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Acute Care for Patients Who Are Incarcerated
A Review

Lawrence A. Haber, MD; Hans P. Erickson, JD; Sumant R. Ranji, MD; Gabriel M. Ortiz, MD, PhD; Lisa A. Pratt, MD, MPH

IMPORTANCE The United States has the world's highest rate of incarceration. Clinicians practicing outside of correctional facilities receive little dedicated training in the care of patients who are incarcerated, are unaware of guidelines for the treatment of patients in custody, and practice in health care systems with varying policies toward these patients. This review considers legal precedents for care of individuals who are incarcerated, frequently encountered terminology, characteristics of hospitalized incarcerated patients, considerations for clinical management, and challenges during transitions of care.

OBSERVATIONS The Eighth Amendment of the US Constitution mandates basic health care for incarcerated individuals within or outside of dedicated correctional facilities. Incarcerated patients in the acute hospital setting are predominantly young men who have received trauma-related admitting diagnoses. Hospital practices pertaining to privacy, physical restraint, discharge counseling, and surrogate decision-making are affected by a patient's incarcerated status under state or federal law, institutional policy, and individual health care professional practice. Transitions of care necessitate consideration of the disparate medical resources of correctional facilities as well as awareness of transitions unique to incarcerated individuals, such as compassionate release.

CONCLUSIONS AND RELEVANCE Patients who are incarcerated have a protected right to health care but may experience exceptions to physical comfort, health privacy, and informed decision-making in the acute care setting. Research on the management of issues associated with hospitalized incarcerated patients is limited and primarily focuses on the care of pregnant women, a small portion of all hospitalized incarcerated individuals. Clinicians and health care facilities should work toward creating evidence-based and legally supported guidelines for the care of incarcerated individuals in the acute care setting that balance the rights of the patient, responsibilities of the clinician, and safety mandates of the institution and law enforcement.

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Author Affiliations: Priscilla Chan and Mark Zuckerberg San Francisco General Hospital and Trauma Center, Division of Hospital Medicine, Department of Medicine, University of California, San Francisco (Haber, Ranji, Ortiz); Office of the Federal Public Defender, Albuquerque, New Mexico (Erickson); Jail Health Services, Department of Public Health, San Francisco, California (Pratt).

Corresponding Author: Lawrence A. Haber, MD, Priscilla Chan and Mark Zuckerberg San Francisco General Hospital and Trauma Center, Division of Hospital Medicine, Department of Medicine, University of California, San Francisco, 5H-14, 1001 Potrero Ave, San Francisco, CA 94110 (lawrence.haber@ucsf.edu).

The United States has the world's highest rate of incarceration.[1] Federal law mandates basic health care for individuals who are incarcerated.[2] Health care professionals practicing outside of correctional facilities receive little dedicated training in the care of incarcerated patients,[3] are unaware of guidelines for the treatment of patients in custody,[4] and practice in health care systems with varying policies toward these patients.[5]

At the close of 2016, an estimated 6.6 million people in the United States were in the adult correctional system.[1] Correctional facilities offer a range of health care services from primary care to hospital-level care. Few states have stand-alone hospitals for incarcerated patients. North Carolina, Texas, and Georgia have state-owned hospitals that provide care solely for prisoners. In some counties, such as Dallas and Los Angeles, health departments offer expanded on-site services in their jails, including urgent care facilities.[6,7] When medical care required by an individual who is incarcerated exceeds the capabilities of the correctional facility's health system (for specialty care, diagnostics, or acuity of illness), that individual is transferred to a contracted hospital or, in emergent cases, to the nearest health care institution. Clinicians practicing outside of correctional settings will be faced with unique medical, legal, and ethical issues surrounding the care of patients who are incarcerated.

In the present article, we discuss the short-term care of patients who are incarcerated. We consider legal precedents for care, frequently encountered terminology, characteristics of hospitalized incarcerated patients, considerations for clinical management, and challenges during transitions of care. The longitudinal care of incarcerated individuals has been considered elsewhere.[8]

Legal Background

The Eighth Amendment to the US Constitution, included in the Bill of Rights in 1791, prohibits cruel and unusual punishment. However, only in the last 43 years has this amendment guaranteed a prisoner's right to health care. In 1973, a 600-pound bale of cotton fell on Texas state prisoner J. W. Gamble while he was performing a labor assignment. Prison officials failed to diagnose and treat Gamble's back injury

adequately and punished him for refusing to return to work because he was in pain. Gamble subsequently sued prison officials, including the Director of the Department of Corrections, W. J. Estelle, for inadequate medical treatment. In 1976, the US Supreme Court heard the case of *Estelle v Gamble* and held that "deliberate indifference to serious medical needs of prisoners constitutes the 'unnecessary and wanton infliction of pain,' proscribed by the Eighth Amendment."[9(p429 US 104)]

Cases following *Estelle v Gamble* established 3 basic rights for patients in the correctional setting: access to care (including specialists or hospitals when required); ordered care (treatment ordered by a health care professional must be enacted); and professional judgment (medical care without bias to incarcerated status).[2] "Serious medical needs" triggering these rights encompass a broad range of acute and chronic diagnoses.[10]

Eighth Amendment protections extend to incarcerated patients under the care of clinicians regardless of whether or not the clinicians work in a correctional facility.[11] Noncontracted hospitals and the health care practioners therein remain responsible for treating incarcerated individuals in emergency settings and may become legally liable as state actors solely because incarcerated individuals are treated in the facility.[12] The Eighth Amendment does not establish or affect any state-specific malpractice standard.[9] Incarcerated and nonincarcerated patients are entitled to the same standard of care.[2]

Terminology

Clinicians may encounter a patient at any point in the correctional process. *Incarcerated* is a nonspecific term referring to a person confined to a jail, prison, or other institution. *In custody* refers to a person physically detained in or en route to a jail or prison. *Inmate* refers to a person confined in prison, jail, or other correctional facility.

Jails are short-term facilities administered by city or county law enforcement agencies, typically housing those serving sentences of less than 1 year or those held awaiting trial, sentencing, or transfer to another facility. Prisons are longer-term state or federal detention facilities, typically for inmates serving sentences exceeding 1 year. There are a small number of private prisons contracted with state or federal government. Six states (Connecticut, Rhode Island, Vermont, Delaware, Alabama, and Hawaii) have integrated jail and prison systems.

Probation, parole, and supervised release are forms of conditional release that allow for some or all of a sentence to be served in the community. *Compassionate release* refers to early release for medical illness.[13] When referring to patients who are incarcerated, clinicians should promote accurate and stigma-free language that prioritizes individuals over characteristics and avoids defining people by the crime for which they are accused or convicted.[14]

Characteristics of Hospitalized Incarcerated Patients

Nationally, the mean age of jail and prison inmates is 32.1 and 35.6 years, respectively, with African Americans overrepresented in jail and prison populations (29.7% and 38.1%, respectively) relative to their proportion in the nonincarcerated adult population (13.4%).[15,16] Individuals who are incarcerated are less likely to have completed any college compared with nonincarcerated adults (13.2% vs 56.6%, respectively), portending lower health literacy.[17] Compared with nonincarcerated adults, inmates have a higher incidence of chronic medical conditions.[15] Acute medical indications for hospitalization of individuals who are incarcerated have not been previously reported.

Characteristics[18] of hospitalized patients who were incarcerated at our institution were assessed during the 2018 calendar year (**Table 1** and **Table 2**). The facility is a 284-bed public safety-net hospital and trauma center located in a metropolitan area and is the primary institution for inpatient and specialty care of individuals in our county jail system. Patients admitted to medical-surgical care units were included in the analysis. Patients in observation status, admitted to an intensive care unit, or admitted to the inpatient psychiatry unit were excluded.

In 2018, incarcerated patients requiring hospitalization at the safety-net hospital were largely young men. Compared with hospitalized adults who were nonincarcerated, inpatients who were incarcerated tended to be younger and male and have a shorter duration of hospitalization. These characteristics are similar to findings demonstrating that incarcerated decedents in community hospi-

Table 1. Characteristics of Nonincarcerated and Incarcerated Adult Patients Hospitalized on Medical-Surgical Units at Zuckerberg San Francisco General Hospital and Trauma Center in 2018

Characteristic	Hospital Population	
	Nonincarcerated	Incarcerated
No. hospitalized	13 399	204
Mean age (range), y	55 (18-106)	39 (17-82)
Male, No. (%)	8588 (64.1)	179 (87.7)
Mean length of stay, d	5.6	4.0

Table 2. Race/Ethnicity of 204 Incarcerated Adult Patients Hospitalized on Medical-Surgical Units at Zuckerberg San Francisco General Hospital and Trauma Center in 2018

Race/Ethnicity	No. (%) of Total Admissions	Male, No. (%)	Mean Age, y
African American	75 (36.8)	66 (88.0)	36.8
White	67 (32.8)	63 (94.0)	42.5
Asian	12 (5.9)	11 (91.6)	41.6
Native Hawaiian/Pacific Islander	3 (1.5)	2 (66.6)	32.0
American Indian/Alaskan Native	2 (1.0)	2 (100)	44.5
Other	45 (22.0)	35 (77.8)	37.0

tals are more often male, black or Latino, and younger individuals with shorter hospitalizations.[19]

Table 3 provides common admitting diagnoses for hospitalized incarcerated patients in our hospital in 2018. The diagnoses in this limited sample provide examples of conditions that clinicians should be prepared to manage and the specialty needs required to care for hospitalized incarcerated patients at similar institutions. The predilection toward traumatic injuries in this population has been noted in prior studies of the short-term care needs of nonhospitalized individuals who are incarcerated.[7,20,21] Characteristics and admitting diagnoses for patients who are incarcerated will likely differ between institutions depending on location, hospital characteristics, contract agreements, and category of correctional facility served.

Table 3. Most Common Admission Diagnoses for 204 Incarcerated Adult Patients Hospitalized on Medical-Surgical Units at Zuckerberg San Francisco General Hospital and Trauma Center in 2018[a]

Admission Diagnosis	No. (%) of Total Diagnoses
Traumatic injury	36 (17.6)
Skin and soft-tissue infection	26 (12.7)
Foreign body ingestion	19 (9.3)
Cardiac illness	19 (9.3)
Sickle cell crisis	8 (3.9)
Respiratory illness	8 (3.9)
Altered mental status	5 (2.5)

[a] Patients receiving diagnoses with 5 or more admissions are included. Traumatic injury includes fracture, laceration, stab wound, gunshot wound, intra-abdominal injury, abdominal ecchymosis, and subarachnoid hemorrhage. Foreign body ingestion includes both purposeful ingestions for secondary gain and body stuffing.[18] Cardiac illness includes tachycardia not otherwise specified, atrial fibrillation with rapid ventricular response, congestive heart failure exacerbation, syncope, chest pain, and acute coronary syndrome. Respiratory illness includes pneumonia, shortness of breath, pneumothorax, and pleural effusion.

Clinical Considerations During Hospitalization

Shackling

Shackling refers to a form of restraint using a physical or mechanical device to control the movement of a prisoner's body or limbs.[22] Shackles (or manacles) are handcuffs, leg chains, or belly chains placed to keep individuals from escaping or harming themselves or others. National physician and nursing societies have highlighted conditions in which the limitations imposed by shackling (eg, an inability to break falls while ambulating, difficulty positioning during seizure management, and reduced mobility increasing the risk of thrombosis) or related to the shackle itself (eg, impeding physical examination maneuvers, interfering with grounding of electrical equipment during surgery) could predispose patients to unnecessary harm.[22,23] In addition to physical harm or discomfort, one qualitative study of perinatal nurses demonstrated that patient shackling was negatively associated with health care professional empathy toward patients who were incarcerated.[24]

In the United States, particular attention has been focused on the shackling of incarcerated pregnant women. The FIRST STEP Act of 2018 bans shackling of pregnant women in federal custody from the date on which pregnancy is confirmed until their postpartum recovery.[25] The majority of women, however, are incarcerated in state prisons.[26] Currently, 22 states and the District of Columbia prohibit or limit shackling of pregnant women. States vary in legislation, with some banning shackles during transport, childbirth, and post partum, whereas other states ban shackles only during labor and birth.[27] New York City recently settled a case of an incarcerated woman who was shackled during childbirth despite state law prohibiting shackling during pregnancy and over clinician objections.[28]

Shackling policies for patients in custody should be differentiated from hospital restraint policies for patients who are agitated or combative. The latter is governed by Centers for Medicare and Medicaid Services guidelines mandating the least restrictive form of restraint that protects the physical safety of the patient, staff, or others.[29] No such Centers for Medicare and Medicaid Services policy exists for shackling in the hospital. Because shackles are placed for nonmedical reasons, the treating clinician should determine whether appropriate care can be delivered with shackles in place. Custody officials are then responsible for determining an alternative manner to safely secure, or not secure, a patient who is incarcerated that allows for standards of medical care to be met.

With the exception of specific legislation safeguarding pregnant women, health care facilities should reinforce shackling policies that promote the safety of the patient, empower the clinical needs of health care professionals, and respect the security concerns of law enforcement. One potential starting place is for hospital policy on shackling of patients who are incarcerated to reflect or align with internal policy on the restraint of persons who are nonincarcerated. Hospital policy should delineate for clinicians when and how to communicate to security what is medically necessary to provide the standard of care. Lack of security staff should not be a reason to use more restrictive restraints.

Patient Privacy

The Health Insurance Portability and Accountability Act (HIPAA) set standards regarding the use and disclosure of individuals' protected health information (PHI) by health care professionals and organizations.[30] The initial HIPAA proposal excluded inmates,[31] although this broad exception was eliminated from final regulation over concerns that unprotected health information could trigger assaults within correctional facilities on individuals with stigmatized conditions or that disclosures could impair patients' reintegration into society.[32]

The standards set by HIPAA require covered entities to take reasonable steps to limit the disclosure of PHI to the minimum necessary to accomplish the intended purpose.[33] General exceptions to this minimum necessary standard exist for health care professionals sharing information for treatment purposes, disclosures to the patient or at the individual's authorization, and disclosures required by law.

Specific HIPAA exceptions apply to hospitalized inmates. A hospital may disclose PHI to a correctional institution or official maintaining custody of an inmate if the information is necessary for the provision of health care to such individuals, the health and safety of the patient or others at the correctional institution, the health and safety of officers or others responsible for the transport of inmates, law enforcement on the premises of the correctional institution, or the maintenance of safety, security, and order of the

correctional institution.[34] Minimum necessary standard rules and Substance Abuse and Mental Health Services Administration (SAMHSA) regulations requiring patient consent prior to disclosure of substance use disorder treatment continue to apply to individuals who are incarcerated.[35] Disclosure of PHI exempted under HIPAA should be conducted in coordination with the medical officer of the responsible correctional system.

Clinicians caring for hospitalized inmates frequently conduct interviews or examinations in front of custody officials, inadvertently revealing PHI. When investigating physician practices, a 2006 study found that 95% of the 183 participants responded that breaches of privacy occurred in the management of treating hospitalized prisoners.[4] Asking if the patient consents to discussing PHI in front of law enforcement officials or asking officers to move out of hearing range mitigates inappropriate transfer of information and ensures that a patient who is incarcerated feels more comfortable disclosing potentially legally detrimental elements of the medical history.

Qualitative studies reinforce the challenges staff and patients face navigating privacy. In one study of perinatal nurses, participants found it "hard to talk with the patient when there are 2 guards in the room."[24(p27)] In another study addressing jailed patient perspectives, a woman described that during her postpartum stay, her desire to breastfeed was reduced by the presence of an officer in the room.[36] Although law enforcement officers are required to uphold safety mandates for patients in their custody, clinicians should communicate privacy concerns to law enforcement and adhere to HIPAA and SAMHSA regulations to the greatest extent possible.

Disclosing Discharge

Administrative policy may dictate that hospital personnel cannot disclose discharge plans to a patient who is incarcerated.[37] Related to the maintenance of security, providing details of patient movement can create vulnerability for law enforcement staff, transport paramedics, or community members in the event that the patient attempts to elope.[38] The practice of withholding such details may place clinicians at odds with patient-informed discharge planning recommended by the American Medical Association's Council on Ethical and Judicial Affairs.[39] Further research is needed on the frequency and factors affecting elopement during medical transportation of patients who are incarcerated.

When patients are in custody, their freedom is restricted by their detention and their inability to initiate or refuse movement (including movement within a cell, to court, or from a hospital). Clinicians encounter a tension when caring for incarcerated patients between this limited autonomy of movement and preserved autonomy of medical decision-making.

No available evidence exists to support withholding of discharge plans from patients who are incarcerated, and health care practioners may feel uncomfortable deviating from usual care. One method to mitigate this concern is through clear communication between the discharging clinician and the receiving jail or prison given that the receiving correctional facility is expected to inform the patient about further monitoring and follow-up plans.

Surrogacy

Establishing a surrogate decision maker for hospitalized incarcerated patients may arise under 2 different circumstances. For patients with impaired medical decision-making capacity or who have been deemed incompetent, clinicians should identify a previously designated surrogate[40] or follow each state's mandated surrogacy hierarchy to identify those best prepared to reflect the values and interests of the patient.[12] Incarcerated individuals may have difficulty identifying or accessing surrogates. In the absence of any identifiable surrogate, a number of practices have been described, including prison officials acting as surrogates, treating physicians acting as surrogates, a blended approach of those 2 practices, and involvement of ethics committees or community consent boards.[41] Having prison officials serve as surrogates may result in a conflict of interest and should be avoided.

There are circumstances in which the state may override medical decision-making of a patient who is incarcerated. This event may occur if an incarcerated patient refuses recommended therapy as a means of bargaining or protest.[42] When caring for incarcerated individuals, clinicians should distinguish between a patient's right to the rational refusal of a recommended treatment and a decision made for secondary gain.

A decision by a patient may be overridden by the state on court order if "reasonably related to a legitimate penological interest" to protect the patient or others.[12(p127)] Overriding treatment refusals should be avoided whenever possible to support patient autonomy. In instances when treatment over objection is medically indicated, appropriate court involvement and legal representation for the incarcerated person is necessary. These scenarios should be managed in conjunction with a risk management department and may be suited to specialty consultation from psychiatric or ethics consult services.

Transitions of Care

Emergency Department

Patients may arrive for emergent care from correctional facilities, during the intake and screening process, or immediately after arrest in the community. When presenting from the community, law enforcement officers or emergency medical services are often responsible for triaging short-term medical needs of those in custody. For new arrivals to a correctional facility, an intake and screening process may be performed by officers with or without involvement from health care professionals.[43] Variations in institutional practice and individual medical experience have the potential to affect accurate identification of individuals requiring evaluation in an acute care setting.

Two studies of patients in jail, one from a referral emergency department (ED) and the other from an on-site correctional facility care center, reinforce the prevalence of trauma-related diagnoses in this population.[7,21] Patients arriving from jail who were seen in the referral ED were younger and healthier and had lower rates of admission compared with the general population, although the jailed patients underwent increased diagnostic testing with longer stays in the ED.[21] On-site care by emergency medicine professionals at the correctional facility led to a reduction in patient transfers to referral hospitals, decreased referral ED closures related to capacity, and cost savings from diminished use of emergency medical services and external security.[7] Integrated medical and correctional care has the potential to reduce burdens on referral systems and contain health care costs.

Practice guidelines for patients who are incarcerated from the American College of Emergency Physicians (ACEP) recommend that "if frequent observation of the detainee is necessary or concern exists about the progression of a medical problem that would require that the patient return in a relatively short amount of time, the patient should be admitted."[43] Further research is needed to identify specific or unique admitting criteria for the incarcerated population. In addition to the ACEP recommendation, ED clinicians may use similar discharge considerations applicable to the inpatient setting to inform admitting decisions.

Receiving Facilities

Determining the capabilities of the receiving correctional facility is paramount for safe transitions of care when a patient who is incarcerated is being evaluated for discharge from the ED or inpatient unit because services or treatments frequently offered in the community may not be available. Most correctional facilities have physician or mid-level professionals present to provide clinical monitoring and medication titration. A clinician is typically on call for jail and prison sites, although the clinician may not be on-site. Laboratory testing may be performed on-site, but frequent testing may not be feasible. Some jails or prisons offer hemodialysis on location, whereas others refer patients to outpatient centers. Formularies in correctional facilities can differ from that of the discharging hospital. In particular, access to medication-assisted treatment initiated in the ED or hospital for opioid use disorder may be limited, with few correctional facilities offering methadone or buprenorphine.[44,45] The ability of a receiving facility to offer medical housing or provide enhanced monitoring by nursing staff may differ among sites. To facilitate safe transitions of care, physicians, case managers, and social workers should catalog the available resources at local receiving correctional facilities.

An additional barrier to effective discharge planning occurs when patients are discharged from the hospital to a correctional facility and are subsequently quickly released from custody without a defined source of follow-up. A study examining postdetainment acute care use among older jail inmates found that having an identified primary care professional was associated with a 31% decreased risk of anticipated ED or hospital use on release.[46] Providing access to primary care for patients returning to custody has the potential to decrease burdens on short-term care resources and improve long-term disease management for this population. Ensuring access to follow-up care may be particularly important for patients with substance use disorders given the increased risk of postrelease opioid-related overdose mortality.[47] Clinicians should coordinate discharges with the receiving physician or physician administrator of the correctional facility in advance of the projected discharge date and identify follow-up needs both at the facility and on potential release.

Discharge Prescribing

Clinicians may be concerned that medications prescribed on discharge will be misused by patients in the correctional system, leading clinicians to restrict or reconsider certain classes of medication in the hospital or on discharge.[48] Commonly diverted medications in the correctional setting include opioids, benzodiazepines, stimulants, antipsychotics, and γ-aminobutyric acid agonists.[49] A study of 103 prison inmates found that 51.5% of participants reported using illicit substances during incarceration, most commonly alcohol (35%) and cannabis (37.9%), followed by narcotics (14.6%).[50] A variety of psychotropic medications are misused in the correctional setting, although prescription medications lag behind more common substances, such as alcohol and cannabis.

Opioid diversion is very common in the community[51] and is likely common in correctional facilities as well, although there are no recent data supporting this assumption. In one randomized clinical trial examining opioid agonist therapies at a large jail, the medications for only 6% of patients were discontinued during the course of a month because of diversion concerns.[52] This falls within a broad range of diversion for opioid agonists reported in the community.[41] There is no evidence that rates of diversion are increased among patients who are incarcerated relative to those in a community setting, and the monitored correctional environment may provide a safer setting for medications with diversion risk.[41]

Compassionate Release

Compassionate release is a transition of care unique to the prison population. The term refers to a range of programs and policies through which a patient who is incarcerated may obtain early release, typically for a severely debilitating or terminal illness.[13] Community standards for palliative and end-of-life care are difficult to deliver in the correctional setting; thus, hospital clinicians often receive these patients on release for inpatient hospice care.[53,54] All states, with the exception of Iowa, have compassionate release policies, although guidelines vary significantly. Barriers to implementation include strict or vague eligibility requirements, categorical exclusions, prolonged review processes, and unrealistic time frames.[55] Most states share the requirement for a physician to determine medical eligibility for potential candidates.[13] Given demonstrated knowledge deficits by patients who are incarcerated regarding requesting medical release,[56] clinicians may be asked to evaluate the severity of a hospitalized patient's illness or assist patients in understanding the qualifications and initiation process.

Conclusions

Patients who are incarcerated have a protected right to health care, although exceptions to physical comfort, health privacy, and informed decision-making during hospitalization occur. Research on the management of medical conditions among hospitalized patients who are incarcerated is limited and primarily focuses on the care of pregnant women, a small portion of all hospitalized incarcerated individuals. Clinicians should understand the rights of patients who are incarcerated in the health care setting, characteristics of this hospitalized population, and the practical challenges in managing the comfort, privacy, surrogacy, and transitions of care for these individuals. Health care facilities should work with correctional officials to create evidence-based and legally supported guidelines in the acute care setting for individuals who are incarcerated, and these guildelines should balance the rights of the patient, the needs of the clinician, and the safety mandates of the institution and law enforcement.

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REFERENCES

1. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Correctional populations in the United States, 2016. https://www.bjs.gov/content/pub/pdf/cpus16.pdf. Accessed April 19, 2019.

2. Rold WJ. Thirty years after *Estelle v. Gamble*: a legal retrospective. *J Correct Health Care*. 2008;14(1):11-20. doi:10.1177/1078345807309616

3. Alemagno SA, Wilkinson M, Levy L. Medical education goes to prison: why? *Acad Med*. 2004;79(2):123-127. doi:10.1097/00001888-200402000-00005

4. Tuite H, Browne K, O'Neill D. Prisoners in general hospitals: doctors' attitudes and practice. *BMJ*. 2006;332(7540):548-549. doi:10.1136/bmj.332.7540.548-b

5. Junewicz A. Shackled: providing health care to prisoners outside of prison. *Am J Bioeth*. 2014;14(7):13-14. doi:10.1080/15265161.2014.918210

6. The Pew Charitable Trusts. State prisons and the delivery of hospital care: how states set up and finance off-site care for incarcerated individuals. https://www.pewtrusts.org/en/research-and-analysis/reports/2018/07/19/state-prisons-and-the-delivery-of-hospital-care. Published July 19, 2018. Accessed April 19, 2019.

7. Eiting E, Korn CS, Wilkes E, Ault G, Henderson SO. Reduction in jail emergency department visits and closure after implementation of on-site urgent care. *J Correct Health Care*. 2017;23(1):88-92. doi:10.1177/1078345816685563

8. Davis DM, Bello JK, Rottnek F. Care of incarcerated patients. *Am Fam Physician*. 2018;98(10):577-583.

9. Justia. *Estelle v. Gamble*, 429 US 97 (1976). https://supreme.justia.com/cases/federal/us/429/97/. Accessed April 19, 2019.

10. Mushlin MB. The Eighth Amendment: medical care: what is a "serious medical need?" In: *Rights of Prisoners*. 5th ed. Thomson Reuters; §4.4.

11. Justia. *West v. Atkins*, 487 US 42 (1988). https://supreme.justia.com/cases/federal/us/487/42/. Accessed April 19, 2019.

12. Journal of Health Care Law and Policy. The prisoner in a private hospital setting: what providers should know. https://pdfs.semanticscholar.org/0919/d3bd0eb25fc61d3d6d7dfcd545895ff1a412.pdf. Published 2017. Accessed July 19, 2019.

13. Mitchell A, Williams B. Compassionate release policy reform: physicians as advocates for human dignity. *AMA J Ethics*. 2017;19(9):854-861. doi:10.1001/journalofethics.2017.19.9.peer2-1709

14. Tran NT, Baggio S, Dawson A, et al. Words matter: a call for humanizing and respectful language to describe people who experience incarceration. *BMC Int Health Hum Rights*. 2018;18(1):41. doi:10.1186/s12914-018-0180-4

15. Binswanger IA, Krueger PM, Steiner JF. Prevalence of chronic medical conditions among jail and prison inmates in the USA compared with the general population. *J Epidemiol Community Health*. 2009;63(11):912-919. doi:10.1136/jech.2009.090662

16. United States Census Bureau. QuickFacts: United States population estimates, 2018. https://www.census.gov/quickfacts/fact/table/US/PST045218. Accessed June 18, 2019.

17. van der Heide I, Wang J, Droomers M, Spreeuwenberg P, Rademakers J, Uiters E. The relationship between health, education, and health literacy: results from the Dutch Adult Literacy and Life Skills Survey. *J Health Commun*. 2013;18(suppl 1):172-184. doi:10.1080/10810730.2013.825668

18. Roberts JR, Price D, Goldfrank L, Hartnett L. The bodystuffer syndrome: a clandestine form of drug overdose. *Am J Emerg Med*. 1986;4(1):24-27. doi:10.1016/0735-6757(86)90245-7

19. Rothman A, McConville S, Hsia R, Metzger L, Ahalt C, Williams BA. Differences between incarcerated and non-incarcerated patients who die in community hospitals highlight the need for palliative care services for seriously ill prisoners in correctional facilities and in community hospitals: a cross-sectional study. *Palliat Med*. 2018;32(1):17-22. doi:10.1177/0269216317731547

20. Chan TC, Vilke GM, Smith S, Sparrow W, Dunford JV. Impact of an after-hours on-call emergency physician on ambulance transports from a county jail. *Prehosp Emerg Care*. 2003;7(3):327-331. doi:10.1080/10903120390936527

21. Maher PJ, Adedipe AA, Sanders BL, Buck T, Craven P, Strote J. Emergency department utilization by a jail population. *Am J Emerg Med*. 2018;36(9):1631-1634. doi:10.1016/j.ajem.2018.06.034

22. American College of Obstetricians and Gynecologists. Health care for pregnant and postpartum incarcerated women and adolescent females. https://www.acog.org/-/media/Committee-Opinions/Committee-on-Health-Care-for-Underserved-Women/co511.pdf?dmc=1&ts=20190419T2145596846. Published November 2011. Accessed April 19, 2019.

23. Smith FD. Perioperative care of prisoners: providing safe care. *AORN J*. 2016;103(3):282-288. doi:10.1016/j.aorn.2016.01.004

24. Zust BL, Busiahn L, Janisch K. Nurses' experiences caring for incarcerated patients in a perinatal unit. *Issues Ment Health Nurs*. 2013;34(1):25-29. doi:10.3109/01612840.2012.715234

25. Congress.gov. Formerly Incarcerated Reenter Society Transformed Safely Transitioning Every Person Act (FIRST STEP Act), HR Doc No. 5682. https://www.congress.gov/bill/115th-congress/house-bill/5682/text?q=%7B%22search%22%3A%5B%22first+step+act%22%5D%7D#toc-H169162FE884349709311 99E724EDDAFD. Published May 23, 2018. Accessed April 19, 2019.

26. National Public Radio. Federal legislation seeks ban on shackling of pregnant inmates. https://www.npr.org/sections/health-shots/2018/12/05/673757680/federal-legislation-seeks-ban-on-shackling-of-pregnant-inmates. Published December 5, 2018. Accessed April 19, 2019.

27. Ferszt GG, Palmer M, McGrane C. Where does your state stand on shackling of pregnant incarcerated women? *Nurs Womens Health*. 2018;22(1):17-23. doi:10.1016/j.nwh.2017.12.005

28. Southall A. She was forced to give birth in handcuffs: now her case is changing police rules. *New York Times*. July 3, 2019. https://www.nytimes.com/2019/07/03/nyregion/nypd-pregnant-women-handcuffs.html. Accessed July 12, 2019.

29. Department of Health and Human Services, Centers for Medicare and Medicaid Services. Hospital conditions of participation: patients' rights. https://www.cms.gov/Regulations-and-Guidance/Legislation/CFCsAndCoPs/downloads/finalpatientrightsrule.pdf. Published December 8, 2006. Accessed April 19, 2019.

30. Department of Health and Human Services, Office for Civil Rights. HIPAA administrative simplification. https://www.hhs.gov/sites/default/files/ocr/privacy/hipaa/administrative/combined/hipaa-simplification-201303.pdf. Amended March 26, 2013. Accessed April 19, 2019.

31. Department of Health and Human Services, Office of the Secretary. Standards for privacy of individually identifiable health information. https://www.govinfo.gov/content/pkg/FR-1999-11-03/pdf/99-28440.pdf. Published November 3, 1999. Accessed April 19, 2019.

32. Goldstein MM. Health information privacy and health information technology in the US correctional setting. *Am J Public Health*. 2014;104(5):803-809. doi:10.2105/AJPH.2013.301845

33. Department of Health and Human Services. Minimum necessary requirement, CFR 164.502(b), 164.514(d). https://www.hhs.gov/hipaa/for-professionals/privacy/guidance/minimum-necessary-requirement/index.html. Accessed June 18, 2019.

34. Bednar AL. HIPAA's impact on prisoners' rights to healthcare. http://www.law.uh.edu/Healthlaw/perspectives/Privacy/030128HIPAAs.pdf. Published January 28, 2003. Accessed March 30, 2019.

35. Petrila J, Fader-Towe H; Council of State Governments Justice Center. Information sharing in criminal justice-mental health collaborations: working with HIPAA and other privacy laws. https://www.bja.gov/Publications/CSG_CJMH_Info_Sharing.pdf. Published 2010. Accessed June 18, 2019.

36. Clarke JG, Adashi EY. Perinatal care for incarcerated patients: a 25-year-old woman pregnant in jail. *JAMA*. 2011;305(9):923-929. doi:10.1001/jama.2011.125

37. Garcia B; San Francisco Department of Public Health. Administrative policy 6.06: care of custody/forensic patients at SFGH acute care units. http://civilgrandjury.sfgov.org/DepartmentResponse/Inquiry%20into%20the%20Operation%20and%20Programs%20of%20the%20San%20Francisco%20Jails/Jails_DPH.pdf. Published September 2, 2014. Accessed April 19, 2019.

38. Courtwright A, Raphael-Grimm T, Collichio F. Shackled: the challenge of caring for an incarcerated patient. *Am J Hosp Palliat Care*. 2008;25(4):315-317. doi:10.1177/1049909108315912

39. Douglas SP. Report of the Council on Ethical and Judicial Affairs: physician responsibilities for safe discharge from health care facilities. https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/about-ama/councils/Council%20Reports/council-on-ethics-and-judicial-affairs/ceja-5a12.pdf. Published 2012. Accessed February 4, 2019.

40. Chase J; San Francisco General Hospital Workgroup on Patient Capacity and Medical Decision Making. A clinical decision algorithm for hospital inpatients with impaired decision-making capacity. *J Hosp Med*. 2014;9(8):527-532. doi:10.1002/jhm.2214

41. Smith MS, Taylor LA, Wake A. Healthcare decision-making for mentally incapacitated incarcerated individuals. *Elder Law J*. 2014;22(1):175-207. https://theelderlawjournal.com/wp-content/uploads/2015/02/Smith.pdf. Accessed August 12, 2019.

42. Peteet T, Tobey M. How should a health care professional respond to an incarcerated patient's request for a particular treatment? *AMA J Ethics*. 2017;19(9):894-902. doi:10.1001/journalofethics.2017.19.9.ecas3-1709

43. American College of Emergency Physicians, ACEP Public Health Committee. Recognizing the needs of incarcerated patients in the emergency department. https://www.acep.org/administration/resources/recognizing-the-needs-of-incarcerated-patients-in-the-emergency-department/. Accessed June 18, 2019.

44. D'Onofrio G, O'Connor PG, Pantalon MV, et al. Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial. *JAMA*. 2015;313(16):1636-1644. doi:10.1001/jama.2015.3474

45. Clarke JG, Martin RA, Gresko SA, Rich JD. The first comprehensive program for opioid use disorder in a US statewide correctional system. *Am J Public Health*. 2018;108(10):1323-1325. doi:10.2105/AJPH.2018.304666

46. Chodos AH, Ahalt C, Cenzer IS, Myers J, Goldenson J, Williams BA. Older jail inmates and community acute care use. *Am J Public Health*. 2014;104(9):1728-1733. doi:10.2105/AJPH.2014.301952

47. Joudrey PJ, Khan MR, Wang EA, et al. A conceptual model for understanding post-release opioid-related overdose risk. *Addict Sci Clin Pract*. 2019;14(1):17. doi:10.1186/s13722-019-0145-5

48. The *New York Times* Well Blog. When hospital rooms become prisons. https://well.blogs.nytimes.com/2016/05/05/when-hospital-rooms-become-prisons/. Published May 5, 2016. Accessed April 19, 2019.

49. Wood D. Drug diversion. *Aust Prescr*. 2015;38(5):164-166. doi:10.18773/austprescr.2015.058

50. Simpler AH, Langhinrichsen-Rohling J. Substance use in prison: how much occurs and is it associated with psychopathology? *Addict Res Theory*. 2005;13(5):503-511. doi:10.1080/16066350500151739

51. Kennedy-Hendricks A, Gielen A, McDonald E, McGinty EE, Shields W, Barry CL. Medication sharing, storage, and disposal practices for opioid medications among US adults. *JAMA Intern Med*. 2016;176(7):1027-1029. doi:10.1001/jamainternmed.2016.2543

52. Magura S, Lee JD, Hershberger J, et al. Buprenorphine and methadone maintenance in jail and post-release: a randomized clinical trial. *Drug Alcohol Depend*. 2009;99(1-3):222-230. doi:10.1016/j.drugalcdep.2008.08.006

53. Stephens SL, Cassel JB, Noreika D, Del Fabbro E. Palliative care for inmates in the hospital setting. *Am J Hosp Palliat Care*. 2019;36(4):321-325. doi:10.1177/1049909118811899

54. Maschi T, Marmo S, Han J. Palliative and end-of-life care in prisons: a content analysis of the literature. *Int J Prison Health*. 2014;10(3):172-197. doi:10.1108/IJPH-05-2013-0024

55. Price M; Families Against Mandatory Minimums. Everywhere and nowhere: compassionate release in the states. https://famm.org/wp-content/uploads/Exec-Summary-Report.pdf. Published June 2018. Accessed April 19, 2019.

56. Kanbergs A, Ahalt C, Cenzer IS, Morrison RS, Williams BA. "No one wants to die alone": incarcerated patients' knowledge and attitudes about early medical release. *J Pain Symptom Manage*. 2019;57(4):809-815. doi:10.1016/j.jpainsymman.2018.12.335