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Health Effects of Policing in Hospitals: a Narrative Review

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Abstract

Importance Law enforcement activity, in the form of outside agencies or hospital security forces, is increasingly common in American healthcare. Little is known about the potential effects of this prevalent, modifiable exposure on hospital staff and patient health. This narrative review characterizes existing evidence on the direct and indirect health effects of law enforcement activity in hospitals.

Observations Law enforcement activity in hospitals can affect health outcomes through four mechanisms: (1) physical health effects related to workplace violence, restraint use, excessive force, and weapon use; (2) mental health effects involving perceptions of safety and psychological distress; (3) social effects related to the patient-provider relationship, mistrust, and bias and discrimination; and (4) legal and ethical considerations affecting overall well-being.

Conclusions and Relevance Unchecked law enforcement activity in hospitals may risk patient physical and mental health, reduce patient trust, result in bias and discrimination, and contribute to legal and ethical rights violations. Importantly, law enforcement activity in hospitals may also contribute to staff perceptions of safety. To fill knowledge gaps on the measurable impact of law enforcement activity in the hospital on staff and patients, hospitals should collect and publicly share robust data on law enforcement activity in their facilities, create and adopt patient-centered policies to ensure safety and protect patient health and privacy, and implement evidence-based interventions that safely reduce law enforcement involvement with patients.

Keywords Policing · Police · Law enforcement · Health effects · Black Americans · Hospital

Introduction

In the last three decades, police activity has increased across the USA, including within hospitals [1]. Evidence from outside the healthcare system has shown that encounters with law enforcement and the criminal-legal system can negatively affect individual and community health [2–7]. In addition to the approximately 2000 individuals hospitalized annually due to law enforcement-related injuries [8], exposures to routine law enforcement activity such as traffic stops, arrest, and detention are linked to physical injury [9–11], chronic illness [12, 13], post-traumatic stress disorder, lower mental health [6, 14, 15], and worse overall well-being [5]. In contrast to the health risks associated with law enforcement outside the hospital, little is known about the health effects of increasingly frequent law enforcement activity in hospitals. Our objective is to review and evaluate existing research on the health effects of law enforcement activity in hospitals, identify gaps in

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knowledge to inform future studies, and highlight potential policy and practice improvements.

Law enforcement officers can enter hospitals either from the outside community or as hired on-site security at healthcare facilities. Officers entering from the community may be accompanying patients who are under arrest or in custody, investigating reported crimes, or called to the scene by hospital staff [16]. Up to 1.3% of emergency department visits and 1.5% of hospital admissions involve incarcerated patients accompanied by law enforcement officers, exposing nearby patients, visitors, and staff to law enforcement activity [16–18]. The prevalence of law enforcement exposure through investigation or safety watches is not known. In an effort to reduce the high prevalence of workplace violence in healthcare settings, law enforcement officers are also sometimes hired by hospitals to provide on-site security services. In surveys conducted between 1988 and 2019, the proportion of hospitals reporting the use of on-site police or security officers increased from 62 to 97% [19–21]. These security forces are often authorized to make arrests and may deploy canine teams, erect metal detectors, or monitor patients and visitors through other means [20, 22, 23].

Mirroring broader patterns of policing in the USA, non-white and lower income communities are likely disproportionately exposed to law enforcement presence in hospitals, although exact frequencies are unknown. The presence of sworn police officers, undercover agents, and security teams is more common in hospitals that serve predominantly Black and low-income populations, such as public hospitals, larger hospitals, and trauma centers [19, 21, 24, 25]. Healthcare workers have also been found to be more than twice as likely to call for support from security officers in encounters with Black patients and their visitors compared to white patients [26]. Exploration of the health impact of law enforcement in hospitals must take into account the likely disproportionate effects on non-white stakeholders as well as possible contributions to broader health disparities linked to policing and the criminal-legal system. [9, 10, 27–29].

The pervasiveness of law enforcement activity in hospitals creates the potential for unintended effects on patient health. In this narrative review, we explore existing literature on the health-related effects of police presence in hospitals, both positive and negative. We classify evidence into four broad categories through which police activity can affect health outcomes: (1) physical health effects including physical safety and outcomes associated with police restraints; (2) mental health effects, including perceptions of safety and psychological distress; (3) social effects, including harm to the patient-provider relationship, erosion of trust, and risks of bias and discrimination; and (4) legal and ethical consequences of policing in hospitals. We consider the relationship between hospital police activity and patient outcomes and discuss potential directions for future research, health policy, and practice improvements.

Physical Health Effects

Physical Safety

Workplace Violence

The increase in law enforcement and security presence in hospitals largely developed in response to high rates of workplace violence in healthcare, which exceed those in any other industry despite being underreported [30]. In 2018, healthcare workers accounted for 73% of all reported nonfatal violent workplace illnesses and injuries nationwide [31, 32]. The American College of Emergency Physicians and other professional organizations continue to encourage hospitals to deploy security personnel, coordinate with local law enforcement, and conduct on-site surveillance as part of workplace violence mitigation strategies, at least in certain high-risk settings like emergency departments [33].

Whether these traditional police and security strategies reduce workplace violence in healthcare is unclear. The deployment of security or police has rarely been studied as a stand-alone intervention, and it has been difficult to identify strategies that reliably reduce workplace violence [30, 34]. Multi-component strategies have shown more promise than isolated interventions when systematically reviewed [35]. However, the deployment of police or security officers has not been examined independently or as a separate component of multi-pronged strategies. As a result, evidence has not clearly linked hospital police and security activity to reductions in workplace violence.

Large policy-based studies of the relationship between hospital security or police presence and workplace violence are also lacking, and the research that does exist has shown mixed results. California enacted the Hospital Safety and Security Act in 1995, making it one of the only states to require hospitals to report violent events, train employees in violence prevention, and track staff and security personnel availability. While one retrospective analysis found that assault rates among emergency department employees in California dropped by 48% relative to a control state following implementation of the law, the absolute rate of violence decreased only slightly [36]. Many limitations make these findings difficult to interpret, including varied response rates before and after enactment of the law and the possibility that actual security practices may not have varied significantly between hospitals in the study and control populations.

The majority of publications on workplace violence interventions have been case reports that may or may not be generalizable. A single institution's experience found

increasing traditional security measures alone resulted in more weapons being confiscated, but not decreased violence against staff [37]. There are also case reports of successful interdisciplinary interventions, including one psychiatric hospital in New Hampshire where introduction of a nurse-police coalition reduced assault rates and staff injury by half over 5 years [38]. This collaboration limited police interactions with patients, vested clinical staff with sole decision-making authority over police involvement, prohibited use of force except in circumstances of extreme and imminent danger, and required prompt return of situational authority to the nursing staff. The unclear link between strategies that rely on police and security to improve safety and actual rates of workplace violence highlights the need to consider the downsides of these interventions as well as whether more targeted evidence-based approaches could achieve desired results with less cost and risk.

Excessive Force and Weapon Use

Police encounters with patients, staff, and visitors inside hospitals can create unique physical safety risks. Nationwide, police-inflicted injuries account for between 51,000 and 85,000 emergency department visits annually and result in over 1000 injuries requiring trauma medical services [39–41]. Although evidence is limited, police and security activity in and around hospitals may have similar risks. There are individual reports of police violence directed at patients, staff, and visitors. A 2016 New York Times investigation found more than a dozen examples of hospital police or security officers killing or seriously injuring patients or visitors [42], including two hospital police killings in 5 years at one public Los Angeles County hospital [43]. Similar to limitations in workplace violence research, the lack of population-based or large-scale prospective surveillance makes identifying nationwide patterns difficult.

The presence of armed officers in hospitals may also indirectly contribute to the risk of gun violence. Weapons used by or taken from security personnel or police were found to be involved in 18% of 154 identified US hospital-based shootings from 2000 through 2011 [44]. Depending on the setting, up to 28% of these shootings resulted in death or injury. It is difficult to interpret any of these results without analysis accounting for law enforcement's role in violence prevention. Recognizing that gun availability can pose risks to bystanders, the American Psychiatric Association recommends against the use of weapons in hospitals except when armed individuals are threatening the safety of others [45].

Novel Safety Interventions

The failure of existing interventions to reduce workplace violence combined with growing interest in non-law enforcement responses to conflict has led to the recent development of novel hospital safety strategies. Emerging evidence is beginning to show that Behavioral Emergency Response Teams (BERTs) may be an effective strategy to reduce hospital violence without law enforcement intervention [46–49]. Interdisciplinary BERT members trained in patient-centered treatment and de-escalation can be activated similarly to traditional medical rapid response teams [50]. A case study from one medical-surgical unit found that following implementation of a BERT, assaults, security intervention, and use of restraints dropped by 90%, 83%, and 80%, respectively, after 6 months [51]. While evaluations of BERT interventions are ongoing [52, 53], existing reviews and best practices statements support their use over security-only responses to conflict [54, 55].

Use of Non-Medical Restraints

Depending on local hospital and law enforcement policies, hospital police and security forces may have the authority to apply non-medical restraints to patients or visitors, and patients who are in law enforcement custody may be restrained throughout their care [16, 56]. The frequency and consequences of these practices in the hospital are largely unstudied. Research on the effects of law enforcement restraint use in the community, non-medical restraint use in specialized patient populations, and medical restraint use in hospitalized patients may be useful to explore for hypothesis building regarding the impact of law enforcement restraint use in the hospital setting.

Prevalence of Non-Medical Restraints and Types of Injury

It is not uncommon for patients under arrest or in custody to be restrained with handcuffs and/or shackles in healthcare settings, regardless of medical condition. A recent survey of general surgery residents at one academic hospital found that the majority of respondents had operated on an incarcerated patient with an armed guard present in the operating room or had cared for a patient who was intubated and shackled to a bed [57]. One recent medical report linked a case of pressure-related soft tissue injury to police shackles in a hospitalized patient [58]. There are no published national estimates on the prevalence of hospitalized patients in custody or existence of non-medical restraint policies for hospitalized patients in custody.

The use of police restraints is associated with negative health effects outside of the hospital, and similar effects may exist in hospitals. Mechanisms of restraint-related injury outside of hospitals range from documented musculoskeletal and neurological injury [59] to reports of sudden death without a clear medical cause [60–63]. Although the mechanisms of restraint-related death are uncertain and controversial,

several factors are thought to contribute to injury, including hypoventilation, the physiologic stress response, and catecholamine-induced cardiac arrhythmias and vascular collapse [63, 64]. Overall, more than 20% of arrest-related deaths in the USA occur in individuals restrained with handcuffs or leg shackles [65], suggesting that physical restraints may play a role in these fatalities.

Although different patient populations are affected, medical restraints used in hospitals are associated with negative health outcomes that could also potentially be observed with the use of law enforcement restraints. Medical restraints, frequently applied to reduce fall risk or self-injury in delirious patients, are linked to increased risk of pressure injury, infection, delirium, and death [66–73]. Because the same mechanisms may play a role in medical and non-medical restraint, there may be an association between non-medical restraint and increased length of stay, venous thromboembolic disease, soft tissue pressure injury, and infection risk similar to medical restraint. To our knowledge, these relationships have not been studied. It is not known whether non-medical restraints used by law enforcement are associated with these outcomes in practice.

Pregnant Patients

The population where the impact of law enforcement restraint has been most studied is pregnant patients in law enforcement custody. In the USA, approximately 20,000 people per year are pregnant upon entry into the correctional system, and it is common practice for labor and delivery to occur at off-site civilian hospitals where shackling policies may apply [4, 74, 75]. Although recent laws have limited the use of shackles in pregnant individuals in the federal corrections system [76], nearly 20% of surveyed local jails, which are state-controlled facilities, report requiring patients to be shackled during delivery [77], and over half restrain mothers in custody immediately after delivery [78]. A majority of states also still permit the routine use of shackles during the third trimester and postpartum recovery, and nine states permit shackling throughout labor and delivery and during medical emergencies [79].

The use of law enforcement restraints in hospitalized pregnant patients has been theoretically linked to several negative health outcomes including increased fall risk and subsequent placental abruption and venous thromboembolic events (VTE), prolonged labor, increased pain, and delays in transport to the operating room when necessary. The use of leg irons and handcuffs may result in imbalance and reduced ability to ambulate or break falls normally [80]. Falls during pregnancy are associated with placental abruption and 2.5 times increased risk for VTE [81]. Immobilization can also prolong labor and prevent pain-alleviating movements. Evidence from other contexts has linked time in the supine position to prolongation of labor, although changes in maternal position have not been found to significantly affect the well-being of mother or fetus [82]. Shackles could also delay transport to the operating room when emergent surgery becomes necessary, thus increasing risk for delivery complications to both mother and fetus [83]. Although it is unclear what the clinical significance of these theoretical risks are, many professional medical and legal organizations oppose the use of police restraints during labor, delivery, and the postpartum period [83–85].

Mental Health Effects

Perceived Safety

Staff perceptions of safety and concerns about workplace violence are frequently cited as reasons to maintain or increase police or security presence in hospitals [86], and most existing evidence has found that these interventions increase staff perceptions of safety on average. In a survey of emergency and psychiatric nurses in California and New Jersey, feelings that security equipment, training, experience, and response time were adequate were all strongly correlated with increased overall feelings of security [87]. None of these features, however, were predictive of actual assault rates in the ED [86]. These findings echo an older survey that reported increased perception of safety after implementation of a 24-h security force [88]. In an Ohio pediatric emergency department, respondents similarly reported they would feel "more safe" with increased presence from hospital security staff (55%) and local police (71%) [89].

While visible hospital security efforts may bolster an important sense of safety among some hospital staff, existing survey-derived data may also present a limited perspective. Most available literature assesses perceptions of safety among physicians and nurses and may not capture perceptions of safety among patients, visitors, and ancillary staff. In a recent series of interviews, emergency medicine physicians at multiple facilities characterized their interactions with outside law enforcement as mixed, with expressions of frustration or confusion sometimes outweighing perceptions of increased safety [90]. Not all stakeholders associate increased law enforcement presence with increased safety. It is important to determine whether perceived safety can be improved through other interventions and help limit police and security responses to situations where it might achieve the greatest benefit with the least harm.

Psychological Distress

Police encounters may cause psychological distress in hospitalized patients. Nearly half of all individuals in one

psychiatric hospital who were restrained by law enforcement during transport reported significant distress associated with the use of restraints, including loss of dignity, reduced autonomy, and humiliation [91]. Although there is a lack of research directly examining the mental health effects associated with police restraints, there is a link between restraint use in general and psychological distress [66, 92–95]. The psychological effects of medical restraints, which have been more extensively studied, include lasting feelings of abandonment, isolation, and mistreatment [96]. Survivors of sexual abuse and other trauma may also be at increased risk of re-experiencing memories associated with restraints [97], and restraint use has been associated with development of PTSD in ICU patients [98, 99].

Shackling of patients by police may also cause psychological distress for hospital staff, patients' families, and other visitors. Preliminary results from a series of qualitative interviews our team conducted with hospital-based violence intervention programs (HVIP) nationwide found that violence intervention workers and patient families report significant distress resulting from witnessing critically ill patients being handcuffed or otherwise restrained to their hospital beds and restricted from having visitors [100]. Together, the mental effects of physical restraint use can contribute to decreased patient, family, and provider sense of well-being, negatively affecting perception of care and potentially exacerbating existing psychiatric conditions [96].

Social Effects

Patient-Provider Relationship and Mistrust

Police involvement in patient care can damage the patient-provider relationship and erode trust in the healthcare system. Mistrust of individual providers and of the healthcare system is associated with reduced communication of important health information, decreased utilization of preventive and emergency care, increased barriers to accessing medication, and higher likelihood of leaving the hospital against medical advice [101–105].

The social effects of police involvement in patient care are evident at many stages of patient interaction within the healthcare system. Direct police involvement with patients before arrival at a hospital has been most closely studied in Philadelphia, where informally since the 1980s, and formally since 1996, many victims of violent crime have been transported to hospitals by police vehicle rather than emergency medical services (EMS) [106]. There, and in Chicago, where similar research has been conducted, Black male trauma victims interviewed after being brought to the hospital by police or encountering police at the scene of their injury have reported that police involvement in this initial period can result in perceived prioritization of investigation over transportation and that searches for weapons and evidence at the scene delayed their medical care [101, 107]. While some victims note that police involvement facilitated speedy transport and provided reassurance, others refused police transport due to mistrust, even after suffering multiple gunshot wounds.

Within hospitals, policing has also been shown to erode patient trust in the medical system and strain the patient-provider relationship. Trauma patients have reported intentionally minimizing symptoms and withholding accurate contact information from healthcare workers out of fear that clinicians would share information with police officers [102]. Police presence during care can weaken collaborative decision-making between patients and providers, decrease information-sharing, and exacerbate barriers to accessing medication and resources for recovery [107]. Criminalization and stigma can intensify these effects, as police questioning during care can lead patients to perceive that investigation of crime is more important than their health [101, 108]. Observational research has found that police patrols of public emergency department waiting rooms and unprompted police requests for patient identification can result in implicit or explicit threats of arrest that lead would-be patients to abandon seeking care altogether [1]. This "blurring of the lines" between policing and healthcare can be an important mediator of patient experiences and eventual health outcomes [101].

Erosion of patient trust in the healthcare system can also have negative health effects extending beyond the individual. For instance, law enforcement restrictions on family visitation or access to remains of loved ones who are killed while subject to police interest may have unstudied consequences for patients, families, and communities [100]. Survivors of violence have also reported reluctance to enroll in research due to fear of police involvement and general mistrust of the medical system [109]. Because lack of trust broadly decreases diverse participation in biomedical research [103, 104] this may contribute to exacerbation of health inequality over the long term [105].

Several knowledge gaps remain regarding the effect of policing on the patient-provider relationship and mistrust in the healthcare system. Most existing research directly examining the relationship between police involvement in care and patient experiences consists of qualitative studies that are limited in size and population type, focusing almost exclusively on Black male trauma victims. More varied data assessing how hospital-based policing affects trust, information disclosure, patient experiences, and, ultimately, medical outcomes is needed to fully assess the effect of law enforcement on the patient-provider relationship.

Risk of Bias and Discrimination

Reliance on traditional police and security responses in hospitals may risk further entrenching bias and racism already present in healthcare and law enforcement. Non-white civilians are disproportionately likely to experience violence, suffer serious injury, or be killed by police [39, 110, 111]. Healthcare workers are also more than twice as likely to call for support from security officers in encounters with Black patients and their visitors compared to white patients [26] and Black patients are 1.22 times as likely as white patients to be restrained in the ED [112]. Public reporting of the private police forces deployed at a major American academic hospital found significant racial disparities in arrest rates; nearly three-fourths of arrested individuals and nearly ninety percent of individuals ultimately charged by hospital police were Black [113]. The San Francisco Department of Public Health has similarly reported that 48% of incidents of police force used against patients at its local public hospitals and clinics in the last fiscal year involved Black patients [114]. The disproportionate use of other types of force by police or security officers, including making arrests or conducting searches of patients or patient property, has not been quantified. Importantly, experiences of excessive force and racism are linked to additional adverse health outcomes [11, 12, 14, 115, 116].

Policing in hospitals may reinforce healthcare workers' negative stereotypes and biases against certain patients. Healthcare workers have similar implicit bias scores compared to the general population [117],which affects clinical decision-making and contributes to negative health outcomes [118–122]. While it is difficult to quantify the direct impact of policing on implicit bias and of implicit bias on clinical decision-making, 25–29% of surveyed healthcare workers have reported that they spend less time interacting with incarcerated patients compared to non-incarcerated patients and that incarcerated patients receive fewer diagnostic tests and medical interventions than patients who are not incarcerated [123]. Nearly half of surveyed general surgery residents at one hospital reported that they believe incarcerated patients receive substandard care [57]. Gunshot survivors similarly report experiencing a lack of compassion from healthcare workers and stigmatization by hospital personnel secondary to bias associated with being subject to police interest [107].

Legal and Ethical Consequences

Policing in hospitals can also raise legal and ethical concerns that affect patients through rights violations and involvement with the criminal-legal system. These indirect risks to patient health range from immediate infringement of patient privacy rights to the long-term health consequences of arrest or incarceration that may follow police interactions while receiving medical care [124].

Disclosure of protected health information (PHI) to police poses the most well-described threat to patient rights. Based upon reports from frontline workers, law enforcement officers frequently request protected information from clinicians about patients, especially in cases of violent or traumatic injury in the emergency department [90, 100, 124, 125]. No comprehensive data exists on the frequency of these requests or the rates at which they are fulfilled. Because sharing PHI outside of specific statutorily defined circumstances can violate federal and state laws as well as Constitutional protections, hospitals and healthcare workers risk violating patients' legal rights when providing PHI to police [124]. Additional privacy protections apply to victims of violence, heightening the risk of inadvertent violations of the rights of patients who have suffered violent injuries [124]. Even when law enforcement officers are not intentionally provided with PHI, their presence in patient care areas can allow them to see or overhear sensitive health encounters, including those involving nearby patients who were not initially subject to law enforcement interest [124]. For these reasons, the American College of Emergency Physicians supports the prohibition of "always on" police body cameras in Emergency Departments [125, 126]. However, the extent of adoption of this policy is unclear.

Other police requests such as for collection of patient property, performance of certain tests or procedures, or placing visitation restrictions on particular patients can raise additional ethical and legal concerns. Ordinary Fourth Amendment protections, such as warrant requirements to conduct searches and seizures, do not apply when information or physical items are provided to law enforcement by third parties, including hospitals and healthcare workers. As a result, providing PHI or patient property to law enforcement when not legally required to do so can lead to the circumvention of fundamental rights. Even casual disclosures of patients' health status can be used against them in subsequent legal proceedings. Similarly, police questioning of patients or their visitors without securing informed consent can weaken Constitutional rights to refuse to speak with the police and to be represented by counsel [124]. Particularly in a hospital setting, where patients cannot easily leave while they are receiving care, police questioning can intentionally or unintentionally side-step legal rules that govern interrogations of detained individuals. In addition, complying with formal or informal police requests for medically unnecessary tests or procedures such as body cavity searches or imaging can constitute serious breaches of medical ethics and of patients' legal rights to autonomy and bodily integrity [126, 127]. Although there is a lack of population level research on the effect of rights violations on patient outcomes, there are multiple case reports where physical property

or invasive tests or procedures obtained by police officers in emergency departments directly contributed to adverse legal consequences for patients [124].

Many healthcare providers report being unsure of how to safeguard patient rights in interactions with law enforcement given this complex legal landscape. Only 51% of responding providers at one recently surveyed hospital reported that they take basic steps to protect patient health information by asking officers to leave the room when conducting a patient history or physical exam, and 42% reported directly providing information about patient care plans to officers [123]. Another recent survey at two large emergency medicine residencies found that over half of responding physicians stated they were not comfortable interacting with immigration authorities in the emergency department, and only 12% were aware of the local hospital rules restricting officers' entry into certain patient care areas [128]. Over half of general surgery residents in another survey reported incidents where trauma patients were being actively questioned by law enforcement during initial trauma evaluation [57]. These examples illustrate how frequently these issues may arise in situations where clear guidance, oversight, and accountability do not exist.

Although evidence on the direct health outcomes associated with these rights violations is limited, the legal and ethical harms may significantly affect patients and expose hospitals to potential legal liability. As a result, law enforcement presence and reliance on law enforcement to provide hospital security can create tension between public safety efforts and respecting patient rights. National legal organizations have recently recognized that police activity in healthcare settings, including the mere physical presence of law enforcement officers in patient care areas, can enable police to run warrant searches against patients or begin investigations that increase the risk of patients being arrested, incarcerated, or deported. These risks are most pronounced for patients who are disproportionately targeted by over-policing, including patients who are immigrants, Black, or members of other marginalized communities [129, 130]. To a large degree, hospital policy serves to regulate law enforcement activity on hospital grounds. Underregulation of hospital police activity may help create the circumstances in which rights violations are more likely to occur. Hospitals can therefore play an important role in reducing harm by creating and implementing policies that work to protect patient rights and mitigate the negative effects of law enforcement activity.

Discussion

The array of negative health effects that may be linked to law enforcement activity in hospitals raises important questions about how to ensure safety in healthcare facilities while simultaneously protecting the well-being and rights of patients, staff, and visitors. Even as police and security have become increasingly prevalent in American hospitals, workplace violence in healthcare remains widespread, illustrating these strategies' potential limitations in achieving safety. While novel approaches to conflict management, such as BERT interventions, show promise in reducing rates of violence in certain hospital settings, it remains to be seen whether these strategies can achieve safety on a broader scale. As we re-examine the role of law enforcement in hospital safety, it is important to collect rigorous data to understand all the ways that law enforcement activity may affect stakeholders and to consider actionable policy and practice improvements to mitigate existing health risks.

Research

There are several limitations to the current research literature. Most broadly, there is a widespread lack of publicly available data on policing in hospitals. Much of the evidence found in this review comes from case reports, single-center survey data, and expert opinion. The underreporting of even basic descriptive statistics makes it impossible to pool large-scale data and identify common patterns in law enforcement in hospitals. This makes oversight, accountability, and study difficult. It is incumbent on hospitals, law enforcement agencies, policymakers, and researchers to share data transparently so the effect of law enforcement activity in hospitals can be fully assessed.

Quantifying the relationship between patient exposure to police activity and established quality-of-care endpoints might be another important step for researchers. While there is some existing evidence connecting hospital policing to factors that are known to mediate adverse health outcomes, such as patient trust, little research has examined direct associations with more traditional health quality measures, even where biologically plausible mechanisms exist. Length of hospital stay, development of pressure ulcers and venous thromboembolic disease, access to physical therapy/occupational therapy, and incidence of subsequent mental health diagnoses such as PTSD are traditional health quality markers that could be studied for association with police involvement in care of hospitalized patients.

Policy Changes

Policymakers at all levels should consider changes to reduce the potential risks of law enforcement activity in hospitals. Initial legislative changes could include clarification and expansion of HIPAA privacy rules. Eliminating the loopholes in HIPAA that currently sanction the sharing of PHI with law enforcement officers under law enforcement exemptions could reduce the legal gray areas that put patient rights

at risk. Similarly, strengthening victims-rights language in HIPAA could help protect the rights of patients who are being treated for violent injuries. Additional avenues for legislative change at the federal, state, and local levels include: reexamining healthcare workers' mandatory reporting obligations; designating healthcare facilities as safe havens where criminal investigations and warrant searches cannot be conducted; requiring that a legal advocate be provided for all patients who must interact with law enforcement officers; and expanding legal privilege protections to ensure that patient interactions with violence intervention workers and other care team members are not subject to disclosure to police.

Hospitals and other healthcare facilities can also make policy changes to protect patients and staff. Example policies include: regulating police presence in patient care areas; limiting the use of shackles or other types of force against patients and visitors; clarifying designated roles for employees who are responsible for hospital safety; prohibiting the sharing of PHI or patient property with law enforcement when not required by law; and generally strengthening patients' rights in police investigations, for instance by putting into place policies that encourage the evaluation of a patient's ability to give informed consent before police questioning. To be most effective, hospitals should consider communicating with local law enforcement agencies to ensure that policies are mutually understood, consistently respected, and acknowledge shared priorities in order to reduce the risk that public safety efforts will harm patient rights or well-being.

Outside of hospitals, the criminal-legal system disproportionately harms marginalized communities, in some cases driving negative public health outcomes and racial inequities [131, 132]. These legacies of institutional racism in medicine and law enforcement shape hospital policies with regard to law enforcement in the USA. When considering the involvement of law enforcement in patients' healthcare experiences, recent pledges to reckon with complicity in perpetuating systems of inequality in healthcare should be followed by concrete action to urgently address these systemic drivers of racism in healthcare, which may include police involvement in care.

Practice Improvements

Medical facilities should also make practice improvements to maintain staff and patient safety while mitigating the adverse health effects of law enforcement activity in healthcare settings. These practice improvements include educating and empowering staff to protect and advocate for patient rights that already exist but are not currently being respected in interactions with law enforcement officers. Many of these changes include intensive education and training on existing policies and supporting staff in enforcing those policies in interactions with law enforcement officers.

Given that intensive policing and security practices have a larger impact on perceptions of safety than on actual violent incidents, there may be a potential to reduce law enforcement presence in hospitals while simultaneously improving safety. Hospitals should consider innovative approaches to conflict resolution, such as implementing BERTs for managing patients in crisis with non-coercive methods that do not rely on law enforcement. This may avoid unnecessary exposure to law enforcement and ensure that those employees who are charged with ensuring hospital safety can always prioritize patient, staff, and visitor well-being. Training staff in non-violent de-escalation and investing in crisis response teams may also reduce the likelihood of calls for law enforcement intervention.

Standardized processes for managing and responding to outside law enforcement activity are also crucial to protecting patients. Hospitals should avoid sharing patient information or property to the extent permissible by local law. Designating qualified and trained staff to serve as law enforcement points of contact may alleviate burdens placed on individual healthcare workers to respond to police requests ad hoc, decreasing the risk of improper disclosure of patient information or sharing of patient property. Creating a culture that enforces clear limits on when police are allowed to enter patient care areas, including emergency departments and trauma bays, and consistently documenting police interactions with patients can also help avoid unauthorized law enforcement interactions with patients and improve accountability. Another step is communicating with local law enforcement as hospitals implement practices that clarify and protect patient rights while allowing for legal law enforcement activity.

Police and security activity is an environmental exposure for many patients in hospitals and emergency departments, but it is rarely studied as a potential contributor to health outcomes. In this review, we characterize the variety of health effects that may be associated with hospital policing, address gaps in knowledge that necessitate further research, and identify potential policy and practice improvements. These steps are important not only to treat all patients with dignity and respect, but also as a part of national efforts to examine and challenge how established practices in our institutions can perpetuate racial inequity within existing systems (Table 1).

Table 1 Summarizes the key findings of the different health effects of law enforcement activity in hospitals on the various stakeholders discussed

Health effect		Stakeholder(s)				
		Patients	Staff	Family/visitors	Hospital administration	Law enforcement
Physical	Workplace violence	–	+/–	*	*	*
	Excessive force	–	*	*	*	*
	Non-medical restraint use	–	*	*	*	*
Mental	Perceptions of safety	+/–	+	*	*	*
	Psychological distress	–	–	–	*	*
Social	Damage to patient-provider relationship	–	–	–	*	*
	Mistrust	–	*	*	*	*
	Bias and discrimination	–	–	*	*	*
Legal/ethical	Disclosure of PHI	–	–	*	–	*
	Collection of property	–	–	*	–	*
	Unnecessary tests	–	–	*	–	*

PHI Protected Health Information

+evidence suggests potential benefit to stakeholder; – suggests potential harm; * indicates insufficient evidence/not applicable

Author Contribution All authors made substantial contributions to the conception of the work; the acquisition, analysis, or interpretation of data for the work; drafting the work or revising it critically for important intellectual content; final approval of the version to be published; and agreement to be accountable for all aspects of the accuracy and integrity of the work.

Declarations

Competing Interests The authors declare no competing interests.

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