47 Disposition Decisions for Psychiatric Patients Presenting to the Emergency Setting

Steven W. Flynn and Leslie S. Zun

Introduction

Approximately one in four adults have a psychiatric disease, and annually, 5.3 million patients present to the emergency department (ED) with a psychiatric-related chief complaint [1]. It has been estimated that 50 inpatient psychiatric beds are needed per 100,000 people. Currently, some states have only 10 psychiatric beds per 100,000 people [2]. This demonstrates that less funding is being invested in inpatient psychiatric facilities and that there is a transition to more outpatient management [2]. Many of these patients present to EDs for evaluation and treatment and end up boarding in the ED waiting for an available psychiatric bed.

The emergency department is referred to as the gateway to the hospital. The public relies upon the ED to manage new acute medical problems or manage an exacerbation of their underlying chronic medical ailment. Many times, these patients, some with chronic mental illness, cannot be treated as an outpatient and, after evaluation in the ED, are deemed unsafe to be discharged home and must be admitted. Without objective admission measurements, such as a HEART (history, EKG, age, risk factors, troponin) score for major adverse cardiac events and CURB-65 (confusion, BUN, respiratory rate, blood pressure) for community-acquired pneumonia, determining which of these patients require admission can be a daunting task. The aim of this chapter is to review areas for improvement in patient evaluation and disposition of psychiatric complaints.

Psychosocial Factors Incorporated into Disposition Selection

Multiple factors need to be considered when making the decision to admit a psychiatric patient. In a general sense, the need for admission is based on danger to self, danger to others, or inability to care for one's self. However, the admission decision is not always an easy one because of illness severity, extenuating circumstances, and difficulty in assessment. These decisions may differ on the training and experience of the evaluator, time of evaluation in the disease process, and ability to obtain collateral information.

The symptoms and circumstances surrounding a psychiatric illness typically affect the admission decision [3]. Psychosocial factors should be collected to determine if the person has a safe place to go after discharge, if they are able to afford medication, if they can make it to

S. W. Flynn (✉)
Department of Emergency Medicine, Methodist Hospitals, Gary, IN, USA

L. S. Zun
Department of Emergency Medicine, Rosalind Franklin University of Medicine and Science/ The Chicago Medical School, North Chicago, IL, USA

L. S. Zun et al. (eds.), *Behavioral Emergencies for Healthcare Providers*,
https://doi.org/10.1007/978-3-030-52520-0_47

appointments, and if their living situation is contributing to their psychiatric condition. Finally, there should be a discussion with the patient and any significant others to determine disposition priorities. Although limited, studies have shown a correlation between patient preference for admission or discharge and actual disposition [4]. Collateral input can be very useful, especially if the patient is unable to answer appropriately. Through this collateral information, the emergency provider can gain a sense of what the patient is like outside of the hospital and collect details on events leading up to the patient's emergency presentation. Through discussion with the patient and family, a better relationship can be formed with the care provider. This may allow for open communication concerning care needs and what outcomes can be expected.

Admission Decisions

Admission decisions can be made by a number of mental health professionals including social workers, psychiatrists, psychologists, outsourced services, and others. These may be performed in person, telephonically, or using telemedicine. Despite whoever is doing this evaluation, the emergency provider is ultimately responsible for the patient's disposition.

Availability of a psychiatrist or other psychiatric professional can be a limiting factor affecting disposition time. On average, psychiatric patients wait 10 hours until being evaluated by a psychiatric professional [1]. Longer ED boarding time is associated with an escalation of symptoms and poorer outcome [2]. With such limited inpatient psychiatric facilities, if the emergency physician can make appropriate diagnosis and disposition, it would improve bed availability for other psychiatric patients presenting to the ED. This would also have a good financial impact on the patient and hospital by avoiding unnecessary admissions.

Disposition times could be improved if emergency physicians accurately recognized psychiatric issues warranting admission. Studies have looked into disposition selection between psychiatrists and emergency providers. When looking at psychiatric patients in the ED, the emergency provider's decision to admit psychiatric patients had a positive predictive value (PPV) of 87.3% and negative predictive value (NPV) of 66.7% compared to psychiatrists. Suicidal patients comprise a large proportion of these patients and the decision to admit had a PPV of 90% and NPV of 69.6% [1]. Emergency providers can identify patients requiring admission but do not do well with selecting which patients are safe to be discharged home.

Suicidal Patients

In 2007, 650,000 patients presented to the ED with suicidal thoughts as a chief complaint. It is listed as a top ten cause of death among all age groups [5]. Emergency providers are placed in a unique situation because the ED visit may be that the first-time patients with suicidal ideation are gaining access to psychiatric help. It is also important to note that not all depressed patients are suicidal and not all suicidal patients have depression. There are many tools to screen for suicidality, but these tools do not determine suicide risk. Although these tools evaluate degree of suicidal ideation, they do not accurately predict if a patient will attempt suicide and are not reliable in selecting disposition [5]. Although the Columbia Suicide Severity Rating Scale comes closest to a reliable risk assessment tool, it lacks reliability. Challenges in risk stratifying these patients clearly exist within emergency medicine as a specialty but also within psychiatry. A prospective study was performed to see which patients committed suicide following discharge from a psychiatric facility. The study showed that the psychiatrist did not foresee 44% of the completed suicides [6]. Since there are no reliable scoring systems, emergency providers must rely on patient history, static and dynamic risk factors, as well as protective factors in the determination. Patients are placed into low-, moderate-, and high-risk categories. The high-risk patients require obvious admission, and the low-risk category usually can be managed as an outpatient. Those in the moderate-risk category need further evaluation by a psychiatrist. High-risk factors include age, prior attempts, psychiatric illness, substance use disorder, sex, method that would

be used, and sudden interest in death (books, movies, and websites). Protective factors include family and social support, ongoing relationship with mental health providers, and spirituality. If a patient is discharged home, then the emergency provider must document clearly in the medical record their assessment and thought process for patient discharge.

In the past, many EDs made "safety contracts" having the patient agree that they would call 911 or return to the ED immediately if the suicidal ideations persisted or if the patient was planning on committing suicide. These contracts have been shown to not work and have even been used against the physician in lawsuits [6].

Schizophrenic Patients

Schizophrenia is a spectrum disorder where symptoms may range from minor interference with functions to those that have difficulty taking care of their daily needs. In general, if the patient has no insight to their medical condition, is a danger to self or others, is grossly debilitated by their disease, and lacks essential social support or if this is their first psychotic episode, then admission is warranted to a psychiatric service [7, 8].

Patients presenting with worsening of underlying psychosis typically cannot be discharged especially if they lack insight and judgment. For insight, it is important to determine whether the patient (1) is aware of their psychiatric condition, (2) understands treatment options, and (3) is able to recognize manifestations of their disease (e.g., hallucinations). Judgment is best assessed with problem-solving scenarios such as asking what the person would do if they saw smoke coming from a building or what they would do if they found a stamped envelope [9]. Patients with poor insight and judgment will more likely need admission.

Bipolar Patients

Patients with bipolar illness need a complete mental status exam to determine their current functional abilities whether they are manic or depressed. The evaluation of insight and judgment as well as psychosis is especially important with these patients. Information from collateral resources is helpful in determining functional status and risky behaviors. Patients who have difficulty functioning and are suicidal or demonstrate dangerous behaviors usually need admission.

Decision-Making Tools

To date, there have been very limited studies to elucidate methods to risk stratify and select disposition. The severity of psychiatric illness (SPI) rating scale and the crisis triage rating scale (CTRS) provide some decision support.

The SPI score uses three features—suicide potential, harm to others, and severity of symptoms. Each feature is based on a 0–3 scale on symptom's severity and then plugged into two separate formulas to determine admission probability from 0 to 100. Any patient with an admission probability less than 80% could potentially be discharged [3, 10]. The SPI correctly determined disposition 73% of the time, which equates to a significant amount of inappropriate discharges and admissions. The moderate correlation with admission and cumbersome calculation makes this a challenging modality to use in the ED. A useful feature of the tool is a graded scale used to help determine high- and low-risk features of suicide potential.

Bengelsdorf and colleagues proposed the CTRS in 1984. It is a rating scale based off of three features: dangerousness to self/others, support system, and ability to cooperate. These three features are graded on a 1–5 score based on severity of symptoms and then added to determine a final score from 3 to 15. The initial prospective study showed scores 3–8 were found to have a high correlation with patients that required admission. Higher scores 10–15 were more likely to be discharged. Scores of 9 were intermediate, and the study showed about a 50/50 chance of being admitted [11]. Although a quick modality to determine inpatient vs. outpatient management, validation studies showed a moderately strong correlation rate with actual admission decision.

Table 47.1 Admission determination

Severity	Description	Suicidal	Disposition	Need for hospitalization
Stable	Functional, works	None	Outpatient	No
Low level	Medical or psych stressor	Low	Outpatient	OBS
Moderate	Decompensation, agitated	Moderate	Psych consultation	OBS or inpatient
Severe	Severe decompensation	High	Inpatient care	Yes

Based on these scales, a decision tool was developed to assist in the determination of whether patients need admission, discharge, or observation (Table 47.1). Further research and development of tools to determine the utility of an admission protocol is needed.

The CTRS using a cutoff score of 8 (<8 is admitted, 9 or greater in discharged) had a correlation of 62.2% with actual disposition decision [12]. With moderately strong correlation, this too leads to inappropriate admissions and discharges. Although not validated, Turner et al. found that a CTRS cutoff score of 9 had a correlation of 75.2%, and a cutoff score of 10 had correlation of 81.2% with actual disposition. This might be more easily utilized than the SPI in the ED based on quick addition of scores. If used, a higher cutoff score of 9 or 10 should be used.

Alternatives to Admission

Management and access to psychiatric care is not consistent across communities. It is important to know what is available in the community. Alternatives to ED admission include discussion with the patient's psychiatrist to be evaluated in clinic, crisis hotlines, observation units, day hospitals, and crisis housing. Studies have shown no difference in clinical outcome between inpatient hospital admissions vs. respite care and day hospitals [13–15]. There are advantages to outpatient care. These benefits may include the patient being managed in a more homelike setting where they are able to participate in ADLs to the extent of their functionality, a comfortable living situation, and less formality.

Table 47.2 Descriptions of outpatient facilities to manage psychiatric emergencies

Alternative to admission	
Day hospital	Facilities open during daytime hours, generally 9 AM–5 PM, that allow the patient to come for treatment and then go home or to a crisis center until they return to next day Offers psychotherapy, medication management, and counseling to improve interpersonal relationships and how best to manage emotional disturbances
Psychiatric urgent care	Similar to other medical urgent cares but specific for psychiatric emergencies. Allows for immediate counseling, medications, and other interventions for acute psychiatric emergencies. Referral for psychiatric follow-up is also given
Respite care	Housing unit that allows for small group of psychiatric patients to live in a home setting while receiving counseling and treatment. Case managers available to help with social issues outside of the facility to prevent decline of psychiatric condition. Length of stay can vary from days to weeks
Mobile crisis unit	Clinicians that respond to home, jail, hospital, etc. to perform evaluation of patient and offer counseling

Patients across the whole spectrum of psychosis, mood disorders, and personality disorders can all be managed in these settings. Emergency providers are often not aware of these additional resources and should seek to find what alternatives our communities offer. Table 47.2 describes alternatives to inpatient management.

Prior to Discharge

If the decision is made to discharge home, then medication adjustments and psychiatric follow-up should be determined. In general, it is best to communicate with their prescribing provider before any psychiatric medications are adjusted and to ensure that the patient has scheduled follow-up. Discharged patients should go home with a reliable family member or friend. It must also be clearly communicated to the patient and their family and friend, if appropriate, what medication changes have been made as well as when and where their follow-up appointments will be. They should also be given crisis resources such as the phone number for the National Suicide Prevention Hotline, local crisis support services and hotline, and possibly peer support groups.

Discharged suicidal patients require a safety plan. The Suicide Prevention Resource Center has developed a tool kit which includes a model safety plan. These safety plans/tool kits involve good follow-up, discussion with providers, phone calls to check in, and involvement of friends and family [16]. The phone number to the National Suicide Prevention Hotline should be part of the safety plan and discharge instructions.

Conclusion

Psychiatric disposition determination is a challenge to emergency and psychiatric physicians. To date, there are no reliable ways to score patient presentations to determine admission or discharge. Input from the patient and family is an invaluable resource to help guide disposition selection. SPI and CTRS need to be tested in the emergency department to determine its utility in the setting. More research is needed to create a quick scoring system that may be used to determine the need for hospitalization.

References

1. Chakravarthy B, Menchine M. Psychiatric patient disposition agreement between the emergency physician consultant. Crisis. 2013;34:354–62.
2. Wiler JL, Brown NA. Care of the psychiatric patient in the emergency department. Retrieved 19 Dec 2016, from ACEP: https://www.acep.org/uploadedFiles/ACEP/Clinical_and_Practice_Management/Resources/Mental_Health_and_Substance_Abuse/Psychiatric%20Patient%20Care%20in%20the%20ED% 202014.pdf.
3. Lyons JS, Colletta J. Validity of the severity of psychiatric illness rating scale in as sample of inpatients on a psychogeriatric unit. Int Psychogeriatr. 1995;7:407–16.
4. Way B. Relationship between patient, family and significant other disposition preferences in psychiatric emergency services and the clinical symptom rating and disposition decisions of psychiatrists. Psychiatr Rehabil J. 2005;29:132–7.
5. Kuo DC, Tran M. Depression and the suicidal patient. Emerg Med Clin North Am. 2015;33:765–78.
6. Colucciello SA. Mood disorders. In: Hockberger R-H, Marx JA, editors. Rosen's emergency medicine. Amsterdam: Elsevier; 2014. p. 1492–500.
7. Brown H. How to stabilize an acutely psychotic patient. Curr Psychiatr Ther. 2012;11:10–6.
8. Hockberger RS, R. J. Thought disorders. In: Hockberger R-H, Marx JA, editors. Rosens emergency medicine. Amsterdam: Elsevier; 2014. p. 1460–5.
9. Mental Status Exam. (n.d.). Retrieved Jan 2, 2017, from The Royal Children's Hospital Melbourne: http://www.rch.org.au/clinicalguide/guideline_index/Mental_State_Examination/
10. Lyons JS, Stutesman J. Predicting psychiatric emergency admissions and hospital outcome. Med Care. 1997;35:792–800.
11. Bengelsdorf H, Levy LE. A crisis triage rating scale: brief dispositional assessment of patients at risk for hospitalization. J Nerv Ment Dis. 1984;172:424–30.
12. Turner PM, Turner TJ. Validation of the crisis triage raring scale for psychiatric emergencies. Can J Psychiatr. 1991;36:651–4.
13. Sledge WH, Tebes J. Day hospital/crisis respite care versus inpatient care, part I: clinical outcomes. Am J Psychiatry. 1996;153:1065–73.
14. Goodwin R, Lyon JS. An emergency housing program as an alternative to inpatient admission. Psychiatr Serv. 2001;52:92–5.
15. Brooker CE. Admission decisions follow contact with an emergency mental health assessment and intervention service. J Clin Nurs. 2007;16:1313–22.
16. Support Safe Care and Transitions and Create Organizational Linkages. (2017). Retrieved January 14, 2017, from Suicide Prevention Resource Center: http://www.sprc.org/comprehensive-approach/transitions-lInkages.