Title Registration for a Systematic Review: Crisis Intervention Team Training Programs for Law Enforcement Officers: A Systematic Review
Phillip Marotta M.S.S.W, M.P.H, Jeremy Barnum M.A, Amy Watson, PhD, Joel Caplan, PhD

Submitted to the Coordinating Group of:

- [ ] Crime and Justice
- [ ] Education
- [ ] Disability
- [ ] International Development
- [ ] Nutrition
- [x] Social Welfare
- [ ] Other:

Plans to co-register:

- [x] No
- [ ] Yes  [ ] Cochrane  [ ] Other
- [ ] Maybe

Date Submitted: 15 June, 2014
Date Revision Submitted:
Approval Date:
Publication Date: 01 September, 2014
BACKGROUND

(Briefly describe the problem that the interventions under review are aiming to address, the relevance to policy and practice, and the objective(s) of the review.)

Law enforcement’s duty to provide a first line of response for psychiatric emergencies is not a novel innovation in the field of policing. New to the field of policing, however, is the surge in mental health calls for service catalyzed by an international movement toward shuttering state psychiatric hospitals (Borum, 2000; Hall & Weaver, 2008; Tucker, Van Hasselt & Russell, 2008; Watson & Falumbarker, 2012; Van den Brink, Broer, Tholen, Winthorst Visser & Wiersma, 2012). In the United States, from 1955-2005, the number of available inpatient commitment beds per person plummeted from 314 per 100,000 (563,000 beds) to 17 per 100,000 (92,069 beds) (Markowitz, 2011). This placed a tremendous burden on law enforcement, outpatient mental health clinics and community mental health service providers to manage a chronically ill psychiatric population (Morabito, 2007). Law enforcement officers became a front line resource for providing emergency response services to individuals immersed in mental health crises (Cochran, Deane, & Borum, 2000; Van den Brink et al, 2012; Watson, Morabito, Draine, & Ottati, 2008; Watson, Ottati, Draine & Morabito, 2011; Watson, Corrigan, & Ottati, 2004). In order to equip law enforcement officers with skills to manage a rising number of mental health emergencies, the Crisis Intervention Team (CIT) model provides a framework for ensuring proper use of force, collaboration with behavioral health service providers and reducing inappropriate confinement in jail settings.

Studies from Australia (Godfredson, Thomas, Luebbers, & Ogloff, 2011), Greece (Psarra, Sestrini, Santa, Petsas et al., 2008) Britain, and Canada (Adelman, 2003) provide cogent evidence of a growth in encounters between law enforcement officers persons with severe mental illness on a global scale. In the United States and Australia approximately 10% of law enforcement contacts with citizens in the community involve persons with diagnoses of chronic mental illness (Borum, 2000; Canada, Angell & Watson, 2010; Watson & Angell, 2013; Fry, O’Riordan, & Geanellos, 2002; Watson & Fulambarker, 2012) and law enforcement officers transport upwards of 30% of patients seen in psychiatric emergency rooms (Lamb, Shaner, Elliott, DeCuir & Foltz 1995). Although substantial time and effort are devoted to resolving psychiatric emergencies, numerous international studies suggest that law enforcement officers do not receive adequate training, suffer from lack of knowledge
about mental illness and do not consider resolving psychiatric emergencies an integral part of police work (Fry et al., 2002; Godfredson et al., 2011; Psarra et al., 2008; Hollander, Lee, Tahtalian & Young et al., 2012).

Embedded in a historical context characterized by expanding encounters between law enforcement and the mentally ill, law enforcement departments in several countries have taken proactive measures to improve police responses to psychiatric crises. In the United States, the crisis intervention team model emerged, in 1988, out of a tragic shooting of a schizophrenic man during a police encounter in Memphis, Tennessee (Borum, 2003; Dupont, 2007; Compton et al., 2008; Ellis, 2013; Hanafi, Bahora, Demir & Compton, 2008). The creation of the Crisis Intervention Team model involved a partnership between the National Alliance on Mental Illness (NAMI), the Memphis Police Department, the University of Tennessee and the University of Memphis, (Dupont et al., 2007; Compton et al., 2008). Conceptualized as a pre-booking jail diversion program, CIT operates on the explicit rationale that training law enforcement officers and cultivating partnerships with mental health organizations, will reduce disproportionate jail involvement, improve safety, increase service linkage, and promote humane interactions with mentally ill populations (Cochran et al., 2000; Dupont, 2007; Lord, Bjerregaard, Blevins, & Whisam 2011; Morabito, Kerr, Watson, Draine, Ottati & Angell, 2012; Ritter, Teller, Marcussen, Munetz & Teasdale, 2010).

Another overarching rationale behind the CIT model is that specialized training to law enforcement officers and embracing relationships with mental health organizations will decriminalize mental illness (Munetz & Griffin, 2006; Lamb & Weinberger, 2011; Perez, Leifman & Estrada, 2003). Since its original inception in 1988, police departments in the United States and Canada are increasingly adopting CIT training interventions to equip their law enforcement officers with skills to more effectively respond to psychiatric emergencies in the community (Hall & Weaver, 2008; Wood, Swanson, Burris & Gilbert, 2011). Similar to police-based responses in Canada and the United States, Australia implemented police-based CIT programs called Mental Intervention Teams that designated trained law enforcement officers as Mental Health Intervention officers (Wood et al, 2011; Herrington, 2009; Herrington 2012).

Outside of North America and Australia, police departments employ several different strategies to improve encounters between law enforcement officers and persons with mental illness. Unlike, pre-arrest/pre-booking programs, the police-based diversion and liaison schemes embraced by law enforcement departments in the United Kingdom, provide linkages to interdisciplinary Community Mental Health Teams following a formal arrest (James, 2000; Wood et al., 2011). Liasons are cultivated as a means of diverting persons arrested for minor offenses into community mental health services in lieu of incarceration (McGilloway & Donnelly, 2004; Pakes, & Winstone, 2010; Scott, McGilloway, Dempster, Brown & Donnelly, 2013). Throughout Western Europe, in countries such as France, mental health teams and collaborations between law enforcement and mental health professionals remain the predominant method of engaging persons with mental illness in the community.
Tragically for many other countries throughout the world, law enforcement officers are entirely untrained in how to respond to psychiatric emergencies.

The purpose of this review is to evaluate the rigor of extant literature on police-based crisis intervention training programs and to synthesize key findings from these studies. Traditionally, evaluation studies gauge the success of CIT training programs by virtue of their impact on the knowledge, attitudes behaviors and referral decisions of trained officers compared to their untrained counterparts (Bahora et al., 2008; Compton et al., 2006; Compton et al., 2011; Compton & Chien, 2008; DeCuir, 1995; Demir et al., 2009; Ellis, 2013; Patch & Arrigo, 1999; Morabito, 2012; Lamb et al., 2001; Oliva & Compton, 2008).

**OBJECTIVES**

(The objective(s) should be listed as questions that the review will aim to answer.)

Informed by the outcomes conceptualized in prior literature, this systematic review aspires to answer the following research questions:

a) What is the impact of CIT training on police officer knowledge about the aetiology, treatment, and signs and symptoms of serious mental illness?

b) What is the impact of CIT training on law enforcement attitudes toward severe mental illness?

c) What is the impact of CIT training on officer use of physical force versus verbal de-escalation to resolve a crisis?

d) What is the impact of CIT training on the decisions of dispatch officers?

e) Are CIT trained officers more likely to refer persons in psychiatric crises for mental health treatment rather than arrest?

f) Are transports of persons in psychiatric emergencies handled more efficiently than transports handled by non-CIT trained officers?

f) What is the impact of officer-level attitudinal and knowledge changes on patient outcomes? These outcomes are:

a. Re-arrest

b. Treatment measures: hospitalization, engagement in on-going behavioural health care, reduction in future psychiatric crises.
EXISTING REVIEWS

(List any existing systematic reviews on the topic, and justify the need for this review if existing reviews exist or are in progress.)

There is one prior systematic review that evaluated Crisis Intervention Team training programs (Compton, 2008). No reviews to date, however, have adopted a framework that scored extant literature on methodological rigor or study design. This analysis will rest upon a PRISMA framework (Preferred Reporting Items for Systematic Reviews and Meta-analysis) (Liberati et al., 2009) as well as the Campbell methodology (Higgins, 2008) to guide the evaluation of studies.

INTERVENTION

(Describe the eligible intervention(s) and comparison(s) clearly in plain language. What is given, by whom, to whom, and for how long? What are the comparison conditions (what is usually provided to control/comparison groups who don’t receive the intervention)? Describe any similar interventions that will not be eligible and justify the exclusion.)

The traditional Crisis Intervention Team (CIT) model is comprised of a training intervention administered to law enforcement alongside coordination between emergency psychiatric and criminal justice systems to ensure that trained law enforcement officers possess the resources to render appropriate dispositions for persons enmeshed in psychiatric crises (Watson & Fulambarker, 2012). At the officer-level, Crisis Intervention Team training involves a 40-hour educational program that is provided voluntarily to law enforcement officers (Watson & Fulambarker, 2012). The training is administered by a combination of senior law enforcement staff, mental health professionals, advocates and consumers. Didactic lectures, training videos, role-play demonstrations and re-enactments of real life scenarios are features of the educational intervention (Watson & Fulambarker, 2012). At a systems level, jurisdictions that subscribe to the CIT model enter into Memoranda of Understanding with local emergency psychiatric departments to ensure officers are able to return to the community quickly after responding to a potential psychiatric crisis (Steadman et al., 2001). These emergency psychiatric centres function as ‘drop-off’ locations for law enforcement officers (Steadman, 2001; Watson & Fulambarker, 2012). The number of officers trained varies widely and hinges upon administrative and logistical needs presented by each specific department. The ‘control’ group or comparison conditions are law enforcement officers who have not received any training in responding to psychiatric emergencies.

Psychological first aid is the only intervention comparable in scope and purpose to CIT training and will not be included in this analysis. This exclusion is justified because psychological first aid is not a targeted intervention specifically for persons with serious mental illness. Although officers with training in psychological first aid are often asked to
respond to psychiatric emergencies, the intervention is focused on attenuating the deleterious effects of PTSD and stress-responses during traumatic experiences.

**POPULATION**

(Specify the types of populations to be included and excluded, with thought given to aspects such as demographic factors and settings.)

The population that will be included in this systematic review are sworn law enforcement officers who participated in Crisis Intervention Team Training. Although studies often occur in the United States, no studies will be excluded on the basis of geographic location. Further, no studies will be excluded on the basis of any demographic factors (i.e., gender, age, years of experience) or setting (i.e., rural vs. urban, type of law enforcement agency) but these factors will receive thorough discussion throughout the analysis. Studies of CIT training programs among non-law enforcement officers such as correctional officers will be excluded from analysis.

**OUTCOMES**

(List the primary and secondary outcomes for the review including all outcomes important to those who will be affected by and those who will make decisions about the intervention(s). Give thought to the inclusion of adverse and unintended effects, resource use, and outcomes along the causal chain.)

The following study embraces three primary outcomes. The first is the reduction of use of force by law enforcement officers during interactions with persons in psychiatric illness. Second, dispositions rendered by law enforcement officers to divert persons to emergency rooms and behavioural outpatient treatment centres in lieu of arrest is a crucial component behind CIT training. The third primary outcome encompasses changes in patient-level variables such as future involvement in the criminal justice system, hospitalization, and adherence to outpatient treatment. There are two secondary outcomes. The first involves changes in knowledge surrounding the aetiology of mental illness and the signs and symptoms of psychiatric crisis. Second, the attitudes held by law enforcement officers toward serious mental illness facilitate changes in primary behavioural outcomes. Given that CIT is a pre-jail diversion program, these outcomes are particularly important for key stakeholders charged with making decisions surrounding funding and implementation of CIT. Similarly, an understanding of the effectiveness of CIT is of paramount importance for mental health advocates, policy makers, consumers, and the public writ large who have a vested interested in reducing inappropriate use of force and increasing fair policing strategies.
STUDY DESIGNS

(List the types of study designs to be included and excluded (please describe eligible study designs). Where the review aims to include quantitative and qualitative evidence, specify which of the objectives noted above will be addressed using each type of evidence.)

Eligible studies are included if they 1) are published after 1988 (after the initial inception of CIT programs), 2) employ randomized control trial, quasi-experimental, single group, or pre-post study designs, 3) measure the following officer-level changes a. knowledge of the aetiology of mental illness, and the recognition of signs and symptoms of mental illness b. attitudes toward mental illness (including stigma), and c. officer behaviours during the arrest encounter such as use of force or verbal de-escalation techniques, and 4) evaluate police encounters only with persons in psychiatric crises or involving calls for service designated as mental disturbances. Studies whose design incorporates comparison or control groups are analysed separately from single group evaluation studies. A small but rigorous population of studies exist whose design embraces a comparison group of untrained law enforcement officers. For instance, Watson et al, (2011) compared the outcomes of contacts between persons with mental illness and CIT trained officers to contacts with non-CIT trained officers. We will synthesize findings from these studies separately from those who use a single group design. Studies with a treatment and control group will not be excluded on the basis of not assessing participants pre and post intervention. Single group studies, however, that do not provide a baseline assessment will not be included in the analysis.


Variables important to assessing internal validity will also be scrutinized. These variables include, attrition, voluntary vs. involuntary participation in the program, loss to follow up, and the demographic and diagnostic profile of persons in psychiatric crises. Studies will be scored and rated on quality according to the criteria put forth by the Campbell Collaboration. Any additional methodological considerations put forth by the Campbell Collaboration will be incorporated into the analysis.

Although qualitative studies are not eligible for inclusion in the systematic review, findings from any qualitative studies identified during the review of literature will be discussed in its own section.

It is worth noting that several countries have adopted modified versions of Crisis Intervention Team programs with varying names. Studies will be included as long as the
inclusion criteria for this review is met and adherence remains to the core principles of CIT (i.e. collaboration with mental health agencies, law enforcement training, etc).

REFERENCES


**REVIEW AUTHORS**

**Lead review author:** The lead author is the person who develops and co-ordinates the review team, discusses and assigns roles for individual members of the review team, liaises with the editorial base and takes responsibility for the on-going updates of the review.

<table>
<thead>
<tr>
<th>Name: Phillip Marotta, MSSW, MPH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title: Research Associate, Doctoral Student, and NIH T32 Trainee</td>
</tr>
<tr>
<td>Affiliation: Columbia University School of Social Work</td>
</tr>
<tr>
<td>Address: 1255 Amsterdam Avenue 8th Floor</td>
</tr>
<tr>
<td>City, State, Province or County: New York NY</td>
</tr>
<tr>
<td>Postal Code: 10027</td>
</tr>
<tr>
<td>Country: USA</td>
</tr>
<tr>
<td>Phone: 718-772-2619</td>
</tr>
<tr>
<td>Email: <a href="mailto:plm2113@columbia.edu">plm2113@columbia.edu</a></td>
</tr>
</tbody>
</table>

**Co-author(s):** (There should be at least one co-author)

<table>
<thead>
<tr>
<th>Name: Jeremy Barnum, MA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title: Doctoral Student and Research Associate</td>
</tr>
<tr>
<td>Affiliation: Rutgers University School of Criminal Justice</td>
</tr>
<tr>
<td>Address: 123 Washington Avenue</td>
</tr>
<tr>
<td>City, State, Province or County: Newark, NJ</td>
</tr>
<tr>
<td>Postal Code: 07102-3094</td>
</tr>
<tr>
<td>Country: USA</td>
</tr>
</tbody>
</table>
Email: jeremy.barnum@rutgers.edu

Co-author(s): (There should be at least one co-author)

Name: Amy Watson
Title: Associate Professor
Affiliation: University of Illinois, Jane Addams College of Social Work
Address: Room 4242, EPASW
1040 West Harrison Street
City, State, Province or County: Chicago
Postal Code: 60607-7134
Country: USA
Phone: (312)-996-0039
Email: acwatson@uic.edu

Co-author(s): (There should be at least one co-author)

Name: Joel Caplan, PhD
Title: Associate Professor
Affiliation: Rutgers University School of Criminal Justice
Address: 123 Washington Avenue
City, State, Province or Country: Newark, New Jersey
ROLES AND RESPONSIBILITIES

(Please give a brief description of content and methodological expertise within the review team. It is recommended to have at least one person on the review team who has content expertise, at least one person who has methodological expertise and at least one person who has statistical expertise. It is also recommended to have one person with information retrieval expertise. Please note that this is the recommended optimal review team composition.)

Phillip Marotta-writing the report (primary), content management, coding, statistical analysis

Jeremy Barnum-writing the report, information retrieval, coding, statistical analysis

Amy Watson-reviewing the report, expert content guidance, statistical analysis, systematic review methodology

Joel Caplan-reviewing the report, systematic review methods

FUNDING

Do you receive any financial support, and if so, from where? What are your deliverable deadlines for the review? If not, are you planning to apply for funding, and if so, from where?

No Funding.

POTENTIAL CONFLICTS OF INTEREST

For example, have any of the authors been involved in the development of relevant interventions, primary research, or prior published reviews on the topic?

Professor Watson has written extensively on the topic of mental health, law enforcement, procedural justice, and crisis intervention team programs. Alongside other colleagues in the field, Professor Amy Watson completed one mixed methods evaluation study of a CIT program that culminated in 5 quantitative (Watson et al., 2010; Watson et al., 2011; Morabito et al., 2012; Compton et al., 2014 ‘Model I’; Compton et al., 2014 ‘Model II’) and 2 qualitative publications (Canada, Angell, & Watson, 2010; Canada, Angell, & Watson, 2012) (Project Title: “Testing a systems level intervention to improve police response to
persons with mental illness: CIT in Chicago” NIMH R34MH081558). She provided consultation to a multi-phase R01 evaluation study titled “Modelling Officer-Level Effects of Crisis Intervention Team (CIT) Training” (PI Michael Compton). In addition to primary research and consultation, she has collaborated with other colleagues to author the only review of extant literature on crisis intervention programs (Compton et al., 2008). This prior review underscores Professor Watson’s interest in carrying out this systematic review in an unbiased fashion. Although her existing work largely supports the use of Crisis Intervention Team trainings, she would not be uncomfortable if the findings of this study refute the results presented in her prior publications.

Professor Watson, Professor Caplan and colleagues are in the process of conducting a 5-year, evaluation study of a CIT training program in Chicago (‘CIT & MH Service Access in Police Contacts: Impact on Outcomes of Persons with Serious Mental Illnesses’- NIMH R34MH081558). No research has been published from this project. Neither Professor Watson nor Professor Caplan would be uncomfortable if results from this systematic review did not support the effectiveness of CIT programs.

Professor Caplan, Phillip Marotta, and Jeremy Barnum have not published any scholarly work related to Crisis Intervention Team training programs.

**PRELIMINARY TIMEFRAME**

Note, if the protocol or review are not submitted within 6 months and 18 months of title registration, respectively, the review area is opened up for other authors.

- Date you plan to submit a draft protocol: 3, November 2014
- Date you plan to submit a draft review: 3, September 2015

**AUTHOR DECLARATION**

**Authors’ responsibilities**

By completing this form, you accept responsibility for preparing, maintaining, and updating the review in accordance with Campbell Collaboration policy. The Coordinating Group will provide as much support as possible to assist with the preparation of the review.

A draft protocol must be submitted to the Coordinating Group within one year of title acceptance. If drafts are not submitted before the agreed deadlines, or if we are unable to contact you for an extended period, the Coordinating Group has the right to de-register the title or transfer the title to alternative authors. The Coordinating Group also has the right to de-register or transfer the title if it does not meet the standards of the Coordinating Group and/or the Campbell Collaboration.

You accept responsibility for maintaining the review in light of new evidence, comments and criticisms, and other developments, and updating the review every five years, when substantial new evidence becomes available, or, if requested, transferring responsibility for maintaining the review to others as agreed with the Coordinating Group.

**Publication in the Campbell Library**

The support of the Coordinating Group in preparing your review is conditional upon your agreement to publish the protocol, finished review, and subsequent updates in the Campbell Library. The Campbell Collaboration places no restrictions on publication of the findings of a Campbell systematic review in a more abbreviated form as a journal article either before or after the publication of the monograph version in *Campbell Systematic Reviews*. Some
journals, however, have restrictions that preclude publication of findings that have been, or will be, reported elsewhere and authors considering publication in such a journal should be aware of possible conflict with publication of the monograph version in *Campbell Systematic Reviews*. Publication in a journal after publication or in press status in *Campbell Systematic Reviews* should acknowledge the Campbell version and include a citation to it. Note that systematic reviews published in *Campbell Systematic Reviews* and co-registered with the Cochrane Collaboration may have additional requirements or restrictions for co-publication. Review authors accept responsibility for meeting any co-publication requirements.

I understand the commitment required to undertake a Campbell review, and agree to publish in the Campbell Library. Signed on behalf of the authors: Phillip Marotta

Form completed by: Phillip Marotta Date: 6/15/2014