Police responses to vulnerable populations: tracking the evolution from "zero-policing" to "co-responding"

Policing strategies for vulnerable people

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Abstract

Purpose – The paper examines the historical shifts in policing strategies towards individuals with SMI and vulnerable populations, highlighting the development of co-response models, introducing the concept of "untethered" co-response.

Design/methodology/approach – This paper conducts a review of literature to trace the evolution of police responses to individuals with serious mental illness (SMI) and vulnerable populations. It categorizes four generations of police approaches—zero-policing, over-policing, crisis intervention and co-response—and introduces a fifth generation, the "untethered" co-response model exemplified by Project SCOPE in Philadelphia.

Findings – The review identifies historical patterns of police response to SMI individuals, emphasizing the challenges and consequences associated with over-policing. It outlines the evolution from crisis intervention teams to co-response models and introduces Project SCOPE as an innovative "untethered" co-response approach.

Research limitations/implications – The research acknowledges the challenges in evaluating the effectiveness of crisis intervention teams and co-response models due to variations in implementation and limited standardized models. It emphasizes the need for more rigorous research, including randomized controlled trials, to substantiate claims about the effectiveness of these models.

Practical implications – The paper suggests that the "untethered" co-response model, exemplified by Project SCOPE, has the potential to positively impact criminal justice and social service outcomes for vulnerable populations. It encourages ongoing policy and evaluative research to inform evidence-based practice and mitigate collateral harms associated with policing responses.

Social implications – Given the rising interactions between police and individuals with mental health issues, exacerbated by the COVID-19 pandemic, the paper highlights the urgency for innovative, non-policing-driven responses to vulnerable persons.

Originality/value – The paper contributes to the literature by proposing a fifth generation of police response to vulnerable persons, the "untethered" co-response model and presenting Project SCOPE as a practical example.

Keywords Police co-response models, Policing persons with SMI, Policing vulnerable populations **Paper type** Conceptual paper

Introduction

Through at least the late 1950s persons in the US with serious mental illness (SMI) were frequently housed in hospital settings that provided shelter and medication (Yohanna, 2013). At the apex of this policy in 1955, state hospitals housed an estimated 559,000 persons with SMI (Frank and Glide, 2006). But, starting in the mid-1960s, states began a process of deinstitutionalization under the common assumptions that hospitals were inhumane, new medications could help reduce symptoms and allow persons with SMI to "function" in community settings, and states needed to save money (Accordino *et al.*, 2001; Baker, 2007;



Davis *et al.*, 2012; Kessler *et al.*, 2005; Krieg, 2001). By 2003, the number of persons with SMI housed in state hospitals had decreased to approximately 47,000 (Davis *et al.*, 2012; Frank and Glide, 2006; Geller, 2000), leaving hundreds of thousands of persons with SMI potentially unhoused.

As a result, prisons began to play a larger role. As of 2011, at least 623,500 persons with SMI were unhoused; and at least 459,000 persons with SMI were incarcerated (Substance Abuse and Mental Health Services Administration, 2012; but see: Lamb and Weinberger, 2014). Moreover, Baranyi *et al.* (2022, p. 557) find evidence that among incarcerated men and women in 21 countries, at least 30% of them are living with severe *dual* disorders, which include SMI coupled with major depression and/or substance use disorders.

Perhaps unsurprisingly, with the closing of many state health hospitals, the police have become the primary community-based responders to crises involving persons with SMI and/or addiction (Manderscheid *et al.*, 2009; Slate *et al.*, 2013), often with troubling outcomes. Evidence has shown, for example, that police have disproportionately arrested people experiencing mental health crises (Teplin and Pruett, 1992; Ruiz and Miller, 2004; Godfredson *et al.*, 2010). A significant proportion of these arrests, however, may have represented "mercy bookings:" arrests when officers felt they had no legitimate, alternative response (Lamb *et al.*, 2002). Evidence also indicates that police officers have used deadly force at much higher rates against persons showing signs of mental health or other behavioral crises (Brouwer, 2005; Cotton and Coleman, 2010; de Tribolet-Hardy *et al.*, 2015). Indeed, and largely as a result of these deadly encounters, engaged members of society have pushed for new training and deployments that would allow or even require police officers to respond with less coercive methods to people showing signs of mental health distress (Johnson, 2011; Wood and Watson, 2017).

This paper examines the evolution of police responses to persons with SMI, and more broadly, vulnerable population members. Policing has moved through four generations of responses, beginning with the "zero-policing" or "hospital" era. Zero-policing simply recognizes that during the period in history when state hospitals represented the primary providers for people experiencing serious mental health crises, policing had virtually no systematic response to managing persons with SMIs because they did not need them. "Zero-policing" evolved to the "over-policing," era, then to "crisis intervention teams," and finally to the "co-response" era.

These eras, or generations, are not mutually exclusive, and they may not reflect the complete universe of responses and policies across the United States. However, they do provide a useful heuristic for tracing the development of the typical policing approaches through the period of deinstitutionalization to manage situations involving persons in crisis. Thus, the discussion of the different response models allows for the development a taxonomy of policies, rather than establishing clear-cut "eras."

The current review culminates with an illustration of a fifth-generation, the "untethered" model of police responses to persons experiencing mental health crises. The review introduces Project SCOPE (Safety, Cleaning, Ownership, Partnership, Engagement) (Wilson, 2022) – a program administered in conjunction with the transit police in Philadelphia designed to connect vulnerable population members who take shelter in subway stations with social services while reducing the overall number of police contacts, police arrests, uses of force and other enforcement actions involving vulnerable population members. While Project SCOPE focuses on issues germane to transit policing in an urban setting, an untethered co-responder model can generalize to municipal policing and to a range of other contexts in which law enforcement must systematically engage with people in crisis.

The following section describes the processes for conducting the literature search. Although the present study is not a systematic review, it does incorporate an *a priori* framework that guided both our search for literature and the inclusion of papers into the review.

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Methodology

To identify literature that helped trace the "eras" of police responses to vulnerable populations, several databases, including JSTOR, Sage Journals, Criminal Justice Abstracts, PubMed and Google Scholar, were systematically searched for peer-reviewed journal articles and books. This used keywords related to co-response models, crisis intervention teams and policing vulnerable populations and persons with mental illnesses to identify articles. Search parameters specified studies published in the English language between 1960 and 2024. We present the search strings and individual database results in the appendix. Studies using strong quasi-experimental or randomized experimental designs that test the effects of different police-mental health programs among vulnerable populations were preferred. Our search returned relatively few articles that reported on randomized controlled trials (RCTs), commonly considered the gold standard of research, which is consistent with the findings of systematic reviews related to crisis intervention and co-response models (e.g. Puntis et al., 2018; Marcus and Stergiopoulos, 2022). Therefore, we also included publications using mixed methods and qualitative designs. Finally, we included articles examining programs outside the United States so that the complete universe of police responses to vulnerable populations would be considered.

The study identifies multiple types of articles (e.g. reviews and program evaluations) that highlighted a distinct evolution of how police could respond to vulnerable: zero-policing, overpolicing, crisis intervention teams and co-response [1].

Identifying eras of police responses to vulnerable populations

Zero-policing approach – or the "hospital era"

During the 1950s and throughout most of the 1960s, state hospitals generally housed (when necessary) persons experiencing SMI (Lamb and Weinberger, 2020; Yohanna, 2013), leaving police with a limited role in managing this population (McGrew *et al.*, 1999). While police often represented the first responders in the community to persons experiencing SMI, their initial interventions often led to commitments in state hospitals of such persons, reducing the likelihood that police officers would repeatedly contact the same individuals in community settings (McGrew *et al.*, 1999).

Perhaps as a result, policing through the 1970s did not view itself as a primary service provider to people experiencing SMI or addiction and therefore did not develop specific protocols for systematically engaging with such individuals (e.g. McGrew et al., 1999; Kane, 2022). Thus, this review refers to the early era of responses to persons with SMI as the "Zeropolicing Approach," not because police did not interact with persons experiencing SMI. They did encounter them, often with troubling or even tragic outcomes, such as the use of deadly force (e.g. Cotton and Coleman, 2010). Rather, our taxonomy is a way of noting that before the initial wave of deinstitutionalization that began in the mid-1960s (e.g. Kritsotaki et al., 2016), policing policy did not develop specific procedures to guide officers during such encounters.

It wasn't until the mid-1970s, when the effects of deinstitutionalization were becoming evident at the street level, that police officers began to routinely contact people experiencing SMI and the first paradigm shift occurred. Given that police departments had few policies or procedures to guide officers during these encounters, a new so-called "over-policing" era would begin.

Over-policing approach

After the deinstitutionalization of mental health services that occurred in the 1960s, the police became the primary institution for responding to individuals suffering mental health crises (Manderscheid et al., 2009; Slate et al., 2013). This is not surprising: several generations of police researchers have emphasized the social service function of police, noting the importance of police as first responders to persons in crises: (e.g. Goldstein, 1977; Skolnick and Fyfe, 1993; Wilson, 1968; Bittner, 1967; Wood and Watson, 2017). An important aspect of this social service function in policing is the use of discretion by officers in managing mental health-related encounters (Punch, 1979) and other crises. Wood et al. (2016) refer to this gap between formal and informal interventions as the "gray zone" of police work: during encounters with people who may have an SMI or other crisis, police officers could respond with a range of actions such as arrest, transport to a mental health facility or nothing at all because many situations involving persons in crisis do not require, per se, any formal, legalistic intervention.

Still, and despite the research consistently finding that police officers generally prefer to dispose of mental health encounters informally (Bittner, 1990; Wood et al., 2016), evidence also indicates that the police disproportionately arrest individuals displaying signs of SMI (Teplin and Pruett, 1992; Ruiz and Miller, 2004; Godfredson et al., 2010). These higher arrest rates are perhaps due to the lack of dispositional options available to the police, coupled with officers' desires to provide persons experiencing mental health crises with the resources they appear to need at that moment (Wood et al., 2011; Lamb et al., 2002). Thus, some officers may have understood that an arrest could allow a person to access psychiatric care (Ruger et al., 2015).

While some of the criminalization of mental illness (Slate *et al.*, 2013) can be attributed to these so-called "mercy bookings" (Lamb *et al.*, 2002), police have been scrutinized for their overly aggressive use of coercion, particularly deadly force. People experiencing mental illness are much more likely to be killed by the police than people in the general population (Brouwer, 2005; Cotton and Coleman, 2010; de Tribolet-Hardy *et al.*, 2015). Such overrepresentation in deadly force encounters has led some scholars and policymakers to criticize police training in the area of encounters with persons in crisis in both the US and abroad (Deane *et al.*, 1999; Kesic *et al.*, 2013; Moore, 2010). Evidence does suggest, however, that persons experiencing mental health or drug-related crises can be intoxicated or otherwise impaired when contacted by police and may increasingly engage in aggressive behaviors toward officers, potentially explaining the increased risk of deadly force during such encounters (Fyfe, 2000; Kaminski *et al.*, 2004; Short *et al.*, 2013).

Another complicating factor during police encounters with persons experiencing SMI can be the actions of responding officers who may escalate conflict and create situations where they are forced to use their firearms (Godfredson *et al.*, 2011; Brouwer, 2005; Kane, 2022). It may be that the traditional police response, which typically involves multiple officers yelling verbal commands such as "Stop!" or "Get on the ground," may be confusing to people experiencing a crisis. For example, such commands can lead the person to make furtive movements, which can lead to the police use of deadly force (e.g. Kane, 2022; Reisig *et al.*, 2004; de Tribolet-Hardy *et al.*, 2015). An increasing awareness, within academia and agencies, forced a reconceptualization of the role of police during a crisis, leading to another fundamental policy shift.

Crisis intervention team approach

After decades of "over-policing" mental health encounters, and following several highly public shootings of persons experiencing SMI (Johnson, 2011), policing was forced to develop new policies and training to better guide officers during their encounters with people experiencing a mental health crisis (e.g. (Morrissey *et al.*, 2009; Wood and Watson, 2017)).

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The most notable result of this new policing approach has been the Crisis Intervention Team (CIT), originally developed in Memphis, Tennessee after the 1988 police killing of a man diagnosed with schizophrenia (Dupont and Cochrane, 2000). CIT typically emphasizes training for officers to manage a person experiencing SMI, and enhanced collaboration with community service providers as a way of diverting persons (where possible) experiencing SMI from arrest (Watson and Fulambarker, 2012; Compton *et al.*, 2008).

The formal Crisis Intervention Team (CIT) model requires 40 h of training for officers to become certified (Wood and Watson, 2017). Typical elements of the model include partnerships between the police and mental health agencies, access to emergency psychiatric care and a change in police department policies and procedures related to interactions with persons experiencing crises (Dupont *et al.*, 2007). CIT has become ubiquitous across US police departments and many abroad, with over 3,000 programs being reported in use around the world (University of Memphis CIT Centre, 2016).

Despite its broad implementation, CIT has been difficult to systematically evaluate given the substantial variations in CIT implementations across police departments (Watson *et al.*, 2008). Moreover, full implementation of CIT requires police departments to make systemic changes to nearly every aspect of their operations (e.g. Watson and Fulambarker, 2012) – a difficult proposition for organizations known to resist the implementation of new operations (Bittner, 1970; Kane, 2022; Rogers, 2003).

The results of the research examining the impacts of CIT are mixed. Studies have shown that CIT may increase referrals to services (Kane *et al.*, 2018), improve transport and linkage to care (Watson *et al.*, 2021; Teller *et al.*, 2006) and reduce the use of force (Compton *et al.*, 2011; Morabito *et al.*, 2012) as well as injuries to members of the public and police officers (Dupont and Cochrane, 2000). In their systematic review of the literature, however, Marcus and Stergiopoulos (2022) found that "there is little evidence to suggest that CIT models averted arrests, impacted use of force, or the resolution of crisis calls on scene compared to standard policing." (see also: Yang *et al.*, 2018). Still, other research has found that CIT improves the knowledge, attitudes and effectiveness in dealing with persons with mental illnesses among officers trained in CIT (Ritter *et al.*, 2010; Compton *et al.*, 2011; Ellis, 2014).

One significant challenge to CIT is that while CIT should be focused on *crisis* events, the majority of mental health calls for service to which intervention teams respond do not rise to that level, making CIT officers frequently unprepared for the situations they are most likely to confront (e.g. Coleman and Cotton, 2016; Morabito *et al.*, 2018). In the end, without more rigorous, causal research claims about the effectiveness of CIT remain unsubstantiated (Watson *et al.*, 2017).

Crisis intervention teams represent what, in healthcare, would be termed a "downstream" treatment, meaning it intervenes at an acute moment in a person's life where the urgency of the encounter often requires split-second decision-making (McMahon, 2022). Alternatively, "upstream" approaches intervene with an at-risk person *before* their situation becomes a crisis (McMahon, 2022). Treating patients upstream means healthcare teams can take more time with the patient, reduce the risk of verbal and physical conflict and generally offer a broader set of non-acute care options (Martins and Burbank, 2011). Policing has developed a similar upstream approach to responding to at-risk people, known as the "co-response" model.

Co-response approach

Introduced during the 1990s in California, the co-response model is a deployment strategy that pairs police officers with mental health professionals or outreach workers. These co-response teams typically respond to calls for service related to mental health (Lamb *et al.*, 1995; Morabito and Savage, 2021) but some include responses to members of "vulnerable"

populations – for example people with substance use disorder, and those experiencing homelessness and mental health challenges (e.g. Reuland, 2010; White and Weisburd, 2018). Co-response policing can be conceptualized as an up-stream deployment because it is designed to intercept and treat vulnerable people before their situations – for example addiction, lack of shelter and/or emotional/mental well-being – escalate to crisis levels.

Though not always expressly stated, co-response policing is rooted in a harm-reduction conceptual framework designed to minimize potential conflict that might otherwise exist between police and members of vulnerable groups. Harm reduction strategies, emphasizing "pragmatic yet compassionate" care, were developed in Europe as alternatives to the traditional disease-focused drug addiction interventions (Marlatt, 1996, p. 779). Through the mid-1990s, harm reduction was introduced in the US primarily as an alternative to the "use reduction" interventions guided by the American "War on Drugs" (Des Jarlais, 1995; Marlatt, 1996). Harm reduction approaches to substance use emphasized the opening of pop-up safe injection sites, the decriminalization of certain drugs and the de-politicalization of drug policy (Klein, 2020).

As applied to policing, harm reduction has existed mostly as a proposed philosophy toward the use of police discretion, particularly concerning decreasing discretionary arrests (e.g. Beckett, 2016; Kane, 2022) and as the practice of diverting people who use drugs (PWUD) and those who engage in sex work from arrest (Herbert *et al.*, 2018; Perrone *et al.*, 2022). For example, the LEAD program implemented by the San Francisco Police Department in 2017 – though not a co-response model – was a harm-reduction program designed to reduce arrests and recidivism among PWUD and sex workers (Magaña *et al.*, 2022).

Co-response policing, which also emphasizes diversion and to some extent, encourages treatment, can be viewed as a form of harm-reduction policing, given its alternatives-to-enforcement approaches to public behaviors that have long been considered disorderly, such as drug use, sex work, serious mental illness (SMI) and homelessness. Indeed, co-response deployments have become a popular policing strategy in the US and abroad (e.g. Australia, Canada and the United Kingdom), allowing patrol officers to harness the expertise of mental health professionals when managing persons who might be addicted, experiencing homelessness or in mental health crisis (Shapiro *et al.*, 2015; Puntis *et al.*, 2018; Robertson *et al.*, 2020).

Despite the rising usage, however, research examining the effectiveness of the co-response model is limited; one recent systematic review identified only 26 studies in the literature (Puntis et al., 2018). One of the reasons for this is the lack of a standardized model, which has resulted in numerous variations of joint police/clinician responses that can vary markedly from one jurisdiction to another (Morabito and Savage, 2021). Co-response models have also included police ride-alongs, remote support, mobile crisis units, plainclothes officers and uniformed officers (Kisely et al., 2010; Puntis et al., 2018; Thomas and Kesic, 2020). The deployment locations and strategies of co-response models also vary, with some implemented to reactively respond to calls throughout a jurisdiction (Lamanna et al., 2018), some used to proactively target known crime hot spots (White and Weisburd, 2018) and others dictated by the implementing agency's resource constraints and priorities (Morabito et al., 2018).

Still, the goals of co-response are consistent: reducing the number of hospitalizations and emergency room (ER) admissions of vulnerable people (Meehan *et al.*, 2019; Morabito *et al.*, 2018), while diverting vulnerable people *away* from criminal justice engagement, such as arrest and physical altercations with police (Lamb *et al.*, 1995; Reuland, 2010).

Research on the efficacy of co-responding is mixed. Puntis *et al.* (2018) found that co-response models were associated with a reduction in the use of police powers of detention, resulting in lower numbers of people being detained. Scholars also found that the co-response model can lead to reductions in the number of involuntary psychiatric assessments (Robertson *et al.*, 2020) and a decreased reliance on police in issues related to mental health

(Marcus and Stergiopoulos, 2022). Meehan *et al.* (2019) found that co-response teams resolved the immediate crisis for the majority of people they contacted and that these interventions also reduced the number of emergency department (ED) admissions. Some evidence suggests that citizens approached by police officers paired with mental health professionals view the police more favorably, increasing perceptions of legitimacy and procedural justice (Furness *et al.*, 2017; White and Weisburd, 2018).

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Un-tethered co-response models

Recently, a new model of co-response has emerged that combines elements of CIT and elements of Assertive Community Treatment – that is a treatment approach that further removes policing from the front lines of engagement with vulnerable people. Assertive Community Treatment (ACT) represents a long-standing model of outreach designed to provide community-based mental health treatment for vulnerable individuals (Olfson, 1990; Bond and Drake, 2015). Originally rooted in psychiatry, and lacking a policing component, ACT deploys mental health professionals into community settings to intervene with people experiencing SMI and the "greatest level of functional impairment." (Phillips *et al.*, 2001, p. 771). Since the early 2000s, several RCTs have shown ACT to be effective at successfully treating patients with SMI while allowing them to remain in their community settings (see Bond and Drake, 2015 for a concise summary of the current state of ACT).

More recently, ACT has become Flexible Assertive Community Treatment (FACT) and reconceptualized to more fully integrate a range of community-based social service options to treat persons experiencing SMI and keep them out of acute care settings. Though not typically a policing intervention, FACT has been refined into a model that can accommodate a policing component, despite that it would not be police-led. In that way, a FACT program would be "untethered" from police, despite that it could be considered a co-response deployment.

In Philadelphia, an example of the "untethered" police co-response model has emerged as a response to an emerging crisis (MacDonald, 2022). Project SCOPE (Safety, Cleaning, Ownership, Partnership, Engagement) is a collaboration between the Southeastern Pennsylvania Transit Authority (SEPTA), and the Southeastern Pennsylvania Transit Authority Police Department (SEPTA PD). Project SCOPE deploys outreach workers autonomously in many of the most challenged subway stations of Philadelphia to connect vulnerable individuals (e.g. people experiencing addiction, homelessness and/or mental health crises) to social service providers (Southeastern Pennsylvania Transportation Authority, 2022). The program was implemented in the fall of 2021 after SEPTA transit leaders created a safety committee in response to public and political concerns about the rising number of vulnerable individuals taking refuge in subway stations (MacDonald, 2022).

Like other co-response programs, Project SCOPE is largely rooted in the concept of harm-reduction policing; though, given its "untethered" nature, where outreach workers are deployed independently from officers, Project SCOPE can be considered an adapted form of FACT. As such, SCOPE outreach specialists, similar to more traditional co-response models, coordinate their efforts with the police, are deployed in coordination with police officers, and carry a police radio to call for officer assistance when needed. But while Project SCOPE outreach specialists and police officers work in collaboration through a formal partnership, the outreach specialists contact vulnerable population members on their terms and time, build rapport with vulnerable population members outside of police presence and involvement and decide when they require police intervention due to personal safety or other needs. Thus, Project SCOPE may be viewed as a hybrid of traditional police co-response and flexible assertive community treatment (FACT).

Project SCOPE outreach teams provide numerous services while present at the SEPTA subway/transit stations, such as distributing resources (e.g. food, clothing, rides and even wound care), referring people to social service agencies (e.g. for housing assistance, and addiction and mental health services) and deploying Narcan. In some cases, outreach teams directly connect a vulnerable individual with a social service provider. However, when a situation escalates to a crisis level or the outreach workers are faced with safety concerns, they call for police support.

A primary goal of Project SCOPE is to remove police from most front-line interactions with vulnerable population members, potentially reducing conflict that sometimes characterizes police encounters with vulnerable persons. In this way, SCOPE teams assume the role of the lead responder, which may be one key to their success, given research showing that it can take multiple engagements before a vulnerable person will accept services offered by an outreach worker (e.g. Morabito *et al.*, 2018; Morabito and Savage, 2021).

Another potential – though, as of yet, untested – benefit of the untethered co-response model is the way it frees up the time of police officers to focus more on general patrol in areas characterized by large numbers of vulnerable population members. By creating an overall area of security in small-scale spaces (e.g. subway stations), police officers may foster an environment in which the social outreach workers can do their jobs without fear of being hassled.

Table 1 summarizes studies examining police responses to persons experiencing serious mental illness. Notably, the table classifies peer-reviewed journal articles by their relevant response eras (i.e. over-policing, crisis intervention, co-response), the years the studies covered, countries in which the studies were conducted, the findings of the studies (with asterisks indicating statistically significant findings) and the effect sizes. The table also includes descriptions of the crisis intervention or co-response programs for relevant studies.

Conclusions

As state hospitals around the country decreased their in-patient services to persons experiencing serious mental illness, it is no surprise that policing became the leading public response to people in crisis. The ongoing opioid crisis has only exacerbated this tension and need. Indeed, just as the so-called crack "epidemic" of the late 1980s quickly became less a public health issue and more a violent crime matter (Hartman and Golub, 1999; Shachar et al., 2020), society's response to persons with SMIs has become a familiar story: "unleash the cops!" (Walker, 2014, p. 100). Given that the police are socialized and expected to function as crime fighters (e.g. Bittner, 1970; Kane, 2022; Klockars, 1985), it is unsurprising that they would have relied more on enforcement (e.g. arrests, use of force, even deadly force) tactics than on a treatment-oriented approach when contacting people with SMI. As the research examining the police response to persons with mental illness has shown, police have created new deployment strategies to help de-escalate conflict between officers and vulnerable population members, initially through crisis intervention teams and more recently through police-social service provider co-response deployments.

Vulnerable individuals, many of whom are unhoused and experiencing SMI and/or substance use disorders, frequently come into contact with police officers. As a result, such individuals are overrepresented among arrests and police use of fatal force. The COVID-19 pandemic appears to have exacerbated the scope and impact of the vulnerable population growth. Indeed, recent data indicate that the number of interactions between the police and individuals struggling with mental health issues has increased meaningfully (Homelessness Research Institute, 2020). The need for innovative, non-policing-driven responses will only increase in the face of these challenges.

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Era	Article	Years of study	Country of study	Program description	Findings	Effect size
Over- policing	Teplin and Pruett (1992)	1980– 1981	United States	N/A	*Significantly greater arrest rate among vulnerable populations compared to non-vulnerable	46.7% arrest rate vs 27.9% arrest rate ($\rho < 0.001$)
Over- policing	Ruiz and Miller (2004)	2002	United States	N/A	Populations *Significantly greater rate of injury 47% of calls involving among police officers when vulnerable populations responding to calls with vulnerable ($\rho < 0.001$)	47% of calls involving vulnerable populations $(p < 0.001)$
Over- policing	Godfredson et al. (2011)	2008	Australia N/A	N/A	populations Most common police response to encounters with vulnerable populations mental health	M = 4.31, SD = 1.40 for apprehension and $M = 3.71$, SD = 1.31 for arrest (5 Point 2.7).
Over- policing	Kesic <i>et al.</i> (2013)	1995– 2008	Australia	N/A	apprenension and arrest *Vulnerable populations significantly more likely to be involved in a force incident by	Likert Scale) 7.2% of force incidents included vulnerable populations ($p < 0.001$)
Over- policing	Cotton and Coleman (2010)	2000	Canada	N/A	ponce Vulnerable populations overrepresented among police	3.1 times more interactions with police than general
Crisis intervention	Compton <i>et al.</i> (2011)	2009	United States	Officers received 40 h of training related to de-escalating situations involving persons struggling with a mental health crisis	*CIT officers statistically significantly less likely to use force during interactions with vulnerable	43.5% of CIT officers compared to 63.1% of non-CIT officers used force $(p < 0.05)$
Crisis intervention	Teller et al. (2006)	1998– 2004	United States	Officers received a 40-h introduction to mental health and mental illness with an intensive overview of the local mental health system and were encouraged to make referrals to mental health providers	populations *CIT implementation statistically significantly increased linkage of vulnerable populations with emergency treatment services	32.8% of calls including vulnerable populations resulted in psychiatric services after CIT compared to 25.8% of calls before CIT (ρ < 0.001)
						(continued)

Table 1. Summary of studies examining police responses to persons experiencing serious mental illness

size	M = 37.02, SD = 16.2 after CIT training compared to M = 30.46, SD = 14.98 before CIT training (Knowledge Questionnaire) (b < 0.05)	No effect of CIT training on arrest rate of vulnerable populations ($p = 0.214$)	50% of officers surveyed agreed that CIT trained officers were better equipped to respond to mental health-related calls than other officers	Increase in self-reported confidence after taking CIT training compared to before training $t(14) = 4.329$, $(p < 0.001)$	(continued)
Effect size			50% cagreece were herespor respor		
Findings	*CIT officers displayed statistically significantly more knowledge of effective responses to interactions with vulnerable populations	*No statistically significant difference in arrest rates among CIT models and traditional policing responses	Police officers believed that CTT training does not increase effectiveness in responding to vulnerable populations	*Statistically significant difference in officer confidence with interactions involving persons with mental illness	
Program description	Officers received 40 h of training intended to enhance police officers' interactions with individuals with mental illness and improve the safety of all parties involved in mental health crises	40 h of police training on how to identify individuals with mental health issues, on verbal de-escalation, community resources, as well as partnerships with mental health providers, advocates and other stakeholders	Officers received a scenario-based curriculum that teaches officers to recognize the signs of mental health crisis in individuals, and to use appropriate techniques to deescalate the situation and assess the needs of the individual	Police officers received training to reduce harm to police and persons with mental illness, as well as to increase handoffs to mental health professionals	
Country of study	United States	2010– Canada 2020	United States	Australia	
Years of study	2012	2010– 2020	2016	2008– 2009	
Article	Ellis (2014)	Crisis Marcus and intervention Stergiopoulos (2022)	Yang <i>et al.</i> (2018)	Crisis Herrington and 2008– intervention Pope (2013) 2009	
Era	Crisis intervention	Crisis intervention	Crisis Yang et al. intervention (2018)	Crisis intervention	

Era	Article	Years of study	Country of study	Program description	Findings	Effect size
risis ntervention	Crisis Compton et al. intervention (2014)	2010	United States	40-h training that provides officers with knowledge and techniques essential to identifying signs and symptoms of mental illnesses, deescalating crisis situations and making appropriate dispositions	*Officers who received CIT training significantly less likely to arrest persons with mental illness and significantly more likely to link them with mental health services	40% of CIT officers referred individuals to mental health services compared to 29% without CIT (OR = 1.70, $p < 0.05$); 13% of CIT officers arrested vulnerable populations compared to 24% of 0.05 – 0.47 $6 < 0.05$
Crisis intervention	Watson (2010)	2007	United States	40-h training to reduce arrests of persons with mental illness, increase diversion to martal houth corriges and improve cafety	CIT training led to increasing linkage to services	N/A
Co-response	Puntis <i>et al.</i> (2018)	2018	United Kingdom	mental neath professionals assist the police during incidents involving an individual experiencing a mental health crisis either in person or remotely from a control room.	*Co-response models statistically significantly reduced number of vulnerable individuals detained by the rolice for montal health reasons	1.4% of co-response contacts resulted in arrest compared to 13.3% of police-only contacts $\theta_0 < 0.001$
Co-response	Meehan et al. (2019)	2017	Australia	A mental heards in on a control from the hired to work alongside police to determine the nature of the distress and level of risk present on-site when receiving calls involving a martal hearth emergency.	Co-response model reduced number of emergency room admissions among vulnerable populations	(p < coor) (p < coor) (p0% of cases received by coresponse team did not require emergency room admission
o-response	Co-response Robertson et al. (2020)	2016	Australia	A mental health nurse and a specially trained police officer respond to calls for assistance by emergency and other services attending people potentially in a mental health crisis.	Co-response model reduced number N/A of involuntary psychiatric assessments among vulnerable populations	N/A
Co-response	Morabito et al. (2018)	2011– 2016	United States	Police officers paired with mental health clinicians provide community-based psychiatric crisis services to persons experiencing psychiatric emergencies	Co-response increased number of referrals to mental health services for vulnerable populations	22.3% of incidents answered by co-response unit resulted in a referral to mental health services
						(continued)

Era	Article	Years of study	Country of study	Program description	Findings	Effect size
Co-response	White and Weisburd (2018)	2015	United States	Police officers were paired with mental health clinicians to spend time in hot spots in an effort to connect people who suffer from mental health and substance abuse problems to services and rebuild trust between the police and community	Co-response model increased perceptions of the police among vulnerable populations	N/A
Co-response	Bailey et al. (2022)	2017	United States	A police officer, mental health clinician and EMS parameter respond to calls involve a person with suspected mental or behavioral health or substance use issues	*Co-response unit was significantly less likely to make arrests and significantly more likely to refer vulnerable populations to mental health services	Co-response unit less likely to arrest (OR = 0.48) and more likely to link to mental health services (OR = 1.71) $(b < 0.05)$ for both
Co-response	Bais and Brisebois (2021)	2016– 2018	Canada	Social workers assist police officers with calls involving psychosocial emergencies such as family or partner violence, suiciderelated behaviors, psychosocial crises and mental health problems	*Co-response program was associated with statistically significant decreases in police use of force and hospital transports, as well as a statistically significant increase in referrals to community	Co-response unit led to decreases in force (ATE = -0.077 ; $p \le 0.05$) and transports to hospital (ATE = -0.773 ; $p \le 0.01$); increases in of-773; $p \le 0.01$); increases in referrals to services
Co-response	Bailey <i>et al.</i> (2023)	2020– 2021	United States	A police officer, mental health clinician and EMS paramedic respond to calls involve a person with suspected mental or behavioral health or substance use issues	Calls answered by co-response unit were not resolved differently from those answered by traditional police resonase	N/A
Co-response	Yang et al. (2024)	2016– 2019	United	Mental health clinicians provided a secondary response to mental health-related calls, police initially responded to the call to assess the situation and secure the scene, and then called to request the presence of a mental health clinician	*No statistically significant difference for the number of police contacts between individuals engaged by co-response unit and those engaged by traditional police response	Number of police contacts between police as usual group and co-response group not statistically different $(p = 0.82)$
Source(s):	Source(s): Table by authors					

This paper has described the trajectory of four different generations of police response to vulnerable populations: over-policing, crisis intervention and co-response. It has proposed a new model, dubbed the "untethered" co-response, that at least one big-city transit authority police department has developed and implemented. An untethered co-response model is one where outreach workers are deployed to provide services to vulnerable people *independently* from police patrols. Project SCOPE represents a co-response model that is similar to Flexible Assertive Community Treatment models that also deploy into community settings to engage and treat vulnerable individuals experiencing SMI.

Policing strategies for vulnerable people

While SCOPE is currently untested, in terms of its effectiveness, it is nevertheless an example of one re-interpretation of the typical co-response model. Moreover, given Project SCOPE's resemblance to many FACT programs, it has the potential to take examples from the evaluations of FACT showing that community-based treatment of vulnerable individuals may be effective for youth populations (Broersen *et al.*, 2022), integrating community-based treatment options (Trane *et al.*, 2021), working within the context of court-ordered treatment (Stuen, 2019), engaging people with intellectual disabilities (Neijmeijer *et al.*, 2020) and including licensed clinicians as part of the community outreach teams (Van Haaren *et al.*, 2021).

Indeed, as police departments move away from traditional coercion-based responses to vulnerable individuals, and as they adopt a mentality of harm reduction over the historic mandate of crime control, they have the opportunity to become the primary integrators of community-based treatment across a variety of challenging settings and population groups. Co-response generally, and the untethered co-response model in particular, may represent policing's best option to regain legitimacy in the eyes of a public that has been increasingly questioning the role of the police in society.

Notes

- A list of publications returned from the search categorized by their specific era can be found in Appendix.
- 2. Search strategies by authors
- 3. Publications classified by era of police response to vulnerable populations by authors

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Further reading

Michaud, L., van der Meulen, E. and Guta, A. (2023), "Therapeutic alignments: examining police and public health/harm reduction partnerships", *Policing and Society*, pp. 1-15, doi: 10.1080/ 10439463.2023.2263616.

Appendix

Database	Results
ProQuest National criminal justice reference service (NCJRS) abstracts	408 70
Web of science core collection	512
JSTOR Google scholar	509 1,270
Source(s): Table by authors	

Table A1. Search results

Search strategies

ProQuest national criminal justice reference service (NCJRS) abstracts [2]

PubMed

ISTOR

Google Scholar

TX ("psychiatric" OR "mental health" OR "mental illness" OR "mentally ill" OR "mental disorder*") AND ("street triage" OR "co-respon*" OR "law enforcement" "crisis team*" OR "emergency respon*" OR "crisis intervention" OR "policie" OR "policing")

Web of science core collection

TOPIC: TX ("psychiatric" OR "mental health" OR "mental illness" OR "mentally ill" OR "mental disorder*") AND ("street triage" OR "co-respon*" OR "law enforcement" "crisis team*" OR "emergency respon*" OR "crisis intervention" OR "police" OR "policing") OR TITLE: TX ("psychiatric" OR "mental health" OR "mental illness" OR "mentally ill" OR "mental disorder*") AND ("street triage" OR "co-respon*" OR "law enforcement" "crisis team*" OR "emergency respon*" OR "crisis intervention" OR "police" OR "policing")

Publications classified by era of police response to vulnerable Populations *Indicates article is included in* Table 1 [3].

Zero-policing

- (1) Accordino et al. (2001)
- (2) Baker (2007)
- (3) Baranyi et al. (2022)
- (4) Davis et al. (2012)
- (5) Frank and Glide (2006)
- (6) Geller (2000)
- (7) Kessler *et al.* (2005)
- (8) Krieg (2001)
- (9) Kritsotaki *et al.* (2016)
- (10) Lamb and Weinberger (2014)
- (11) Lamb and Weinberger (2020)
- (12) McGrew et al. (1999)
- (13) Yohanna (2013)

Over-policing

- (1) Bittner (1967)
- (2) Bittner (1970)
- (3) Bittner (1990)
- (4) Brouwer (2005)
- (5) Cotton and Coleman (2010)
- (6) Deane et al. (1999)
- (7) de Tribolet-Hardy et al. (2015)

- (8) Fyfe (2000)
- (9) Godfredson et al. (2010)
- (10) Godredson et al. (2011)
- (11) Goldstein (1977)
- (12) Johnson (2011)
- (13) Kaminski et al. (2004)
- (14) Kesic et al. (2013)
- (15) Lamb et al. (2002)
- (16) Manderscheid et al. (2009)
- (17) Moore (2010)
- (18) Punch (1979)
- (19) Reisig et al. (2004)
- (20) Ruiz and Miller (2004)
- (21) Short et al. (2013)
- (22) Skolnick and Fyfe (1993)
- (23) Slate et al. (2013)
- (24) Teplin and Pruett (1992)
- (25) Wilson (1968)
- (26) Wood and Watson (2017)
- (27) Wood et al. (2011)
- (28) Wood et al. (2016)

Crisis intervention

- (1) Compton et al. (2008)
- (2) Compton et al. (2011)
- (3) Compton et al. (2014)
- (4) Dupont and Cochran (2000)
- (5) Dupont *et al.* (2007)
- (6) Ellis (2014)
- (7) Herrington and Pope (2013)
- (8) Kane et al. (2018)
- (9) Marcus and Stergiopoulos (2022)
- (10) Morabito et al. (2012)
- (11) Morrissey et al. (2009)
- (12) Ritter et al. (2010)
- (13) Teller et al. (2006)
- (14) Watson (2010)

- (15) Watson and Fulambarker (2012)
- (16) Watson et al. (2008)
- (17) Watson et al. (2017)
- (18) Watson et al. (2021)
- (19) Yang et al. (2018)

Co-response

- (1) Bailey et al. (2022)
- (2) Bailey et al. (2023)
- (3) Blais and Brisebois (2021)
- (4) Furness et al. (2017)
- (5) Kisely et al. (2010)
- (6) Lamanna et al. (2018)
- (7) Lamb *et al.* (1995)
- (8) Meehan et al. (2019)
- (9) Morabito and Savage (2021)
- (10) Morabito et al. (2018)
- (11) Puntis et al. (2018)
- (12) Reuland (2010)
- (13) Robertson et al. (2020)
- (14) Rosenbaum (2010)
- (15) Shapiro et al. (2015)
- (16) Thomas and Kesic (2020)
- (17) White and Weisburd (2018)
- (18) Yang et al. (2024)

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