

Improving police interventions during mental health-related encounters: past, present and future

Jennifer D. Wood & Amy C. Watson

To cite this article: Jennifer D. Wood & Amy C. Watson (2017) Improving police interventions during mental health-related encounters: past, present and future, *Policing and Society*, 27:3, 289-299, DOI: [10.1080/10439463.2016.1219734](https://doi.org/10.1080/10439463.2016.1219734)

To link to this article: <http://dx.doi.org/10.1080/10439463.2016.1219734>



Published online: 11 Aug 2016.



Submit your article to this journal [↗](#)



Article views: 654



View related articles [↗](#)



View Crossmark data [↗](#)

Improving police interventions during mental health-related encounters: past, present and future

Jennifer D. Wood^a and Amy C. Watson^b

^aDepartment of Criminal Justice and Centre for Security and Crime Science, Temple University, Philadelphia, PA, USA;

^bJane Addams College of Social Work, University of Illinois at Chicago, Chicago, IL, USA

ABSTRACT

There are calls across America for police to re-imagine themselves as ‘guardians’ rather than ‘warriors’ in the performance of their innumerable duties. The contentious history of police attitudes and practices surrounding encounters with people affected by mental illnesses can be understood through the lens of this wider push towards guardianship. At least as far back as the de-institutionalisation of mental health care and the profound lack of community-based resources to fill service deficits, the role of police as mental health interventionists has been controversial and complex. This paper reviews the first wave of reform efforts designed to re-shape police sensibilities and practices in the handling of mental health-related encounters. We argue that such efforts, centred on specialised training and cooperative agreements with the health care sector, have advanced a guardian mindset through improved knowledge and attitudes about mental health vulnerabilities and needs. Building on the progress made, we suggest there are critical opportunities for a new wave of efforts that can further advance the guardianship agenda. We highlight three such opportunities: (1) enhancing experiences of procedural justice during mental health-related encounters; (2) building the evidence base through integrated data sets; and (3) balancing a ‘case-based’ focus with a ‘place-based’ focus.

ARTICLE HISTORY

Received 12 March 2016

Accepted 28 July 2016

KEYWORDS

Policing; law enforcement; public health; mental health; mental illness; reform; crisis intervention training

Introduction

There are calls across America for police to re-imagine themselves as ‘guardians’ rather than ‘warriors’ in the performance of their innumerable duties (Rahr and Rice 2015). The guardian mindset – centred on the role of police as protectors – sits in opposition to a ‘warrior’ ethos conveying the view that police are ‘at war’ with those they serve. This call for cultural change in police work is a key thread woven throughout the recent report of the President’s Task Force on 21st Century Policing (2015). The urgency of this call stems from a series of tragic police encounters that have illuminated deep ruptures between police and communities across the nation. The Report emphasises deficits in the public’s trust and in the legitimacy of American law enforcement.

The contentious history of police attitudes and practices surrounding encounters with people affected by mental illnesses can be understood through the lens of this wider push towards guardianship. Those critical of police as mental health interventionists have for decades urged a shift in mindset towards health and welfare-oriented values during routine order maintenance and crime control activities that sometimes include the handling of crisis situations exacerbated by substance use and misuse. Efforts to transform police decision-making within a public health frame are

correspondingly decades old, with the first wave of reforms initiated in the 1980s in the wake of fatal encounters that could have ended differently.

Arguably, the story of police transformation dates back even earlier to the 1960s with the de-institutionalisation of mental health services and the profound lack of community-based resources to fill the gaps in mental health care (Manderscheid *et al.* 2009, Slate *et al.* 2013). In the ensuing decades, reformers set out to re-shape the policing ethos in a way that embraced their expanded public health role. This was critical in light of a troubling trend towards 're-institutionalising' people with mental illnesses in the criminal justice system (Wood *et al.* 2011). By the 1980s, a central mechanism of reform was (and continues to be) specialised police training designed to improve officers' knowledge of and attitudes towards mental health vulnerabilities while shaping their decision-making in favour of appropriate de-escalation techniques. This training focus has been supported by cross-system collaborations and cooperative arrangements between police and mental health 'drop-off' facilities best equipped to perform psychiatric assessments in a timely manner.

This paper reviews this story of reform efforts and looks into the future. It takes stock of what has been accomplished in fostering a guardian mindset in the handling of mental health-related encounters. It then explores critical opportunities for advancing the next wave of transformation needed to more fully align the missions of law enforcement and public health. We argue that specialised training – supported by cross-system collaboration and cooperative health care agreements – is a necessary, but not sufficient element in advancing the effectiveness and legitimacy of police as 'incidental' (Burris *et al.* 2010) mental health interventionists. In this paper, we make the argument for three needed areas of progress which tie in to wider developments in evidence-based policing and community trust-building. These are: (1) enhancing experiences of procedural justice during mental health-related encounters; (2) building the evidence base through integrated data sets; and (3) balancing a case-based focus with a place-based focus.

The (not-so) 'secret social service'

The public health aspects of everyday police work are traditionally under-valued and even worse, unacknowledged. Four decades ago, Punch characterised law enforcement as the 'secret social service' (Punch 1979). This was because the welfare-oriented roles of police were usually out of view, 'largely undocumented' (Punch 1979, p. 102) and therefore misunderstood by policy-makers, researchers and the general public. Punch explained that '[t]his lacuna in our understanding of police work conspires to make of the police a 'secret social service' because obligations in this grey area remain diffuse and unspecified while operational practice is largely hidden from scrutiny and evaluation' (Punch 1979, p. 102).

Supporting Punch's observations was a pioneering network of researchers (Banton 1964, Goldstein 1977, Muir 1977, Skolnick and Fyfe 1993, Westley 1970, Wilson 1968) who illuminated this social service function through careful attention to officers' decisions as they navigated an innumerable array of situations on the street. This body of work was not narrowly focused on officers' enforcement of the law, but more broadly on the ways in which they handled a gamut of situations using formal and informal means at their disposal. An important theme across this research was the observation that police were first and foremost situational problem-solvers. In every time-space moment, officers chose from a repertoire of 'peacekeeping' interventions, many of which did not involve the use of legal sanctions (Bittner 1967b).

The handling of mental health-related encounters was no different. Bittner's work in particular honed in on this area of police work (Bittner 1967a), which revealed larger parallels with his other work on 'skid row' policing (Bittner 1967b). Bittner showed us that officers experienced a rather profound tension between what they were authorised to do in handling situations and what they often chose to do to dispose of matters and move on to the next problem. He explained that police know the law, and are experienced in the intricacies of its application, but they rely predominantly on their craft knowledge, or 'area knowledge' (Bittner 1970), which informs 'provisional solutions' to problems

(Bittner 1990). When it came to handling mental health crises, officers routinely exercised 'psychiatric first aid' (Bittner 1967a), a process of communication and interaction designed to bring 'safety and normalcy' to the situation (Bittner 1967a, p. 288). Psychiatric first aid formed part of a larger orientation towards 'peacekeeping' rather than 'law enforcement' in the narrow conception of the term. Our recent observations of police work in contemporary Chicago echoed Bittner's findings, and invoked Punch's insights into the 'grey' area of social service work:

[O]fficers pay careful attention to negotiating peace with both complainants or callers and call subjects. This resolution of interests often occurs within a grey area that exists between the restricted options of invoking criminal law (arrest) and using civil law as grounds for emergency apprehension. In many cases, officers choose not to coerce a solution, but to align interests in the negotiation of peace (Wood, Watson and Fulambarker 2016, p. 16)

In the ensuing years since Bittner's early findings, questions about the effects of police decision-making on long-term mental health outcomes became more important. As the effects of de-institutionalisation accumulated, police experienced the work burden associated with gaps in community resources, coupled with increasingly stringent civil commitment criteria that limited their dispositional options (Wood *et al.* 2011). In this larger social context, Teplin extended Bittner's line of inquiry on the factors influencing police decision-making during mental health-related encounters (Teplin 1984a, 1984b, 2000, Teplin and Pruett 1992). Echoing Bittner, Teplin and Pruett found that officers generally preferred to handle matters informally. However, there was a disproportionate use of arrest with individuals manifesting signs of mental illness (1992). Arrest, in such cases, was often perceived as the only means of bringing a situation under control. As well, arrest was sometimes the only option available when the criteria for civil commitment were not met and citizens were demanding that something be done to bring peace. Additionally, arrest was seen as a viable option for those known to be too dangerous for a hospital setting or had a criminal charge pending (Teplin and Pruett 1992).

In a phenomenon Lamb *et al.* (2002) described as 'mercy booking', officers perceived detention in jail as the only available access point to psychiatric treatment. Indeed, in the United States, only persons who are incarcerated are constitutionally guaranteed adequate health care (Ruger *et al.* 2015). The implementation of the Patient Protection and Affordable Care Act (2010) has expanded access, but falls well short of a guarantee. Thus, for many, jail and prison are the only places they are able to access psychiatric care.

In this light, the criminalisation of mental illness (Slate *et al.* 2013) was in large part a by-product of limited dispositional options for police. At the same time, however, the manner in which police handled mental health-related encounters came under increased scrutiny during the late decades of the twentieth century. A series of encounters – involving numerous police agencies within America and beyond – resulted in fatal outcomes for the citizens involved (Cotton and Coleman 2010, Dupont and Cochrane 2000). This cumulative set of events sparked a concern with the mindset of police in relation to their roles as health interventionists. Using the current language of the Task Force on Twenty-first Century Policing, questions were raised about whether officers truly embraced a guardian mindset in their dealings with people experiencing mental illnesses. In the next section, we review efforts to transform the policing ethos and improve police decision-making during encounters.

The first wave of police reform

The increased scrutiny that began in the final decades of the twentieth century stimulated attention to the development of strategies to improve officer training and models of interagency cooperation to support safer and more effective responses to persons with mental illnesses. Several models emerged in the United States. A survey of police agencies conducted in the late 1990s (Borum *et al.* 1998; Deane *et al.* 1999) found that these models tended to fall onto one of three categories: (1) interagency agreements with mental health agency-based mobile crisis teams; (2) mental

health clinicians embedded in police agencies to provide consultation to officers in the field and (3) specially trained police officers who provide initial crisis response in the field and liaise with mental health providers to resolve calls. While research on models that fall within the first two categories is scant, there is a growing literature on the Crisis Intervention Team (CIT) model, which is a police-based model that includes specialised training for officers and significant cross-system and community collaboration (Compton *et al.* 2008).

CIT, sometimes called the Memphis Model, was first developed in Memphis, TN following the police shooting of a man who it turned out had been diagnosed with schizophrenia. The model includes partnerships between police, mental health agencies, advocates, and persons with lived experience; 40 hours of specialised training for officers who volunteer to become CIT officers; designated points of access to emergency psychiatric assessment and care; and changes to policies and procedures to facilitate a more effective response to persons experiencing mental health crises (Dupont *et al.* 2007). The CIT Centre at the University of Memphis estimates that over 3000 jurisdictions (including several outside of the United States) are implementing CIT programmes (University of Memphis CIT Centre, 2016). However, it is not clear how many of these jurisdictions are implementing the full CIT model (beyond the 40 hours of training).

While a randomised controlled trial of CIT effectiveness has yet to be conducted, there is a growing body of research that suggests CIT can impact important outcomes related to officer knowledge and attitudes, safety, diversion from arrest and linkage to services. We have the strongest evidence for the impact of CIT training on improving officer knowledge, attitudes and self-efficacy related to responding to persons with mental illnesses (Compton and Chien 2008, Compton *et al.* 2006, 2011, 2014a, Ellis 2014, Ritter *et al.* 2010, Wells and Schafer 2006). There is also evidence that these improvements maintain over time after the training, particularly for more experienced officers (Compton and Chien 2008). Overall, these findings are suggestive of a stronger guardianship orientation as a result of the training.

In terms of safety outcomes, there is some evidence that suggests CIT may reduce use of force. Compton *et al.* (2011) presented officers with scenarios containing increasing levels of subject resistance/combatative behaviour and found that CIT officers were less likely to endorse force as effective compared with officers who were not CIT certified. In a study of Chicago's CIT program, Morabito *et al.* (2012) found that CIT officers used less force with more resistant subjects. While they did not have a comparison group, Skeem and Bibeau (2008) examined CIT call forms from the Las Vegas Police Department and found that CIT officers used less force than they legally could have when responding to persons with mental illnesses. Additionally, Dupont and Cochran (2000) have reported reductions in injuries to officers and civilians following implementation of CIT in Memphis, TN.

In terms of call resolution, the evidence of the impact of CIT on arrests is less consistent, with some studies finding CIT reduces arrests of persons with mental illnesses (Compton *et al.* 2014b, Franz and Borum 2011, Steadman *et al.* 2000) and studies in different jurisdictions not detecting an impact (Teller *et al.* 2006, Watson *et al.* 2010). However, the studies that did not find an impact on arrests did find that CIT increased linkage to services (hospital transport or other linkage) (Teller *et al.* 2006, Watson *et al.* 2010) suggesting that in some cases, CIT may be serving to link individuals to services instead of no intervention. The extent to which this may prevent future police contacts and arrests is unknown.

Initially, CIT programs sought to train officers and develop relationships and workable protocols with psychiatric emergency receiving facilities, often times hospital emergency departments, so that officers could divert symptomatic individuals from arrest and to the hospital. More recently, CIT programs are collaborating with community partners to create options that allow officers to divert individuals from arrest/jails AND hospital emergency departments, as both are expensive and difficult environments to provide services to persons experiencing mental health crises. This includes the establishment of crisis triage centres, respite beds and co-responder linkage teams.

While the CIT model, with or without enhancements is most recognised and considered a 'Best Practice' model, other promising models have emerged. Like CIT, these models include mental

health crisis response training and rely heavily on public health-law enforcement partnerships and collaboration. The United States Department of Justice Bureau of Justice Assistance (DOJ/BJA) has recognised several jurisdictions implementing specialised policing responses as Law Enforcement/Mental Health Learning sites (Council of State Governments 2016), which include the Los Angeles (CA) Police Department and the Madison (WI) Police Department. The Los Angeles Police Department is implementing a multi-layered approach that includes mental health crisis response training, co-responder teams, follow-up linkage teams and a crisis triage desk that officers are required to call for persons experiencing mental health crises. The Madison Police Department utilises mental health liaison officers who work within their assigned districts with mental health providers, advocates, families and consumers to proactively problem solve, address system issues, and link people to needed services. Other elements of their approach include the approximately 60 hours of crisis management and mental health intervention training that all officers receive in the academy, and ongoing work with community partners.

While we have growing research on the effectiveness of CIT, we do not have research to judge if it is better than other models or which model is most effective for specific outcomes, and most likely, no one size fits all. What is clear is that there is growing acknowledgement of the guardian public health role that police play in responding to persons with mental illnesses, in crisis or otherwise. CIT and the other promising models recognise that while training officers is important, collaborating across systems is essential for ongoing problem-solving and the development of effective crisis response. Thus, while all officers should receive training related to recognising mental illness and basic de-escalation skills, simply making CIT training mandatory for all officers, as some have suggested, is unlikely to achieve the desired outcomes unless combined with collaboration and locally based problem-solving. We would also argue that there is an important role for officers who self-identify (volunteer) to serve a specialist role and take on additional responsibility for responding to mental health-related calls and working across systems to provide effective crisis response. This could be as a CIT officer (e.g. Memphis Model CIT program), a Mental Health Liaison (e.g. Madison, Wisconsin), or a member of a co-responder team (e.g. Los Angeles, California).

Critical opportunities for the next wave

Although first wave efforts have strengthened law enforcement-public health partnerships while improving officer knowledge and attitudes about health vulnerabilities, persons with serious mental illnesses continue to be significantly overrepresented among jail and prison populations, with recent studies estimating that 16–17% of the jail and prison populations in the United States have a serious mental illness (Ditton 1999, Steadman *et al.* 2009). Additionally, a report from the Treatment Advocacy Centre using 2011 police shooting data estimated that at least one quarter of persons shot and killed by police have a severe mental illness, giving them a 16 times greater likelihood of being killed by police than individuals without severe mental illnesses (Fuller *et al.* 2015). Thus, there are calls for a next wave of real-world diversion models that look beyond immediate call resolutions towards long-term outcomes for ill or vulnerable individuals repeatedly encountering the police.

We suggest that ‘critical opportunities’ for improving police interventions with people affected by mental illness can be located within a wider narrative about the future of policing in the twenty-first century. This narrative centres on ways of achieving a balance between effective, evidence-based policing and high-quality police encounters. In the sections that follow, we outline three areas of focus that should constitute the next wave of interventions with people affected by mental illnesses: (1) enhancing experiences of procedural justice; (2) building the evidence base through integrated data sets and (3) balancing a ‘case-based’ focus with a ‘place-based’ focus (see Mello *et al.* 2013).

Enhancing experiences of procedural justice during mental health-related encounters

The President's Task Force Report outlines the necessary conditions for fostering a guardianship culture in policing. One of these elements is citizen experiences of 'procedural justice' during routine encounters with officers. The theory of procedural justice arose in part out of a concern with the limits of deterrence and the threat of punishment as a mechanism for gaining voluntary compliance with legal authorities and the laws they enforce. The path to compliance is police legitimacy, which is enhanced when people experience police encounters as procedurally just. To create the experience of procedural justice, citizens must perceive they are being treated with dignity, respect, fairness and transparency, are given a 'voice' during the interaction, and sense trustworthy motives (Tyler 2004). A now robust evidence base demonstrates that procedural justice is a precondition for wider beliefs in police legitimacy, and ultimately, long-term voluntary compliance with the law (Mazerolle *et al.* 2012, Sunshine and Tyler 2003, Tyler 2003, 2004, 2006, Tyler and Fagan 2008, Tyler and Huo 2002).

The distinct value of procedural justice to mental health-related encounters has been explored in several studies, including one by Watson and Angell (2007, see also Livingston *et al.* 2014a, 2014b). They found that perceptions of procedural justice are particularly critical for stigmatised populations (2007) and in situations in which they feel the most vulnerable such as mental health crises or arrests (Watson and Angell 2013). Participants in the study reported feeling very vulnerable in encounters with police (Watson *et al.* 2008) and perceived procedural justice was associated with lower levels of resistance, greater cooperation with police in the encounter and greater willingness to cooperate with police in the future (Watson *et al.* 2010, Watson and Angell. 2013).

Despite this initial work, questions about how precisely procedural justice is experienced during moments of crisis or behavioural disturbance merit further study. This knowledge gap is especially apparent in relation to situations involving drug and/or alcohol use, where experiences of procedural justice may contain distinct, unmeasured dimensions. Furthermore, less is known about how best to support officers in providing procedurally just responses to people experiencing mental or behavioural health crises. CIT training is believed to facilitate more compassionate and procedurally just responses; however, this has not been directly tested. Outside of a procedural justice framework, mental health scholars have identified particular aspects of the police encounter experience that must be handled with great care, such as mode of conveyance to a psychiatric facility (wagon versus car) (Herrington *et al.* 2009). The question of whether or not mode of conveyance links conceptually to experiences of dignity may provide a useful line of inquiry.

Validated survey instruments for measuring procedural justice are publically available for use in replication studies (Murphy 2009, Tyler 2006), but surveys may not be optimal methods (at least exclusively) for testing and refining the theory with people affected by mental illnesses. Ethnographic and interview-based studies are also necessary as methods to validate existing procedural justice constructs and measures. A few studies have employed both interview and survey-based methods (Watson and Angell 2007) and a validated measure of procedural justice in these encounters, the Police Contact Experience Survey, is available (Watson *et al.* 2010). Findings from this initial work has important implications not only for the specialised training of police, but also for other emergency responders, medical personnel, outreach workers and others intervening at some point during an encounter. Tyler and Mentovich make the case that procedural justice is just as critical to securing voluntary compliance with the directives of health authorities as it is to the directives of criminal justice authorities (2013).

In short, an explicit commitment to enhancing experiences of procedural justice during mental health-related encounters could help to build on the gains achieved by CIT and CIT-enhanced programmes in fostering a guardian ethos among police.

Building the evidence through integrated data sets

As mentioned above, the extent to which CIT may prevent future police contacts and arrests is unknown. In other words, the question of whether or not CIT serves to reduce the 'cycling' of people with mental illnesses through the criminal justice and/or behavioural health systems has not been answered. In his critique of CIT, Geller writes that

[f]or many folks who are the 'beneficiaries' of frequent police pickups which lead to jail, emergency room, psychiatric hospital, or shelter, the immediate outcome is irrelevant. In a short time they'll be back on the streets, and the play will repeat itself. For far too many, 'CIT' might just as well stand for Consecutive Interventions without Treatment. (2008)

The current lack of data on consumer outcomes is a result of system fragmentation or 'parallelism' (Normore *et al.* 2015, Wolff 1998). Not only is there variation across police agencies in terms of data collected on call resolutions (Cotton and Coleman 2010), health and justice data systems rarely speak to one another in order to track both the incidence and outcomes of mental health-related encounters (Victoria Police 2007). This leaves police officers operating in a knowledge vacuum, unclear as to whether their methods of handling encounters lead to tangible improvements in consumers' lives. At present, police decision-making is guided in large part by situational circumstances, including their local knowledge of the person, the community context (including available resources), any associated criminal behaviour, and imminent safety and security considerations (Morabito 2007). This fragmented system problem therefore contributes to the view that officers can, at best, decide upon a provisional solution that avoids criminalisation.

From a cross-systems perspective, it is well known that particular sub-groups of people affected by mental illness, substance use and homelessness cycle repeatedly through both our criminal justice and health institutions (Constantine *et al.* 2012). Since multiple vulnerabilities do overlap (Normore *et al.* 2015), the problem of system fragmentation becomes ever more complex, with data from various social services (e.g. homeless outreach) being relevant in assessing outcomes for individuals holistically. The widest lens through which to view long-term outcomes would be one which accepts the 'social determinants' of mental health as interconnected risk factors (Compton and Shim 2015).

Inspiration can be drawn from current efforts at linking data systems and identifying those with acute vulnerabilities. For instance, in the U.S. state of New Jersey, the Camden Coalition of Healthcare Providers through their ARISE initiative (Administrative Records Integration for Service Excellence) links police administrative data (i.e. arrests, citations, calls for service) and hospital claims data (i.e. emergency room and critical care visits) and has so far found powerful evidence of 'cross-sector high utilizers' – those encountering both police and healthcare systems with regularity, and at great costs to both systems (Camden Coalition of Healthcare Providers 2015). These data, in conjunction with other analyses performed globally (Eriksson *et al.* 2013), provide opportunities for practitioners and researchers to experiment with new street-level interventions that may better target the risk factors of high utilizers. Clearly, there is a minefield of privacy issues related to cross-system data-sharing, but they are not insurmountable. In the United States, the Bureau of Justice Assistance, along with the Council of State Governments, has published a technical assistance guide titled 'Information Sharing in Criminal Justice-Mental Health Collaborations' (Petrla and Fader-Towe 2010), and programmes such as ARISE have developed strategies that protect individual privacy.

Balancing a case-based focus with a place-based focus

A commitment to assessing the long-term health and justice outcomes of individuals with police involvement reflects a wider commitment to 'epidemiological criminology' (Akers and Lanier 2009, Akers *et al.* 2012, Waltermaurer and Akers 2013), where the fields of criminology and public health converge around theories, methods and policy interventions. Complementing this 'case-based'

approach is another promising area of convergence; a 'place-based' approach which focuses on the geography of mental health-related encounters with police. Understanding where public health problems cluster, and why, has been at the heart of epidemiologic inquiry. More recently, criminologists have adopted a place-based perspective (Weisburd *et al.* 2009, Weisburd *et al.* 2012) in order to understand not only where crime concentrates and why, but also to guide more informed operational decisions about where to allocate finite police resources.

As a conceptual variation of crime 'hotspots' (Sherman *et al.* 1989), Wood and Beierschmitt explored what they described as 'hotspots of vulnerability' through a spatial analysis of locations where police pick up persons in crisis for conveyance to a psychiatric facility (2014). Their analysis confirmed the hypothesis that mental health-related calls (at least calls that resulted in police transport) are not equally distributed across the city. In a related vein, Hibdon and Groff (2014) performed geo-spatial analyses of Emergency Medical Services (EMS) calls to identify 'hot places' of drug use. Although the narcotics crime data collected by police illuminates street segments where drug-related crime is concentrated, Hibdon and Groff show that geo-referenced EMS data can help paint a fuller, more varied and richer picture of the spatial distribution of drug use and addiction.

Future studies of hot spots or hot places of vulnerability can help police agencies specifically and first responder communities more generally understand the spatial relationships between crime, mental health and substance use vulnerabilities. This geographic perspective can be used to inform cross-sector place-based interventions designed to align public safety and public health objectives. Although public health advocates are familiar with place-based approaches such as the establishment of needle or syringe exchange programmes for injection drug users (Werb *et al.* 2013, Ivsins *et al.* 2012), place-based interventions to address mental illness in particular should be given greater attention. Such interventions could include the targeted deployment of CIT or other specialist police officers in conjunction with intensive case management, outreach and follow-up services at vulnerable hot spots.

Conclusion

In the spirit of a wider commitment to strengthen a guardian mindset in policing, strides have been made in shifting the knowledge and attitudes of officers in their role as mental health interventionists. Cultural change in policing is invariably challenging, policing styles and occupational stereotypes do vary across officers and organisations (Wilson 1968), and departmental missions and philosophies can oscillate with political regime change. Nevertheless, programmes like CIT and its variants have spurred a generation of more sensitive and reflective officers. CIT-trained officers are now more skilled at choosing carefully from a repertoire of diversionary and non-punitive options in their handling of mental health-related encounters. There is hope in the idea that the tide of re-institutionalisation through criminal justice is slowly being reversed.

Notwithstanding this progress, the cross-system environments within which officers perform their work can militate against their desire to affect better outcomes for people affected by mental illnesses. Although police operate at the nexus point of law enforcement, mental health and social services, there are insufficient cross-sector arrangements for governing their work. Police continue to operate in an institutional vacuum, unclear whether their efforts to assist people in crisis yield meaningful public health and safety outcomes. The critical need to look beyond the proximal outcomes of police encounters and adopt a long-term view of cross-sector service effectiveness is fuelling current efforts to advance the 'next generation' of reforms (Epperson *et al.* 2011). Optimism can be drawn from the knowledge that the fields of policing and public health are beginning to align. A scholarly commitment to integrating theories and methods, combined with a cross-system commitment to reducing fragmentation, can lead to improved long-term outcomes for those with mental health and co-occurring vulnerabilities.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by the National Institute of Mental Health [grant number NIMH R01MH096744].

References

- Akers, T.A. and Lanier, M.M., 2009. "Epidemiological criminology": coming full circle. *American journal of public health*, 99 (3), 397–402.
- Akers, T.A., Potter, R.H., and Hill, C.V., 2012. *Epidemiological criminology: a public health approach to crime and violence*. San Francisco: Jossey-Bass.
- Banton, M.P., 1964. *The policeman in the community*. New York: Basic Books.
- Bittner, E., 1967a. Police discretion in emergency apprehension of mentally ill persons. *Social problems*, 14 (3), 278–292.
- Bittner, E., 1967b. The police on skid-row: a study of peace keeping. *American sociological review*, 32 (5), 699–715.
- Bittner, E., 1970. *The functions of police in modern society*. Chevy Chase, MD: National Institute of Mental Health.
- Bittner, E., 1990. *Aspects of police work*. Boston, MD: Northeastern University Press.
- Borum, R., et al., 1998. Police perspective on responding to mentally ill people in crisis: perceptions of program effectiveness. *Behavioral sciences & the law*, 16 (4), 393–405.
- Burris, S., et al., 2010. Making the case for laws that improve health: a framework for public health law research. *The Milbank quarterly*, 88 (2), 169–210. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/20579282>.
- Camden Coalition of Healthcare Providers. 2015. *Camden ARISE select findings, September 2015*. Camden, NJ: Camden Coalition of Healthcare Providers.
- Compton, M.T. and Chien, V.H., 2008. Factors related to knowledge retention after crisis intervention team (CIT) training for police officers. *Psychiatric services*, 59, 1049–1051.
- Compton, M.T. and Shim, R.S., 2015. *The social determinants of mental health*. Washington, DC: American Psychiatric.
- Compton, M.T., et al., 2006. Crisis intervention team training: changes in knowledge, attitudes, and stigma related to schizophrenia. *Psychiatric services*, 57 (8), 1199–1202.
- Compton, M.T., et al., 2008. A comprehensive review of extant research on crisis intervention team (CIT) programs. *Journal of the American Academy of Psychiatry and the Law*, 36 (1), 47–55.
- Compton, M.T., et al., 2011. Use of force preferences and perceived effectiveness of actions among crisis intervention team (CIT) police officers and non-CIT officers in an escalating psychiatric crisis involving a subject with schizophrenia. *Schizophrenia bulletin*, 37 (4), 737–745.
- Compton, M.T., et al., 2014a. The police-based crisis intervention team (CIT) model: I. effects on officers' knowledge, attitudes, and skills. *Psychiatric services*, 65 (4), 517–522.
- Compton, M.T., et al., 2014b. The police-based crisis intervention team (CIT) model: II. Effects on level of force and resolution, referral, and arrest. *Psychiatric services*. 65 (4), 523–529.
- Constantine, R.J., et al., 2012. The impact of mental health services on arrests of offenders with a serious mental illness. *Law and human behavior*, 36 (3), 170–176. doi:10.1037/h0093952.
- Cotton, D. and Coleman, T. G. (2010). Canadian police agencies and their interactions with persons with a mental illness: a systems approach. *Police practice and research*, 11 (4), 301–314.
- Council of State Governments, 2016. Law enforcement mental health learning sites. Available from: <https://csjjusticecenter.org/law-enforcement/projects/mental-health-learning-sites/> [Accessed 16 February 2016].
- Deane, M., et al., 1999. Emerging partnerships between mental health and law enforcement. *Psychiatric services*, 50, 99–101.
- Ditton, P.M., 1999. *Mental health and treatment of inmates and probationers*. Bureau of Justice Statistics Bulletin. Washington, DC: US Department of Justice.
- Dupont, R. and Cochrane, S., 2000. Police response to mental health emergencies: barriers to change. *Journal of the American academy of psychiatry and the law*, 28 (3), 338–344.
- Dupont, R., Cochran, S., and Pillsbury, S., 2007. *Crisis intervention team core elements*. Memphis, TN: University of Memphis.
- Ellis, H.A., 2014. Effects of a crisis intervention team (CIT) training program upon police officers before and after crisis intervention team training. *Archives of psychiatric nursing*, 28 (1), 10–16.
- Epperson, M., et al., 2011. *The next generation of behavioral health and criminal justice interventions: improving outcomes by improving interventions*. New Brunswick, NJ: Center for Behavioral Health Services and Criminal Justice Research.
- Eriksson, Å., et al., 2013. Offenders with mental health problems and substance misuse: cluster analysis based on the Addiction Severity Index version 6 (ASI-6). *Mental health and substance use*, 6 (1), 15–28.
- Franz, S., and Borum, R., 2011. Crisis intervention teams may prevent arrests of people with mental illnesses. *Police practice and research: an international journal*, 12 (3), 265–272.
- Fuller, D.A., et al., 2015. *Overlooked in the undercounted: The role of mental illness in fatal law enforcement encounters*. Treatment Advocacy Center. Available from: TACReports.org/overlooked-undercounted [Accessed 23 February 2016].
- Geller, J.L., 2008. Commentary: is CIT today's lobotomy? *Journal of the American academy of psychiatry and the law*, 36 (1), 56–58.

- Goldstein, H., 1977. *Policing a free society*. Cambridge, MA: Ballinger.
- Herrington, V., et al., 2009. *The impact of the NSW police force mental health intervention team: final evaluation report*. New South Wales: Charles Sturt University.
- Hibdon, J. and Groff, E.R., 2014. What you find depends on where you look: using emergency medical services call data to target illicit drug use hot spots. *Journal of contemporary criminal justice*, 30 (2), 169–185.
- Ivins, A., et al., 2012. An examination of injection drug use trends in Victoria and Vancouver, BC after the closure of Victoria's only fixed-site needle and syringe programme. *International journal of drug policy*, 23 (4), 338–340.
- Lamb, H.R., Weinberger, L.E., and DeCuir, W.J., 2002. The police and mental health. *Psychiatric services*, 53 (10), 1266–1271.
- Livingston, J.D., et al., 2014a. What influences perceptions of procedural justice among people with mental illness regarding their interactions with the police? *Community mental health journal*, 50 (3), 281–287.
- Livingston, J.D., et al., 2014b. Perceptions and experiences of people with mental illness regarding their interactions with police. *International journal of law and psychiatry*, 37 (4), 334–340.
- Manderscheid, R.W., Atay, J.E., and Crider, R.A., 2009. Changing trends in state psychiatric hospital use from 2002 to 2005. *Psychiatric services*, 60, 29–34.
- Mazerolle, L., et al., 2012. *Legitimacy in policing*. Available from: <http://www.campbellcollaboration.org/lib/project/141/>.
- Mello, M., et al., 2013. Critical opportunities for public health law: a call for action. *American Journal of Public Health*, 103 (11), 1979–1988.
- Morabito, M., 2007. Horizons of context: understanding the police decision to arrest people with mental illness. *Psychiatric services*, 58 (12), 1582–1587.
- Morabito, M.S., et al., 2012. Crisis intervention teams and people with mental illness: exploring the factors that influence the use of force. *Crime & delinquency*, 58 (1), 57–77.
- Muir, W.K., 1977. *Police: streetcorner politicians*. Chicago: University of Chicago Press.
- Murphy, K., 2009. Public satisfaction with police: the importance of procedural justice and police performance in police-citizen encounters. *The Australian and New Zealand journal of criminology*, 42 (2), 159–178.
- Normore, A.H., Ellis, B., and Bone, D.H., 2015. The defragmentation of mental health services, police, and the homeless. *Policing*, 10 (2), 134–142.
- Patient Protection and Affordable Care Act. 2010. Pub. L. No. 111–148, §2702, 124 Stat. 119, 318–319.
- President's Task Force on 21st Century Policing. 2015. *Final Report of the President's Task Force on 21st Century Policing*. Washington, DC: Office of Community Oriented Policing Services Available from: http://www.cops.usdoj.gov/pdf/taskforce/taskforce_finalreport.pdf.
- Petrila, J. and Fader-Towe, H., 2010. *Information Sharing in Criminal Justice-Mental Health Collaborations: working with HIPAA and other privacy laws*. Council of State Governments Justice Center, New York, 10005. Available from: https://www.bja.gov/Publications/CSG_CJMH_Info_Sharing.pdf.
- Punch, M., 1979. The secret social service. In: S. Holdaway, ed. *The British police*. London: Arnold, 102–117.
- Rahr, S., and Rice, S.K., 2015. *From warriors to guardians: recommitting American police culture to democratic ideals*. Washington, DC: Department of Justice. Available from: <http://www.hks.harvard.edu/content/download/76023/1708385/version/1/file/WarriorstoGuardians.pdf>.
- Ritter, C., et al., 2010. Crisis intervention team (CIT) training: selection effects and long-term changes in perceptions of mental illness and community preparedness. *Journal of police crisis negotiations*, 10, 1–2, 133–152.
- Ruger, J.P., Ruger, T.W., and Annas, G.J., 2015. The elusive right to health care under U.S. law. *The New England journal of medicine*, 26, 2558–2563.
- Sherman, L.W., Gartin, P.R., and Buerger, M.E., 1989. Hot spots of predatory crime: routine activities and the criminology of place. *Criminology*, 27 (1), 27–56.
- Skeem, J. and Bibeau, L., 2008. How does violence potential relate to crisis intervention team responses to emergencies? *Psychiatric services*, 59 (2), 201–204.
- Skolnick, J.H. and Fyfe, J.J., 1993. *Above the law: police and the excessive use of force*. New York, NY: Free Press.
- Slate, R.N., Buffington-Vollum, J.K., and Johnson, W.W., 2013 *The criminalization of mental illness: crisis and opportunity for the justice system*. 2nd ed. Durham, NC: Carolina Academic Press.
- Steadman, H.J., et al., 2000. Comparing outcomes of major models of police responses to mental health emergencies. *Psychiatric services (Washington, D.C.)*, 51 (5), 645–649.
- Steadman, H.J., et al., 2009. Prevalence of serious mental illness among jail inmates. *Psychiatric services*, 60 (6), 761–765.
- Sunshine, J. and Tyler, T.R., 2003. The role of procedural justice and legitimacy in shaping public support for policing. *Law and society review*, 37 (3), 513–548.
- Teller, J.L.S., et al., 2006. Crisis intervention team training for police officers responding to mental disturbance calls. *Psychiatric services*, 57, 232–237.
- Teplin, L.A., 1984a. Criminalizing mental disorder: the comparative arrest rate of the mentally ill. *American psychologist*, 39, 794–803.
- Teplin, L.A., 1984b. Managing disorder: police handling of the mentally ill. In: L. A. Teplin, ed. *Mental health and criminal justice*. Beverly Hills, CA: Sage, 157–175.
- Teplin, L.A., 2000. Keeping the peace: police discretion and mentally ill persons. *National institute of justice journal*, July, 9–15.

- Teplin, L.A. and Pruett, N.S., 1992. Police as streetcorner psychiatrist: managing the mentally ill. *International journal of law and psychiatry*, 15, 139–156.
- Tyler, T.R., 2003. Procedural justice, legitimacy, and the effective rule of law. In: M. H. Tonry, ed. *Crime and justice: a review of research* (Vol. 30, pp. 431–505). Chicago, IL: University of Chicago Press.
- Tyler, T.R., 2004. Enhancing police legitimacy. *Annals of the American academy of political and social science*, 593 (1), 84–99.
- Tyler, T.R., 2006. *Why people obey the law*. Princeton, NJ: Princeton University Press.
- Tyler, T.R. and Fagan, J., 2008. Legitimacy and cooperation: why do people help the police fight crime in their communities. *Ohio state journal of criminal law*, 6 (1), 231–275.
- Tyler, T.R. and Huo, Y.J., 2002. *Trust in the law: encouraging public cooperation with the police and courts*. New York, NY: Russell Sage Foundation.
- Tyler, T.R. and Mentovich, A., 2013. Mechanisms of legal effect: theories of procedural justice. In: A. C. Wagenaar and S. Burris, eds. *Public health law research: theory and methods*. San Francisco, CA: Jossey-Boss, 131–146.
- University of Memphis CIT Center. 2016. *Announcements* [online]. Memphis, TN: University of Memphis. Available from: <http://www.cit.memphis.edu/> (Accessed 4 August 2016).
- Victoria Police. 2007. *Peace of mind: providing policing services to people with, or affected by, mental disorders*. Melbourne: Victoria Police.
- Waltermauer, E. and Akers, T.A., 2013. *Epidemiological criminology: theory to practice* (Vol. 11.). Abingdon: Routledge.
- Watson, A.C. and Angell, B., 2007. Applying procedural justice theory to law enforcement's response to persons with mental illness. *Psychiatric services (Washington, D.C.)*, 58 (6), 787–793. doi:10.1176/appi.ps.58.6.787.
- Watson, A.C. and Angell, B., 2013. The role of stigma and uncertainty in moderating the effect of procedural justice on cooperation and resistance in police encounters with persons with mental illnesses. *Psychology, public policy and law*, 19 (1), 30–39.
- Watson, A.C., et al., 2008. Defying negative expectations: dimensions of fair and respectful treatment by police officers as perceived by people with mental illness. *Administration & policy in mental health & mental health services research*, 35, 449–457.
- Watson, A.C., et al., 2010. Outcomes of police contacts with persons with mental illness: the impact of CIT. *Administration and policy in mental health*, 37 (4), 302–317.
- Weisburd, D., Bernasco, W., and Bruinsma, G., 2009. *Putting crime in its place: units of analysis in geographic criminology* (Vol. 1). New York, NY: Springer.
- Weisburd, D., Groff, E., and Yang, S.-M., 2012. *The criminology of place: street segments and our understanding of the crime problem*. New York, NY: Oxford University Press.
- Wells, W. and Schafer, J.A., 2006. Officer perceptions of police responses to persons with a mental illness. *Policing: international journal of police strategies and management*, 29, 578–601.
- Werb, D., et al., 2013. Patterns of injection drug use cessation during an expansion of syringe exchange services in a Canadian setting. *Drug and alcohol dependence*, 132 (3), 535–540.
- Westley, W., 1970. *Violence and the police*. Cambridge, MA: MIT Press.
- Wilson, J.Q., 1968. *Varieties of police behavior: the management of law and order in eight communities*. Cambridge, MA: Harvard University Press.
- Wolff, N., 1998. Interactions between mental health and law enforcement systems: problems and prospects for cooperation. *Journal of health politics, policy and law*, 23 (1), 133–174.
- Wood, J. and Beierschmitt, L., 2014. Beyond police crisis intervention: moving 'upstream' to manage cases and places of behavioral health vulnerability. *International journal of law and psychiatry*, 37 (5), 439–447.
- Wood, J., et al., 2011. *Police interventions with persons affected by mental illnesses: a critical review of global thinking and practice*. New Brunswick, NJ: Center for Behavioral Health Services and Criminal Justice Research, Rutgers University.
- Wood, J., et al., 2016. The "gray zone" of police work during mental health encounters: findings from an observational study in Chicago. Published online ahead of print. doi:10.1177/1098611116658875.