A cross emergency departments globally, no patient population can be more challenging to safely and efficiently manage than those presenting for evaluation and management of acute behavioral health conditions. Whether its presentation is simply for medical clearance or for medical clearance, assessment, and disposition to the appropriate site of care, behavioral health patients present unique challenges with respect to ensuring the safety of patients and staff, protecting patient dignity and privacy, and providing a milieu in the emergency department that is acceptable to all patients.

It is well known across many health systems that behavioral health patients represent a growing portion of overall emergency department visits while also utilizing emergency services at a higher frequency than the general population. Various studies show that the issue is global. A 2008 ACEP survey found that 99 percent of emergency physicians reported admitting psychiatric patients daily. In the Netherlands, behavioral health patients were more likely to be high utilizers of emergency department services (van der Linden) and similar findings have been seen in other national health systems as well (Minassian, Lunksy). Presentation of pediatric behavioral health patients also continues to climb.

The initial assessment of stabilization and deposition of behavioral health patients frequently results in longer lengths of stay and longer boarding times in the ED. One academic medical center in the United States determined that the average length of stay for behavioral health patients awaiting inpatient admission was 3.2 times longer than non-psychiatric patients (Nicks). The impact of crowding in the ED has also resulted in increased risk of agitation and use of restraints for behavioral health patients (El-Mallakh). A frequent area of dissatisfaction for behavioral health patients can also be found with respect to the privacy afforded during the care process in the ED. As with many parts of the world, an Australian study examining patient perspectives on behavioral health management in the ED demonstrated dissatisfaction with waiting times, lack of privacy, and the attitudes of the ED staff (Summers).

As emergency departments are developing an understanding of the unique challenges faced in caring for patients presenting with behavioral health emergencies, many are turning toward innovative care models that blend accelerated diagnostic protocols, early psychiatric intervention, and dedicated physical environments custom designed to the needs of behavioral health patients. The combination of these solutions has begun to show early promise in enhancing clinical quality, reducing the use of restraints and seclusion, and lowering the overall cost of care. As a result, the psychiatric and non-
psychiatric patient experience in the emergency department is enhanced.

Planning for the Behavioral Health Patient

There are multiple organizational constructs for behavioral health care. The options vary based on national health care system, frequency of behavioral health attendances, and the role the general emergency department plays in providing acute assessment and management of behavioral health patients. A Canadian study of mental health services provided in pediatric emergency departments reported that ED-based mental health services ranged from coverage by a social worker to services as comprehensive as an entire crisis intervention team (Leon). Similarly, in the United Kingdom, management of acute behavioral health emergencies can be variable. A study of 32 hospitals in the UK demonstrated considerable variability in presentation and management of patients with self-harm. (Cooper).

As with planning any clinical environment, developing clinical and operational models to support optimized behavioral health care in the emergency department mandates consideration of processes, staffing models, use of technology and ultimately, facility design to create an optimized environment.

Process

Understanding how behavioral patients will flow through the emergency department is an important first step in planning psychiatric emergency services. As referenced earlier, the role of the emergency department can range from simple medical clearance to medical clearance, evaluation, stabilization and disposition to the appropriate inpatient or outpatient setting. Regardless of the scope of care in the emergency department, the patient throughput model should focus on the following key attributes: immediate triage and identification of a behavioral health emergency, rapid medical clearance, early psychiatric assessment and stabilization, and quick transfer to an appropriate site of care.

The medical clearance process can be a significant factor in delaying the initiation of psychiatric assessment and disposition. While this process can take many forms, a number of studies are doubting the viability of a one-size-fits-all approach to providing medical clearance.
for behavioral health patients. Evidence is pointing to the fact that many diagnostics routinely performed as part of the medical clearance are of low diagnostic yield and have an even lower impact on management and disposition decisions (Donofrio, Parmar, Shihabuddin).

**Staffing Models**

Emergency departments in Australia, Canada, the United Kingdom and the United States have been the most aggressive in experimenting with different staffing models for behavioral health patients. The models are wide ranging and include on-call crisis response teams that report to the emergency department for acute assessment, a dedicated psychiatric emergency department within or adjacent to the main emergency department, and off-site assessment units that require patient transfer once medical clearance has been completed.

Co-management models consisting of medical support from emergency medicine with parallel assessment by a psychiatric team in the eED has been shown to reduce length of stay for behavioral health patients. A study conducted at an academic medical center without inpatient psychiatric services demonstrated a 22% reduction in length of stay for behavioral health patients cared for under the co-management model (Polevoi).

In facilities with a dedicated psychiatric emergency department, the areas are typically staffed with a cohort of behavioral health personnel including psychiatric nurses, technicians, and psychiatrists or other advanced practice providers. The theory behind this staffing model is tied to the skills set possessed by the staff which aid in behavioral de-escalation and restraint avoidance during the acute assessment and stabilization phase.

**Technology**

Psychiatric telemedicine services are gaining in popularity among many healthcare systems with limited availability of acute psychiatric services. This is particularly the case in rural communities where transfer to a behavioral health receiving center may be unnecessary for some patients and presents a hardship for others. Early studies into the efficacy of telemedicine services indicate that there is no significant difference in diagnosis or disposition recommendation between in-person assessment and tele-consultation assessments (Seidel). Similar analysis in rural areas of Scandinavia are also showing potential benefit to the use of telemedicine services for behavioral health emergencies (Trondsen). Across Europe, transnational psychiatric telemedicine models are beginning to take shape, linking patients in areas with limited access to acute psychiatric services to behavioral health professionals in other parts of Europe in a manner not dissimilar to teleradiology services.

**Design Considerations**

There is limited evidence-based design research supporting the appropriate design characteristics of behavioral health environments in the emergency department. Much of what has been gathered has occurred through anecdotal evidence and trial and error approaches based on the care model in place at the emergency department in question. While patient and staff responses to the built environment can vary based on culture and model of care, evidence does support that design modifications tied to changes in process and human capital models can yield improvements in perceptions regarding privacy and satisfaction in the care process (Lin).

Figure 1 illustrates a pod emergency department design with treatment stations dedicated to behavioral health patients in an area adjacent to both walk-in and ambulance entry.

The largest consideration will be to assess whether behavioral health patient volumes justify a dedicated area within or adjacent to the larger emergency department. Justifiable volumes will vary by emergency department and country and should be based on total volumes, average length of stay, availability of behavioral health staffing resources and the cost model. In emergency departments that cannot support a dedicated psychiatric care area, minor modifications can be made to individual treatment stations to make them psychiatric safe. This reduces potential harm to patients, visitors, and staff. Since treatment stations are not always used.
by behavioral health patients, many emergency departments have turned to designing convertible stations that can be used for general medical patients and when necessary, can be converted to a psychiatric safe treatment station in less than one minute. This is accomplished by placing all fixed equipment along a temporary floor-to-ceiling wall that can be used to cover and lock all medical equipment. These rooms are also fitted with doors that have an unbreakable window and often, video link to the central nursing station for continuous monitoring.

When volumes and model of care support a dedicated behavioral health area within the ED, a relatively simple design solution can be developed. The dedicated behavioral health zone should be located in an area that is separate from the main emergency department yet easily accessible. Separation allows for segregation of medical and psychiatric patients. Figure 1 illustrates a dedicated psychiatric emergency department that is located immediately adjacent to the main emergency department. In this model, the psychiatric emergency department is separated by secured doors that promote patient safety, prevent elopement, and allow easy access to the unit for the general emergency department staff to facilitate smooth patient transfer and response to any emergencies. Further detail regarding the design of the psychiatric emergency department is shown in Figure 2.

Dedicated behavioral health zones also facilitate the creation of an internal waiting area that can be designed to reduce agitation while also providing consultation and treatment rooms for patient interviews and therapeutic interventions. Features of the internal waiting area include psychiatric-safe interior furniture, a de-escalating design, and visual distractions such as video and reading materials.

Conclusion

Planning a new emergency department presents the unique opportunity to consider design solutions that can support caring for behavioral health patients in an environment that mitigates the stress and anxiety psychiatric patients commonly experience in the emergency department. In addition, careful planning and design can enable best-in-class models of care that promote greater collaboration between emergency medicine and psychiatry while reducing the overall length of stay for behavioral health patients in the emergency department.

REFERENCES


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