive 24-hour coverage across the city and SPD precincts to provide services to individuals in behavioral crisis.

7. Conclusion

The results of this descriptive evaluation of the CRT pilot program suggest that the CRT OFC/MHP team is relieving an otherwise substantial, unnecessary, and inappropriate burden on law enforcement officers. Although comparable empirical benchmarks prior to the pilot program are not available, the descriptive information concerning repeat contacts, dispositions, time spent on cases, nature of incidents, and spatial distribution of incidents demonstrate that a substantial workload was appropriately shifted from patrol officers to the CRT OFC/MHP team. The finding that 6% of unique addresses accounted for 27% of CRT OFC/MHP responses suggests that the addition of the MHP and the CRT OFC/MHP team is – based on these locations alone – alleviating what would otherwise be a significant resource strain on patrol officers, and that even greater efficiency gains could be achieved with a more regionalized approach.

The CRT OFC/MHP team averaged 3 contacts with subjects (with no repeat contact in 43% of cases), cleared cases in about 19 days, and spent about 50 min per case. About a third of cases (34.1%) were referred to non-law enforcement agencies to address in- or out-patient chemical dependency treatment or mental health case management. Anecdotally, when reviewing these empirical findings with program staff it was observed that these represented substantial improvements in the amount of time to case resolution, repeat contacts, and referrals to non-law enforcement resources.

Methodological considerations are worth noting in assessing the contribution of the descriptive findings presented here. In their comprehensive review of research on CIT programs from 1988 to 2006, Compton et al. (2008) found that the CIT model can be an effective component in connecting individuals in behavioral crisis who come to the attention of the police with appropriate psychiatric services. However, the authors and other researchers (Neidhart, 2013) note that interventions like CIT which are implemented in truly real-world settings are difficult to study. Many of the evaluations of CIT programs have been descriptive in nature, highly localized, utilizing small samples with no control groups, and researchers have yet to tease out program components in diverse jurisdictions that are most beneficial. Furthermore, CIT research to date has primarily examined intermediate officer-level outcomes that have been extrapolated to more distal patient-level outcomes. For example, researchers suggest that findings showing that CIT training and CIT officer interactions with mental health professionals has the immediate effect of changing officer attitudes toward individuals in behavioral crisis, and that this change in attitude may have an impact on patients in terms of more appropriate referral to services, earlier referral to treatment, and so on. Any research on the effects of CIT interventions have to be understood within the context of these previous CIT evaluation studies.

The value-added by the MHP in the OFC/MHP team in the SPD CRT pilot program can also be extrapolated to patient-level outcomes. However, further research is needed to determine the impact of the different components of the MHP role. For example, Morton (2010) found that practitioners across health and social care backgrounds overwhelmingly identified "emotional support" or just "being there" as the most significant thing they had done to help the person in crisis regardless of what the crisis was or what category of disorder they were deemed to have, and that "emotion" was not a named or measured component of the intervention. This suggests that the function the MHP can serve by handling appropriate and high volume contacts is to offer this emotional component that officers may not have the time or resources to provide. According to Morton (2010, p. 472), "For an individual experiencing a crisis in their emotional life, that experience...is felt as an immediate experience where emotions are difficult to contain. Whatever category individuals are put into is largely irrelevant; what is relevant is what happens next whether in services or outside of them." The role of the MHP in crisis incidents involving individuals in behavioral crisis has the effect of changing "what happens next" in crisis incidents by infusing a professional trained in providing emotional support at the times of crisis where individuals who are not able to contain their emotions come to the attention of the police because of their behaviors that may appear irrational or unreasonable. The effect of this intervention on patient-level outcomes deserves further exploration, and future research following individuals with whom the CRT OFC/MHP team has worked would provide information to assess the value added of the MHP and the OFC/MHP team model in the SPD CRT.

Overall, it appears that on a descriptive basis the anticipated benefits of adding a trained MHP to the CRT are being realized and that the program has the potential for continued improvement in the quality of police response to persons experiencing mental health crises in Seattle. The addition of CRT OFC/MHP teams assigned to individual precincts would enhance coverage, allow for more field responsiveness, and increase overall visibility of CRT staff (J. Dawson & D. Nelson, Personal Communication, July 30, 2012). More comprehensive coverage across the city by the CRT OFC/MHP teams in individual precincts would allow for future research that could potentially incorporate a more sophisticated methodology.

It should be noted that the Seattle Police Department has made substantial improvements in implementing the Crisis Intervention Team model in recent years as part of a series of reforms stemming from a 2012 settlement agreement between the City of Seattle and the Department of Justice (DOJ). The reforms were the outcome of a DOJ report that called for improvements in resources, protocols, training, and policy regarding crisis intervention in response to findings that a high percentage of use of force incidents involved individuals suffering from mental health or substance abuse issues (United States Department of Justice, 2011). A new Seattle Police Department Crisis Intervention Policy draft (Seattle Police Manual Crisis Intervention Policy, 2013) has been developed and is expected to go into effect in 2015 (D. Nelson, personal communication, March 20, 2015). The new policy clearly articulates a view of individuals in behavioral crisis as people who need care and careful response by law enforcement (Miletich, 2014). The intent of the policy is to provide officers with resources to deal with subjects who are in behavioral crisis outlining departmental expectations for officers when engaging with individuals in behavioral crisis that they will attempt to de-escalate the situation when feasible and reasonable. The policy extends officers discretion in handling incidents involving individuals in behavioral crisis even if probable cause to arrest while at the same time acknowledging situations in which officers may be presented with imminent safety risk that will require immediate response. The policy sets standards for organizational oversight of the CIT model, training, data collection, and implemented new and clear terminology including clearly defining units and terms (e.g., "Crisis Response Unit," "OFC/MHP teams," and "Crisis Response Team" (CRT) with clear directives on the CRT's role and function to follow-up on cases involving behavioral crisis at the lowest-level, least-intrusive intercept point to reduce harm through engagement with treatment). The policy articulates specific criminal offenses eligible for diversion resources, criteria that make certain individuals not eligible for crisis diversion resources, and five options⁹ that officers may utilize for misdemeanor property offenses, one of which is routing the case to CRT Unit for follow-up (Seattle Police Manual Crisis Intervention Policy, 2013, February 16).

The new SPD Crisis Intervention Policy is a leading edge CIT policy that positions the Seattle Police Department to make advances in the implementation and evaluation of elements of CIT, including the CRU and the CRT program and the activities of the OFC/MHP team

partnership. Further research utilizing a comparison or control group comparing incidents involving the CRT OFC/MHP team to matched incidents where no OFC/MHP team and/or no MHP is available would be a valuable next step in obtaining additional data to measure line-level, patient-level, and system-level outcomes. Additionally, further qualitative research examining the individual differences in the trajectories of high volume contacts and the role of the CRT OFC/MHP team and specifically the MHP in providing emotional support to individuals in behavioral crisis, de-escalating crisis incidents, providing enhanced services and reducing the amount of time police spend dealing with individuals in behavioral crisis and examining the ways in which the larger SPD culture relates to the implementation of the CIT model with respect to CIT trained officers as well as the CRU and CRT OFC/MHP team partnership, would be an important addition to the findings here.

References

- Adelman, J. (2003). *Study in blue and grey*. Retrieved from Police interventions with people with mental illness: A review of challenges and responses (http://www.cmha.bc.ca/files/policereport.pdf).
- Andrews, G., & Baldry, E. (2013). Mental health frequent presenters: Key concerns, case management, approaches, and policy and programme considerations for emergency services. Policing and the mentally ill: International perspectives. Boca Raton, FL: CRC Press. 197–218.
- Baess, E. P. (2005). Integrated mobile crisis response team (IMCRT): Review of pairing police with mental health outreach services. Retrieved from (http://www.pmhl.ca/webpages/reports/Pairing-report.pdf).
- Baldry, E., & Douse, L. (2013). Compounding mental and cognitive disability and disadvantage: Police as care managers. Policing and the mentally ill: International perspectives. Boca Raton, FL: CRC Press, 219–234.
- Compton, M. T., Bahora, M., Watson, A., & Oliva, J. (2008). A comprehensive review of extant research on crisis intervention team (CIT) programs. *The Journal of the American Academy of Psychiatry and the Law*, 36, 47–55.
- Criminal Justice/Mental Health Consensus Project (2011). Council of State Governments Justice Center. www.consensusproject.org/programs (Retrieved from)
- Deane, M. W., Steadman, H. J., Borum, R., Veysey, B. M., & Morrissey, J. (1999). Emerging partnerships between mental health and law enforcement. *Psychiatric Services*, 50, 99–101.
- Hopes, V. (2011). Abbotsford police mark one year since mental health unit began. Retrieved on March 05, 2012 from Abbotsford News (http://www.abbynews.com/news/ 134457953.html).
- Kirwin, D. K. (2011, July 25). Police team with behavioral health group. Retrieved from The Times (http://pawtuckettimes.com/content/police-team-behavioral-health-group).
- Krishnan, S. (2010, May 18). Mental-health professional added to Seattle Police Department. Retrieved from The Seattle Times (http://seattletimes.nwsource.com/html/localnews/2011897508_mentalhealth19m.html).
- Laberge, D., & Morin, D. (1996). The overuse of criminal justice dispositions: Failure of diversionary policies in the management of mental health problems. *International Journal of Law and Psychiatry*, 18, 389–414.
- Lamb, H. R., Shaner, R., Elliott, D. M., DeCuir, W. J., & Foltz, J. T. (1995). Outcome for psychiatric emergency patients seen by an outreach police-mental health team. Psychiatric Services, 46, 1267–1271.
- Lamb, H. R., Weinberger, L. E., & Gross, B. H. (2004). Mentally ill persons in the criminal justice system: Some perspectives. Criminal Justice Policy Review, 11, 312–328.
- Lightfoot, J. (2012, January 12). Seattle police: What they're doing right with troubled people. Retrieved from Crosscut.com (http://crosscut.com/2012/01/12/law-justice/21775/ Seattle-police-what-theyre-doing-right-with-troubl/).
- Lurigio, J. (2000). Persons with serious mental illness in the criminal justice system: Background, prevalence, and principles of care. Criminal Justice Policy Review, 11, 312–328.
- Miletich, S. (2014, February 11). Federal judge approves new SPD Crisis Intervention Policy. Retrieved from The Seattle Times (http://seattletimes.com/html/localnews/2022886557_crisispolicyxml.html).
- Morton, J. (2010). Emotion in crisis: Primary and secondary mental health contexts. Journal of Social Work Practice, 24(4), 461–474.
- Neidhart, E. (2008). Managing those in crisis: A yearlong analysis of incidents handled by the Seattle Police Department (Unpublished master's thesis). Seattle University, Seattle WA
- Neidhart, E. (2013). Crisis intervention and police interactions with individuals with mental illness. In J. B. Helfgott (Ed.), *Criminal Psychology. Volume* 3. (pp. 139–168) (Santa Barbara, CA).
- Perez, A., Leifman, S., & Estrada, A. (2003). Reversing the criminalization of mental illness. *Crime and Delinquency*, 49, 62–78.
- Reuland, M., Draper, L., & Norton, B. (2010). Improving responses to people with mental illnesses: Tailoring law enforcement initiatives to individual jurisdictions. New York: Council of State Governments Justice Center.
- Reuland, M., Schwarzfeld, M., & Draper, L. (2009). Law enforcement responses to people with mental illnesses: A guide to research-informed policy and practice. New York: Council of State Governments Justice Center.
- Seattle Police Department (2000). A less lethal options program for the Seattle police department. Retrieved from (http://www.seattle.gov/police/publications/Forg/ Forg_Report.PDF).

⁹ The five options for resolving crisis-related misdemeanor property crimes outlined in the SPD Crisis Intervention Policy are: Investigate and release with routing to CRT for follow-up, referral to the Crisis Solutions Center, investigate and release with a request for charges through Seattle Municipal Mental Health Court (MHC), jail booking with a MHC flag, investigate and detain for mental health evaluation with request for charges through MHC.

- Seattle Police Department (2002). SPD progress report less lethal options program year 1.

 Retrieved from (http://www.seattle.gov/police/Publications/Topics/LessLethal2002.
- Seattle Police Manual Crisis Intervention Policy (2013, February 16). Retrieved from (http://static1.squarespace.com/static/5425b9f0e4b0d66352331e0e/t/542ae365e4b0957885ec68f5/1412096869192/Crisis_Intervention_Policy_Final_Draft_12-16-13.pdf).
- Steadman, H. J., Deane, M. W., Borum, R., & Morrissey, J. (2000). Comparing outcomes of major models of police responses to mental health emergencies. *Psychiatric Services*, 51, 645–649.
- Teplin, L. A. (2000). Keeping the peace: Police discretion and mentally ill persons. National Institute of Justice Journal, 8–15.
 Thompson, S. (2010). Policing Vancouver's mentally ill: The disturbing truth. http://
- Thompson, S. (2010). Policing Vancouver's mentally ill: The disturbing truth. http://vancouver.ca/police/assets/pdf/reports-policies/vpd-lost-in-transition-part-2-draft. pdf (Retrieved from)
- Thompson, M. D., Reuland, M., & Souweine, D. (2003). Criminal justice/mental health consensus: Improving responses to people with mental illness. *Crime and Delinquency*, 49, 30–51.
- United States Department of Justice (2011, December 12). Investigation of the Seattle Police Department. Retrieved from (http://static1.squarespace.com/static/5425b9f0e4b0d66352331e0e/t/542ae365e4b0957885ec68f5/1412096869192/Crisis_Intervention_Policy_Final_Draft_12-16-13.pdf).
- Vickers, B. (2000). Memphis, Tennessee's Police Department's Crisis Intervention Team. Retrieved from Bulletin from the Field, Practitioner Perspectives. Bureau of Justice Assistance (http://ojp.usdoj.gov/B|A).
- Wilson-Bates, F. (2008). Lost in transition: How a lack of capacity in the mental health system is failing Vancouver's mentally ill and draining police resources. http://www.cbc.ca/bc/news/bc-080204-VPD-mental-health-report.pdf (Retrieved from)