

2

Business as Usual: Emergency Rooms with No Psychiatric Coverage at All

Felix Geller

Contents

2.1	Introduction	14
2.2	Limitations and Capabilities of This System.	14
2.3	Personnel and Staffing Needed	15
2.4	Patient and Staff Safety Concerns	16
2.5	Collaboration Needed	17
2.6	Expertise Needed	18
2.7	Resources Needed	19
2.8	Consideration of Coordination of Care	19
2.9	Interaction with Probate Courts and Criminal Justice System	20
2.10	Security Needed	20
2.11	Special Considerations	21
2.12	Summary	23
References		

Today's emergency department (ED) is tasked with rapidly stabilizing emergent and life-threatening physical conditions and is the gateway to higher levels of inpatient care for most specialties, including psychiatry. Though designed to be an efficient and versatile unit, the ED faces increased challenges when providing emergency care for psychiatric patients. The standard being adopted for psychiatric crisis assessment is a specifically dedicated unit with an appropriate environment and staff modifications for mental health emergencies. Such units are still rare and are usually located in large hospitals or university centers. The more common model in place in most EDs is to set aside specific beds or sections

F. Geller (🖂)

© Springer Nature Switzerland AG 2020

Robert Wood Johnson Barnabas Health, Barnabas Behavioral Health, Toms River, NJ, USA e-mail: fgeller@preferredbehavioral.org

M. J. Fitz-Gerald, J. Takeshita (eds.), *Models of Emergency Psychiatric Services That Work*, Integrating Psychiatry and Primary Care, https://doi.org/10.1007/978-3-030-50808-1_2

within the general emergency room setting. These sections or beds are designated for patients presenting with psychiatric emergencies or conditions and are selected so that these patients can be easily monitored. This chapter outlines the capabilities and limitations of an ED system to deliver emergent psychiatric services when no psychiatric specialists are available.

2.1 Introduction

The general emergency department (ED) is tasked with the treatment of emergency patients, including those requiring psychiatric care. The emerging standard for the assessment of psychiatric emergencies is through a dedicated emergency psychiatric unit, often called a crisis unit. These units, and the professionals that staff them, can provide assessments and services that were limited under previous models. While dedicated psychiatric emergency services are the preferred treatment for those in psychiatric crisis, there are still many emergency departments without access to psychiatric consultation. This chapter will focus on the limitations and capabilities of an ED system without access to a psychiatrist.

2.2 Limitations and Capabilities of This System

The deinstitutionalization of psychiatry in the United States in the latter half of the twentieth century aimed to maximize patients' freedom while providing comprehensive services at the community level. Unfortunately, the demand for mental health treatment quickly exceeded the available resources. This shortage of community staff has, by default, forced local hospitals to care for a large number of psychiatric patients, with the emergency department (ED) most often being the first place of contact for a crisis [1]. In response, emergency medicine specialists have begun to develop methodologies and procedures aimed at rapidly triaging, stabilizing, and dispositioning these individuals [2]; however, progress in emergency psychiatry is still hindered by the internal and external limitations of the system.

Historically, the ED's physical structure has been optimized for medical and surgical emergencies, not psychiatric care. Patients in crisis benefit from dedicated units that allow for privacy, observation, safe equipment and furniture, and a dedicated multidisciplinary staff [3]. While this is an ideal model of care, for most hospitals and medical centers the ideal is often not feasible. This approach requires both heavy start-up costs and ongoing funding [4] that is simply not available. Without these dedicated units, hospitals attempt to address psychiatric emergencies by providing space within the emergency room itself. However, studies have shown that factors such as overcrowding, lack of privacy, and increased noise levels limit efficacy, as patients may be reluctant to engage in a setting without confidentiality; therefore, this lack of patient engagement increases length of stay and decreases treatment efficacy and satisfaction [5]. Similarly, staffing and time constraints continuously hamper the emergency department's ability to perform comprehensive mental health evaluations, forcing the ED staff to be conservative with discharge. Although emergency clinicians are well-trained to quickly assess and stabilize an individual using objective measures, diagnostic tests, and physical examinations, psychiatric patients, especially those at elevated risk for suicide, rarely allow for such standard evaluations. These patients require extensive time for the interview alone and EDs without a dedicated psychiatric care unit do not have the time or staffing to dedicate to thorough evaluations.

Suicide rates have increased over 60% in the last century and suicide is now the second leading cause of death for patients between the ages of 10–34 years old [6]. Persons completing suicide frequently contacted clinicians in both the year and month before attempting or completing the act [6]. Despite the increased availability of risk assessment measures such as the Columbia-Suicide Severity Rating Scale (C-SSRS), there is little evidence to support the accurate prediction of an acute suicide attempt or completion using screening tools alone [7]. Therefore, current evaluations of suicidal patients rely on accurate histories, historical records, collateral information, and knowledge of the patient, which in turn requires extensive interactions and clinician presence. Emergency rooms without dedicated psychiatric staff have limited ability to evaluate individuals with mental health diagnoses despite often being the place of longitudinal care to such patients. As a result, many clinicians will err on the side of caution and admit the patient [8] or needlessly attempt to transfer the patient to a psychiatric facility, resulting in a prolonged stay in an emergency room awaiting a psychiatric bed, commonly referred to as "boarding."

Despite these limitations, ED personnel are still key in the treatment of psychiatric emergencies and, as previously described, are frequently the only providers available to perform the psychiatric assessment. In response to this recognized need, emergency training programs around the country are beginning to incorporate psychiatric rotations into their curriculum [9].

2.3 Personnel and Staffing Needed

Common presentations to the emergency room include suicidal ideation, psychoses, mania, agitation, intoxication, and patients who have been recently arrested or who are currently incarcerated. These conditions require care that may include a line-of-sight observation level, self-harm resistant equipment, trained staff, sitters, and (frequently) security or law enforcement personnel. Although research shows that the availability of psychiatrists in the emergency room, either on site or through telemedicine, has the ability to increase the efficiency of care [10], the integration of specialized mental health professionals within the general ED is a relatively new concept.

Appropriate staff levels is also an important consideration. Hospital staffing ratios are often based on the number of current patients. For instance, California enacted legislation that limits each ED nurse to about four patients in the general ED and each psychiatric inpatient unit nurse to six patients [11]; however, the

current consensus is that emergency rooms need to staff units according to patient severity, not the number of patients [11]. A reliable and effective method to do this has yet to be universally adopted. Other healthcare professionals such as social workers and discharge coordinators are required for these units to help enroll discharged patients in community care programs, but the presence of these individuals is usually limited in general emergency rooms.

Psychiatric patients also require staff that are familiar with their medication regimens and interactions. Despite the growing trend toward single agent treatment, many psychiatric patients are still on polypharmacy regimens. Moreover, patients with severe and persistent mental illness are at an increased risk for other medical comorbidities and are also prescribed medications for these conditions. The patients themselves may be poor historians as well as poorly or even noncompliant with these regimens. This factor further complicates ED care and potentially contributes to the ED having the highest rates of medication errors among all departments [12]. In response, pharmacists are now incorporated into the emergency care of psychiatric patients in larger centers, where they assist with contacting patients' families and pharmacies to help ensure adequate medication reconciliation. Furthermore, ED pharmacists are able to assist with the transition to an inpatient unit so that the receiving facility pharmacy can obtain non-formulary medications [13]. Pharmacists may also assist with follow-up treatment, including prior authorization and patient assistance programs. These professionals have shown the ability to reduce medication delays and omissions; however, despite studies demonstrating that pharmacists in the ED both improve care and decrease costs [12], their presence in the emergency rooms outside of dedicated units and university centers remains scarce.

2.4 Patient and Staff Safety Concerns

The emergency room is a bright, fast-paced environment, where intoxicated or agitated individuals require observation prior to staff making decisions about their disposition. As the gateway to hospital treatment, disease severity is often at its worst, leading to agitation, frustration, and violence, especially against nurses [14]. Unfortunately, angry outbursts, confusion, and disruptive behavior are now seen as frequent events, which raise the question of the need for restraints even though it's understood that the use of physical restrains delays inpatient admissions and negatively impacts patient care [4, 15]. Prophylactic oral medications, especially atypical antipsychotic agents, have reduced the need for physical restraints [15], but they are not usually readily available in a general ED without a psychiatric crisis unit on site. The lack of availability has led ED staff to use other agents that can also lead to delayed care [4].

Early recognition and management of agitation is crucial to minimizing harm to patients and staff [15]. At the Kennedy University Hospital system in New Jersey, a specific procedure was developed to identify pending violence and provide early intervention. When this procedure was implemented, the number and intensity of episodes decreased significantly [16]. This approach involved interdisciplinary

training and cooperation among psychiatric staff, security, nurses, physicians, and pharmacists. The main components of the procedure focused on regular patient interaction, observation of body language, having the patient within the line of sight, and addressing the concerns of relatives [16]. Although labor intensive and reliant on staff retention, the decrease in violence led to its use throughout that hospital system. Fortunately, this approach is now widespread among other hospital organizations, with individual entity refinement in accordance with internal metrics.

2.5 Collaboration Needed

Effective psychiatric care requires multidisciplinary collaboration between various settings. Most individuals prefer outpatient care, but afflicted individuals often minimize their psychiatric symptoms until emergency services are required. Still, even after crisis stabilization, the success of any treatment plan lies in aftercare, which requires access to community resources and follow-up appointments. Unfortunately, many EDs may not have access to aftercare referral resources.

The primary level of cooperation is usually community-based between family, social services, and law enforcement. At first, community programs were primarily aimed at destigmatizing mental illness, but they are now beginning to take on an education component. Mental health first aid programs instruct community members on recognizing symptoms, causes, treatments, and responses to crisis situations [17]. There are also support communities throughout the country, including the National Alliance on Mental Illness (NAMI), Alcoholics Anonymous, Al-Anon, and other similar groups. Individuals from these groups or communities tend to have frequent contact with patients and are often the ones that bring them to clinical attention, making their collateral information invaluable, especially for risk assessment.

At the professional level, law enforcement services are frequently utilized to enable treatment. Police presence is required by crisis teams in the community, and law enforcement officers are usually the first professionals on the scene of a mental health crisis. They help to stabilize volatile situations, provide safety to medical professionals in the field, and tend to have more frequent interactions with the patient than clinical staff. In addition, police officers are often instrumental for continuity of care, as their contact can link the patient to treatment. In fact, the chances of a patient being engaged in continuous mental healthcare increase significantly when police officers either bring the patient to the crisis center or contact that individual's provider [18].

At the hospital level, various physicians, nurses, and administrators must coordinate efforts to provide efficient treatment. Psychiatric inpatient units tend to require "medical clearance" of a patient prior to accepting the transfer; however, medical clearance has no concrete standards, often delays care, and forces unnecessary laboratory testing [19]. A newer proposed concept is that of medical stability, meaning that the patient's health is sufficiently stable such that they can be admitted to a psychiatric unit where a full medical evaluation and further consultations, such as neurology and physical or occupational therapy, can be obtained. This approach appears to be more suitable to standardization which, in turn, can improve the efficiency of treatment, but still requires the close cooperation of different professionals to streamline patient disposition. In Sutter and Yuba counties in California, a team of emergency physicians, telepsychiatrists, and county mental health professionals in the emergency room cooperatively evaluate the patient, then design, and implement a treatment plan with follow-up and aftercare. This project has shown a reduction of wait time and ER boarding, as well as enhancing cooperation between the various staff disciplines [20]. Without psychiatric coverage, multiple studies have shown that many of the patients would be boarded in the ED, leading to overcrowding and interference in care [4].

2.6 Expertise Needed

Traditionally, much of the focus on mental health in the ED is about safety and risk assessment, but recently, more attention has been paid to aftercare. One of the primary jobs of emergency staff is to evaluate and determine whether an individual poses a risk to themselves or others; however, accurate suicide risk evaluation depends on the information provided by the patient as well as the objective signs and available history. The emergency clinician requires extensive training and experience to recognize the verbal and nonverbal language that is essential to psychiatric assessment [10]. Furthermore, mental healthcare tends to be split between pediatric and adult patients with few individuals treating both populations. As outpatient mental health is limited, especially for minors, emergency rooms have become the resource center for access to child psychiatry with at least 2-5% of all pediatric ED visits related to mental health, an amount that is on the rise in rural areas [5]. Since only a small number of emergency rooms have access to a child psychiatrist, psychiatric boarding of children has become more common and results in a length of stay that is typically twice as long as the stay for children with nonpsychiatric complaints [5].

Currently, the United States has been experiencing an increase in substance use disorders, especially opioids. Nevertheless, other substances (e.g., alcohol, stimulants, benzodiazepines and other sedatives, and novel psychoactive substances) also require emergency medical attention. The emergency department is often involved with such patients, particularly during detoxification. This situation offers a unique opportunity for psychiatrically staffed EDs to initiate medication-assisted treatment (MAT) to these patients, as their frequent ED use often comes at a time of distress and high motivation for change [21]. Until recently, emergency room personnel were hesitant to initiate MAT for patients with substance use disorders due to concerns about follow-up; however, studies now show that initiating MAT in the emergency room is not associated with greater dropout rates in aftercare than when initiated in more traditional settings [21, 22].

One such example is the initiation of buprenorphine by emergency room personnel. The abuse of prescription opioids and heroin continues to be a major public health concern in the United States. These patients often spend their time and resources obtaining short-acting opioids to feed the addiction, avoid withdrawal, or to self-medicate. Until recently, a referral to substance abuse services was the main treatment offered to these patients in the ED; however, with opioid use disorders, this intervention has limited benefit while a patient experiences withdrawal or craving. Now, buprenorphine, a partial opioid agonist, is available to treat opioid dependence. Buprenorphine decreases the withdrawal and cravings for opioids, is available from outpatient physicians, and, in contrast to methadone, has ceiling physiological respiratory effects [22]. A recent study has shown that ED initiation of buprenorphine treatment has improved patient engagement in community treatment and decreased self-reported abuse of opioids [22]. This study, however, included physicians who were educated in buprenorphine administration and had referral sources that were outside standard ED care. Patients that received this treatment used less inpatient time, which in turn can reduce ED boarding. Nevertheless, such medications are still rarely administered in general emergency rooms despite their rising presence in crisis and inpatient units.

Another issue for ED physicians and staff is the involuntary hospitalization of a psychiatric patient. Different states confer various degrees of authority and responsibility on the ED staff for forced treatment. Thus, physicians have to be educated on their roles which vary for each state. Fortunately, these statutes are usually well documented in multiple sources, such as the Treatment Advocacy Center [23].

2.7 Resources Needed

Specific emergency mental health units with qualified staff can reduce the length of stays, security man-hours, and restraint episodes in the hospital [20]. When these units are not available, professional consultations, either face-to-face or telemedicine, are used, especially when after-hours presence is required. Furthermore, a range of medications in both the oral and injectable form are needed to decrease patient agitation or anxiety and to reduce violence. Emergency departments require increasing resources for staff and medications to stabilize, treat, and discharge individuals into the community with a decrease in inpatient care, but further studies are needed to evaluate the availability of consultation services. One state decreased the number of emergency liaison psychiatrists despite increasing patient numbers and universal healthcare coverage [24].

2.8 Consideration of Coordination of Care

Psychiatric care is increasingly based on a treatment team model that requires continuing collaboration between staff members. The ED can be a revolving door for psychiatric patients due to general noncompliance or a lack of outpatient resources. Usually, the staff is aware of the problem but lacks the knowledge and resources to address cases on an individual basis. Consequently, increasing numbers of EDs have dedicated case managers that can coordinate with either inpatient, outpatient, or crisis services to help patients transition between care settings and navigate services [25, 26]. Still, even with specifically designated discharge programs, due to illness denial and a lack of insight in some individuals with mental illness, a high number of patients become nonadherent to their programs, which ultimately results in readmission. In fact, once linked with a psychiatric provider and aftercare, adolescents with psychiatric conditions were actually shown to have higher rates of readmission [27]. The reason for this paradox ranges from the nature of having an illness to brief length of stays with premature discharge, whereby access to the mental health professional forced the recognition of symptoms requiring hospitalization at earlier stages than for those without mental healthcare access in their emergency department or communities.

2.9 Interaction with Probate Courts and Criminal Justice System

Multiple studies have noted that deinstitutionalization is associated with an increase in the numbers of patients in the criminal justice system. Up to 61% of US adult prisoners have a mental health diagnosis, while 15–24% have a severe mental illness [27–29]. The suicide rates in prison are much higher than those of the general population, and close to 20% of detained adolescents had a prior suicide attempt [28]. Yet, a large number of detention centers do not have in-house psychiatrists and require emergency room personnel to evaluate and treat their patients. Incarcerated individuals, especially children, have higher psychiatric admission rates than their peers and longer length of stays. Still, there are few beds dedicated to these individuals leading to delays in care as medications are rarely initiated while an individual is awaiting admission.

The emergency department is also the first place of contact for many vulnerable individuals, including the elderly, children, and survivors of sexual assault and other violence. These individuals are at risk for physical abuse, sexual abuse, trafficking, financial abuse, and neglect. Most states have statutes that designate healthcare personnel as mandated reporters for individuals that cannot report or fend for themselves. Victims and survivors of these crimes not only require reporting and protection but also mental health treatment and integration into community and legal systems [30]. It is this latter requirement that is limited in emergency rooms without dedicated units and staff, as emergency care is only the first step in the recovery for these patients.

2.10 Security Needed

The ED staff is especially prone to workplace violence. The environment is overcrowded and has high traffic, elevated noise levels, patients in pain, and families in distress. The nursing staff is most exposed to this aggression, and some have come to consider it an occupational hazard. Yet studies and research have shown that higher quality care can be delivered if the healthcare worker is confident in the safety of their environment. Previous theories and plans focused on the aggressor and interventions to decrease violence; however, there are an increasing number of publications and bodies of research that focus on healthcare staff, teaching them to evaluate body language and warning signs of violence, enabling them to adjust their mannerisms and outlook to de-escalate the situation [14, 31]. Still, despite focus on de-escalation, trained and uniformed security officers are frequently needed for the safety of all parties involved [16].

2.11 Special Considerations

There are additional considerations for specific patient populations, including patients with suicidal ideation, neurodevelopmental disorders, and neurocognitive disorders. Current approaches to suicidal patients, with an emphasis on risk assessment and safety, do not focus on what the patient is asking for, namely, assistance and support [32]. A new view examines patient needs instead of suicide risk. Although this is more ideal and therapeutic than the current strategy, practical methods and liability limits its use since it requires a longer duration of patient engagement than most emergency departments can provide. Having noted that, crisis units frequently function as psychiatric observation centers and can engage the patient in such a manner and possibly safely discharge the patient to a community provider, allowing for long-term care.

Acute violence management and de-escalation has limited success in children, adolescents, and adults with autism spectrum and other neurodevelopmental disorders. Patients with these conditions often cannot communicate their needs, and are hypersensitive to environmental stimulation and changes, a common issue in emergency rooms [33].

These patients do not usually respond to strategies that are designed for individuals without communication deficits. One strategy designed to address this patient population is to provide "autism-friendly" emergency rooms. This strategy involves extensive training of staff on the condition and its comorbidities, modifying environments (e.g., specific rooms with minimal noise, lighting, and staff changes) and minimizing the different materials used to avoid hypersensitivities [34]. Still, the number of inpatient psychiatric beds dedicated to developmentally disabled individuals is considerably fewer than those dedicated to the general population; therefore, if admission is necessary, these patients tend to have considerably longer wait times and length of stays [34].

Patients with neurocognitive disorders also present a challenge to emergency rooms. These individuals access the ED frequently for pain, confusion, altered mental status, aggression, paranoia, or exacerbation of chronic illness. Their care in the emergency department is difficult as they are poor historians, are easily overwhelmed, and often become uncooperative. These patients require significant staff attention, as they can require constant monitoring to avoid unwanted outcomes [35]. An intensive evaluation for delirium is also warranted, as well as environmental safety modifications to reduce the risk of wandering and falls. This level of support is frequently limited in emergency rooms without dedicated psychiatric services due to shortages in staff, time, and space.

With the shrinking amount of available inpatient beds, psychiatric boarding time in the emergency room is now a common occurrence. Psychiatric patients remain in the ED far longer than other medical patients do. The original guidelines of minimal laboratory testing are based on admission requirements of medical clearance, but inpatient resources are dwindling to a point that multiple states are only showing 10 inpatient beds per 100,000 people instead of the 50 that healthcare experts recommend [16]. Hence, emergency rooms are now often the site of care for initial psychiatric treatment and the extent of medical evaluations is variable. Psychiatric medications, especially atypical antipsychotics, have varying effects on lipids, thyroid, hepatic, renal, and cardiac systems. They require baseline values and regular monitoring. For this reason, extensive laboratory and medical workups are completed on admission to the unit. Emergency departments with dedicated psychiatric units and staff are able to complete the required testing and start treatments while the patient is awaiting a bed, but the majority of emergency rooms without dedicated psychiatric staff will not do so, which results in a delay of care.

The emergency room is also a resource for patients with non-emergent conditions [36]. The concerns of these patients range from medication refills to noncrisis addictions to depression without suicidal ideation. Several states, such as Texas, provide for psychiatric urgent care (crisis stabilization units) to treat these patients and possibly decrease emergency room admissions [36]. These clinics are an intermediate level of care between inpatient and outpatient centers. According to the American Psychiatric Association (APA), these units can often provide continued stabilization and link patients to appropriate care in the community [36]. Coordination with these services can ultimately prove vital to increase the efficiency of emergent psychiatric treatment.

Finally, resentment, transference, countertransference, and poor triage also limit the effectiveness of emergency room treatment [37, 38]. The term "frequent flyer" is used to refer to psychiatric patients that repeatedly present to the emergency room, whether for narcotic addiction, psychosis from chronic noncompliance, self-harm, or homelessness. The underlying reasons for such presentation are often a lack of outpatient care or housing, and the emergency room becomes the final common pathway out of necessity. Furthermore, psychiatric patients are frequently primed toward feeling humiliation, especially when they are forced into compulsory treatment [37, 38]. The feeling of humiliation is itself associated with increased risk of violence, longer length of stays, poor compliance, and frequent rehospitalization. Fortunately, healthcare training now also focuses on empathy, privacy, and autonomy, which are key factors in decreasing the distress these patients experience.

2.12 Summary

Today's emergency department is becoming the first line of contact for both emergency and nonemergency psychiatric patients during a time that available inpatient treatment is significantly decreasing. As a result, ED staff is frequently tasked with evaluating, treating, stabilizing, and dispositioning these individuals; however, the limitations of the traditional emergency room often hinder the care that these patients receive. The creation of a dedicated emergency psychiatric unit has helped to circumvent these limitations and has the potential to improve the emergency care of psychiatric patients.

References

- Evans R, Connell J, Ablard S, Rimmer M, O'Keeffe C, Mason S. The impact of different liaison psychiatry models on the emergency department: a systematic review of the international evidence. J Psychosom Res. 2019;119:53–64.
- American College of Emergency Physicians Emergency Medicine Practice Committee. Care of the psychiatric patient in the Emergency Department-A 33. Review of the literature. American College of Emergency Physicians. October 2014. https://www.acep.org/globalassets/uploads/uploaded-files/acep/clinical-and-practice-management/resources/mental-healthand-substance-abuse/psychiatric-patient-care-in-the-ed-2014.pdf. Accessed 15 Oct 2019.
- Innes K, Morphet J, O'Brien A, Munro I. Caring for the mental illness patient in the emergency departments—an exploration of the issues from healthcare provider perspective. J Clin Nurs. 2013;23:2003–11.
- Warren MB, Campbell RL, Nestler DM, Pasupathy KS, Lohse CM, Schlechtinger E, et al. Prolonged length of stay in ED psychiatric patients: a multivariable predictive model. Am J Emerg Med. 2016;34:133–9.
- 5. Grover P, Lee T. Dedicated pediatric behavioral unit serving the unique and individual needs of children in behavioral health crisis. Pediatr Emerg Care. 2013;29:200–2.
- Alavi N, Reshetukha T, Prost E, Antoniak K, Groll D. Assessing suicide risk: what is commonly missed in the emergency room? J Psychiatr Pract. 2017;23:82–91.
- 7. Giddens JM, Sheehan KH, Sheehan DV. The Columbia-suicide severity rating scale (C-SSRS): has the "gold standard" become a liability. Innov Clin Neurosci. 2014;11(9–10):66–80.
- Moss J, Nauranga D, Kim D, Rosen M, Wang K, Lanctot K. Variation in admission rates between psychiatrists on call in a university teaching hospital. Ann Gen Psychiatry. 2018;17L:30–7.
- Zun L. Care of psychiatric patients: the challenge to emergency physicians. West J Emerg Med. 2016;17(2):173–6.
- Weiland TJ, Mackinlay C, Hill N, Gerdtz M, Jelinek GA. Optimal Management of Mental Health Patients in Australian emergency departments: barriers and solutions. Emerg Med Australas. 2011;23:677–88.
- Graff I, Goldschmidt B, Klockner S, Erdfelder F, Schiefer JL, Grigutsch D. Nurse staffing calculation in the emergency department performance oriented calculation based on Manchester triage system at the University Hospital Bonn. PLoS One. 2016;11:e0154344. https://journals. plos.org/plosone/article?id=10.1371/journal.pone.0154344. Accessed 15 Oct 2019.
- 12. Stevens M, Brady J, Cannon J. Pharmacists in the emergency department: feasibility and cost. Fed Pract. 2014;31:18–24.
- Vandenberg AM, Mullis D. Integrating psychiatric PharmD services into an emergency department psychiatry team. MHC. 2014;4:279–82.

- Ramacciati N, Ceccagnoli A, Addey B, Lumini E, Rasero L. Violence towards emergency nurses: a narrative review of theories and frameworks. Int Emerg Nurs. 2018;39:2–12. https:// doi.org/10.1016/j.ienj.2017.08.004.
- Gomez S, Dopheide J. Antipsychotic selection for acute agitation and time to repeat use in a psychiatric emergency department. J Psychiatr Pract. 2016;22:450–8.
- Jones CD, Manno MS, Vogt B. Tier 1 alert! A psychiatric rapid response team. Nurs Manage. 2012;43(11):34–40.
- 17. Morawska A, Fletcher R, Pope S, Heathwood E, Anderson E, McAuliffe C. Evaluation of mental health first aid training in a diverse community setting. Int J Ment Health Nurs. 2013;22:85–92.
- Van den Brink RHS, Broer J, Tholen AJ, Winthorst WH, Visser E, Wieserma D. Role of police in linking individuals experiencing mental health crises with mental health services. BMC Psychiatry. 2012;12:171–8.
- Yun B, Chou S, Nagurney J. ED utilization of medical clearance testing for psychiatric admissions: National Hospital Ambulatory Medical Care Survey Analysis. Am J Emerg Med. 2018;36:745–8.
- Bodic M, Hung K, Orchard D, Singh H, Casoy F. [Powerpoint presentation]. Innovative approaches to Foster high-quality emergency psychiatric services. American Psychiatric Association Annual Meeting. 2018 May 7. Available from authors.
- Azuar J, Questel F, Hispard E, Scott J, Vorspan F, Belliver F. Hospital stay and engagement in outpatient follow-up after alcohol emergency detox: a 1-year comparison study. Alcohol Clin Exp Res. 2016;40:418–81.
- D'Onofrio G, O'Connor PG, Pantaloon M, Chawarski M, Busch S, Owens P, et al. Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a clinical randomized trial. JAMA. 2015;313:1636–44.
- The treatment advocacy center. Emergency hospitalization for evaluation. http://www.treatmentadvocacycenter.org/mental-health-commitment-laws-2014. Accessed 8 Jul 2018.
- Sanders JS, Raja AS, Hasegawa K, Bittner J, Espinola JA, Olamiju B, et al. Decline in consultant availability in Massachusetts emergency department: 2005 to 2014. Ann Emerg Med. 2016;68:461–6.
- 25. Maples NJ, Copeland LA, Zeber JE. Can medication management coordinators help improve continuity of care after psychiatric hospitalization? Psychiatr Serv. 2012;63:554–60.
- Haughton A, Bowling A, Clarke K, Hopkins A, Jones I. Does a dedicated discharge coordinator improve the quality of hospital discharge? Qual Health Care. 1996;5:89–96.
- Carlisle CE, Mamdani M, Schachar R, To T. Aftercare, emergency department visits, and readmissions in adolescents. J Am Acad Child Adolesc Psychiatry. 2012;51:283–93.
- Wood DB, Donofrio JJ, Santillanes G, Lam CN, Claudius I. Treating psychiatric emergencies in incarcerated minors in the emergency department: what is the cost and what is their disposition? Pediatr Emerg Care. 2014;30:403–8.
- 29. Varney S. By the numbers: mental illness behind bars. PBS News Hour. May 15, 2014. https://www.pbs.org/newshour/health/numbers-mental-illness-behind-bars. Accessed 17 Feb 2019.
- Resnick H, Acierno R, Holmes M, Dammeyer M, Kilpatrick D. Emergency evaluation and intervention with female victims of rape and other violence. J Clin Psychol. 2000;56:1317–33.
- Ramacciati CA, Addey B, Rasero L. Magnitude of workplace violence in emergency department: another brick in the wall. Emerg Med Australas. 2017;29(5):599–600.
- 32. Stallman HM. Meeting the needs of patients who have suicidal thoughts presenting to the emergency departments. Emerg Med Australas. 2017;29(6):749.
- Lacono T, Bogby C, Unsworth C, Douglas J, Fitzpatrick P. A systematic review of hospital experiences of people with intellectual disability. BMC Health Serv Res. 2014;14:505–13.
- McGinigle JJ, Venkat A, Beresford C, Campbell TP, Gabriels RL. Management of agitation in individuals with autism Spectrum disorders in the emergency department. Child Adolesc Psychiatr Clin N Am. 2014;23(1):83–95.

- 35. Clevenger CK, Chu TA, Yang Z, Hepburn K. Clinical care of persons with dementia in the emergency department: a review of the literature and agenda for research. J Am Geriatr Soc. 2012;60(9):1742–8.
- 36. The American Psychiatric Association (APA) task force on psychiatric emergency services. Report and recommendations regarding psychiatric emergency and crisis services. Arlington, VA: APA; 2002. https://www.psychiatry.org/psychiatrists/search-directories-databases/ library-and-archive/task-force-reports. Accessed 7 Jul 2018.
- Svindseth MF, Nottestad JA, Dahl AA. Perceived humiliation during admission to a psychiatric emergency service and its relations to socio-demography and psychopathology. BMC Psychiatry. 2013;13:217–25.
- Moukaddam N, Flores A, Matorin A, Hayden N, Tucci VT, Theresa V. Difficult patients in the emergency department. Psychiatr Clin North Am. 2017;40(3):379–95.